Township of Bloomfield

2018

CONSUMER CONFIDENCE REPORT

PWS ID 0702001

June 2019

Township of Bloomfield

Mayor
Michael J. Venezia

Council Members
Wartyna L. Davis
Ted Gamble
Richard Rockwell
Jenny Mundell
Nicholas Joanow
Sarah Cruz

Dear Customer,

The Township of Bloomfield is committed to providing our customers and the community with high quality drinking water through prompt service, courteous and helpful communication, and excellence in the treatment and distribution of our most valued resource...water.

The purpose of this report is to provide you, our customer, with information on the sources of your drinking water. This report will also describe the water treatment process, and explain what potential substances may be found in drinking water. Health information and a listing of the amounts of detected substances and how they compare to the state and federal regulations are also provided.

This report confirms that your drinking water is safe. However, as you may know, the Township is experiencing issues of non-compliance for disinfection by-products (Haloacetic Acids) and an exceedence of the lead action level for the monitoring period from January to December of 2018. In each of these situations, you have been notified of the violations; what the Bloomfield Water Department is doing to remediate these issues as well as what actions you should be taking as a consumer of our water. We are actively implementing improvements to our water system to provide you with a better quality of drinking water These improvements include, cleaning and lining of our watermains, water system valve exercising and replacement, hydrant flushing and construction of a new water supply pump station to provide a supplemental source of water other than the City of Newark. We presently receive one-hundred percent of our drinking water from the City of Newark. Beginning this past April, the City of Newark has implemented new corrosion control treatment to reduce corrosion in older lead pipes. This should dramatically reduce the amount of lead within our water system and bring the township back in to compliance with EPA lead standards. Furthermore, the City of Newark is also modifying their treatment facilities to significantly reduce the amount of disinfection by-products, such as haloacetic acids, within our system. It is anticipated that these non-compliant issues will be eliminated by the end of 2019. The township is also actively replacing old lead service connections with copper whenever they are discovered during routine repairs or sampling periods. The township continues to provide free water filters upon request to eliminate any lead within the drinking water coming out of your taps. The Bloomfield Health Department also continues to provide free water testing to all residents concerned about the possibility of lead within their drinking water.

The Bloomfield Water Department is committed to providing safe and compliant drinking water to our customers and will continue to make improvements and adjustments to our policies and procedures to accomplish this. I recommend you periodically check our website under the “Bloomfield Water” tab for information and updates related to our drinking water.

We hope you will find this report informative and that it provides you with a better understanding of all that’s involved in bringing high quality drinking water into your home. If you would like additional information or if you have any questions concerning this report, feel free to call me at 973-680-4009. You can also call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

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

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Thank you for allowing us the opportunity to serve you.

Very truly yours,

Paul D. Lasek, P.E.
Township Engineer
Township Water Operator
N.J. W-3 Lic. No. 59864

Sources of Drinking Water:
Both tap water and bottled water may come from groundwater (springs, wells) or surface water (rivers, lakes, ponds, streams, reservoirs). As the 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.

The Township of Bloomfield purchases bulk drinking water from the North Jersey District Water Supply Commission, Wanaque North and South Reservoirs. However, at this time, we cannot physically obtain this water from these reservoirs. We therefore trade or "wheel" this water from the City of Newark Pequannock Watershed system. Therefore, all of our drinking water originates from the Pequannock watershed. The City of Newark's water supply is entirely from surface water sources in the Pequannock and Wanaque watersheds which cover approximately 150 square miles of forest lands in Morris, Sussex and Passaic Counties. The Pequannock watershed supplies five reservoirs (Charlottesburg, Echo Lake, Canistear, Clinton and Oak Ridge Reservoirs) which have a combined capacity of 14.4 billion gallons. The Wanaque watershed supplies the following two reservoirs: the 29.6 billion gallon Wanaque Reservoir and the 7 billion gallon Monksville Reservoir. The Wanaque Reservoir is operated by the North Jersey District Water Supply Commission (NJDWSC) which has pump stations designed to pump 250 million gallons per day from the Pompton River and 150 million gallons per day from the Ramapo River into the reservoir when needed.

"The New Jersey Department of Environmental Protection (NJDEP) has completed Source Water Assessment Reports and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water web site at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

Ongoing Water System Improvements:
The Township of Bloomfield is committed to providing water that meets or exceeds all federal and state requirements for drinking water. In general, our water system is in good condition. However, as with many water systems within the region, the advanced age of pipes and valves represent a challenge in delivering safe and reliable drinking water to our customers. In order to ensure that the Township's water system continues to operate efficiently to provide safe, adequate, and reliable service, we are continuing to improve our system.

Improvements to the Township's water system include cleaning and cement mortar lining of older water mains and the installation of new valves and hydrants to improve water quality, hydraulic capacity and operation of the distribution system.

Other Improvements Include:

Lead Service Line Replacement:
The Township recently awarded a contract to replace over fifty lead service lines that were discovered during recent utility work. Lead service lines are the pipes that connect a residence or building to the water mains in the street. The $220,000 contract will commence in 2019 and will further reduce the risk of lead entering your drinking water. Our Department of Public Works Water Department also continues to eliminate any lead service lines discovered during routine construction or sampling events.

Customer Water meter replacements: The Township has awarded a $4.4 million contract to replace all customer water meters throughout the township. This project will provide the Bloomfield Water Department with real-time information on use of water by customers and even notify them of excess water usage due to an unknown plumbing leak within their residence. In addition to saving and conserving water, this will prevent a resident from receiving a large water bill due to an undetected leak that may have occurred over a billing period. This program will also allow the Bloomfield Water Department to determine, during installation of the new meter, if a residence has a lead service line and therefore advise them as to what remediation actions should be taken to eliminate the lead.

• Cleaning and Lining of Large Distribution Mains: The Township has thousands of feet of large distribution mains. These are mains with diameters of twelve inches and sixteen inches. All of these mains were constructed in the early and mid-twentieth century and have not been improved or maintained since their original installation. Cleaning and lining will remove sediment, rust and corrosion within these mains and apply a thin cement coating throughout the pipe. This dramatically improves the flow and the quality of the water moving through the pipes and ultimately into your taps. The first phase of cleaning and lining is completed. The second phase scheduled to begin in 2019.

• Dead-End Elimination Program:
Dead-ends within a water system are, by nature, problematic. Water tends to stagnate or circulate very slowly at dead-ends thereby increasing the age of the water which can lead to the build-up of chlorine by-products. The Bloomfield Water Department has completed two phases of dead-end elimination and anticipates further eliminations in 2019.

• New North Jersey District Water Supply Commission (NJDWSC) Interconnection:
For many years the township has been a member of the NJDWSC. We therefore purchase our water supply, in bulk from the NJDWSC. Although a member, we have not been able to acquire this water directly from the Wanaque watershed due to a lack of a physical connection to the system. We therefore have been acquiring our water using the Newark water system and paying a "wheeling' fee for this service. The township is currently in the process of designing and constructing a pump station that will allow us to acquire water directly from NJDWSC through their supply line at the northerly end of town. This will ultimately lead to reduced wheeling rates, more resiliency and better circulation in our system to enhance water quality.

The engineering department will also work toward improving the distribution of information about our system to our customers by enhancing our profile on the township website.

Concerning decisions that may affect the quality of water in the Township of Bloomfield, an opportunity for public participation is provided during regularly scheduled council meetings.

Meetings are held in the Council Room on the second floor of the Municipal Building beginning at 7 pm on the following dates: **Mondays**: July 8 and 22, August 19, September 9 and 23, October 7 and 28, November 25, and December 9 and 16. **Tuesday**: November 12.

Also, the City of Newark suggests that you contact them directly at 973-256-4965 for information concerning the next opportunity for public participation about drinking water provided by the City of Newark or find out more about the City of Newark on the Internet at www.ci.newark.nj.us.

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Compliance with Drinking Water Standards:
In order to ensure the safety of drinking water, the EPA and the state's Department of Environmental Protection (DEP) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems and require water suppliers to monitor and treat for potentially harmful contaminants. Bottled water is similarly regulated by the Food and Drug Administration and must provide the same protection for public health as tap water. Our water, which is treated according to the EPA's and NJDEP's regulations, meets and most often surpasses the quality standards set by those agencies.

Potential Contaminants:
The types of contaminants that may be found in the raw water before it is treated to produce drinking 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 storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming.

***Pesticides** are chemicals used to destroy insects and rodents. Herbicides are chemicals used to kill weeds. Both contaminants may come from a variety of sources such as agriculture, urban storm water and residential uses.

***Radioactive Contaminants** which can be naturally occurring or be the results of oil and gas production and mining activities.

***Organic Chemical Contaminants** including synthetic (SOC) and volatile organic chemicals (VOC), which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

All drinking water, including bottled water, may reasonably be expected to contain naturally occurring minerals and traces of 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 **Environmental Protection Agency (EPA) Hotline 1-800-426-4791. or Online at www.water.epa.gov**

Terms and Abbreviations:
N/A = Not Applicable
ND = Not Detected
AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking 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.
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.

pCi/l = picocuries per liter (measure of radiotactivity

ppm = parts per million; (comparable to one minute in two years or one penny in $10,000.00).

ppb = parts per billion; (comparable to one minute in two thousand years or one penny in $10,000,000.00).

Water Quality Data:
The table 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 on samples of water taken from January 1 through December 31, 2018. The state requires us to monitor for certain contaminants at intervals greater than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Health/Educational Information:
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 advise about drinking water from their health care provider. EPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline 1-800-426-4791.**

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers and Others:
Children may receive a slightly higher amount of contamination 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 concerns. 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.

Nitrate
Nitrate in drinking water at levels about 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 an infant, you should ask for advice from your health care provider.

Lead
If present, elevated levels of lead can cause serious health problems, especially for

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WATER QUALITY DATA

Concentrations of Detected Contaminants Report
Township of Bloomfield 2018

Regulated Contaminants	Units	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)	Results Newark Pequannock System		Source of Contaminant
Inorganic Contaminants:						
Arsenic	ppb	5	5	<0.5		Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
Barium	ppm	2	2	0.008		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Mecury	ppb	2	2	<0.0002		Erosion of natural deposits; discharge refineries and factories
Copper	ppm	1.3	AL=1.3	Jan to June 0.247 July to Dec 0.210		Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	ppm	2	2	<0.10		Erosion of natural deposits; water additive which promotes strong teeth
Lead	ppm	0	AL=0.015	14 Samples 90th percentile Jan to June 0.022 July to Dec 0.020		Corrosion of household plumbing systems; erosion of natural deposits Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Nitrate	ppm	10	10	<0.10		
Microbiological Substance:						
Total Coliforms Bacteria	Presence of positive sample	0	Presense of Coliforms in >5% of monthly samples	5 Samples in July 8.33% 6 Samples in October 10%		Naturally present in the environment
Turbidity:						
Turbidity	ntu	N.A.	TT (<0.3 NTU 95% of the time: upper range 1 NTU)	Minimum 0.05 - Maximum 0.65 0.65 (highest single measurement) Average 0.22 96.4 % of samples <0.3 NTU		Soil runoff
Secondary Contaminants	Units		Secondary Maximum Contaminants Level (SMCL)	Results Newark Pequannock System		Source of Contaminant
Alkalinity	ppm		NS	25.3		A characteristic of water caused primarily by carbonate, bicarbonate and hydroxide ions
Aluminum	ppm		0.2	0.083		By-product of water treatment using aluminum salts
Asbestos	waiver granted 01/01/11 - 12/31/19					
Chloride	ppm		250	39		Erosion of natural deposits
Chlorine Residual	ppm		4	0.4 - 1.0		Chlorine remaning in treated water and available to destroy disease causing organisms
Color	CU		10	2		Presence of magnanese and iron, plankton, humus, peat and magnesium
Hardness	ppm		50-250	51.4		A characteristic of water caused primarily by salts of calcium and magnesium
Iron	ppm		<0.3	<0.050		Erosion of natural deposits
Manganese	ppm		<0.05	<0.004		Erosion of natural deposits
Secondary Contaminants	Units		Secondary Maximum Contaminants Level (SMCL)	Results Newark Pequannock System		
ph	units		6.5-8.5	7.02		Presence of carbonates, bicarbonates and carbon dioxide
Sodium	ppm		50	23.2		Runoff from road salt and from some water softening processes
Sulfate	ppm		250	10.3		Drainage of mining wastes, erosion of natural deposits
Total Disolved Solids	ppm		500	108		Erosion of natural deposits
Zinc	ppm	SMCL	5	<0.2		Erosion of minerals from rocks

Stage 2 Trihalomethanes MCL: 80 (ppb)

Site No.	Min	Max	LRAA*
Site 1	60.1	109.8	74
Site 2	53	83.4	71
Site 3	53.4	88	70
Site 4	52	88.2	74

Stage 2 Haloacetic Acids MCL: 60 (ppb)

Site No.	Min	Max	LRAA*
Site 1	60.7	109.8	83
Site 2	75	118.3	94
Site 3	78.6	109.2	84
Site 4	81.7	122.5	93

* LRAA - Locational running annual average

Source of contaminant: a by-product of disinfection or chlorine

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Water systems with uncovered finished water reservoirs are required to eliminate or cover these reservoirs, treat the discharge from these reservoirs, or be in compliance with a state approved schedule to eliminate or cover the reservoirs or provide treatment by April 1, 2009. Newark has executed an Administrative Consent Order with the Department of Environmental Protection wherein Newark is required to develop a plan and implementation schedule to eliminate, cover or provide treatment for their uncovered reservoirs.

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pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Township of Bloomfield 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 serveral 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead. The Township will be monitoring for lead throughout 2019. We will also begin a 2019 program to eliminate known lead service connections.

Arsenic

While your drinking water meets the USEPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Effective January 23, 2006, the MCL for arsenic is 5ppb. The results for arsenic in the drinking water was <0.5ppb in 2018.

Water System:

The Township of Bloomfield purchases bulk water from the NJDWSC which is supplied by the Wanaque watershed. Since we do not have a physical connection with NJDWSC, the Township has a "wheeling" agreement with the City of Newark. Each of Newarks watersheds has a water treatment plant which purifies and filters the water to produce safe and potable water. For the Pequannock system, the City of Newark Water Treatment Plant is located in West Milford; and for the Wanaque system, the NJDWSC Water Treatment Plant is located in Wanaque. At these plants, the water is routinely monitored and tested to ensure the safety of the water. From the plants, the water is conveyed through large diameter transmission mains to the Township of Bloomfield's distribution system. The Township maintains three metered interconnections with the City of Newark and emergency interconnections with East Orange, PVWC, Montclair and Nutley. The Township of Bloomfield's water distribution system provides potable water and fire protection throughout the municipality. Throughout the distribution system the water is continually monitored to maintain high quality drinking water in the system.

Questions and Answers

Is my water hard or soft?

Hardness describes the level of dissolved natural minerals (calcium and magnesium) in drinking water. These minerals are an important part of a healthy diet. Hard water contains more mineral nutrients and less sodium. A gradual build-up of calcium and magnesium in hard water can form harmless, filmy white deposits on faucets, bathtubs, and tea kettles. Hard water also requires more soap to lather fully. The degree of hard water varies depending on where you live. Newark's water in this area has a hardness level of 51.4 parts per million which means it is moderately soft.

Why is there chlorine in my water?

A century ago, acute diseases such as typhoid fever were a very real threat to our health because of microorganisms that caused these diseases were found in public drinking water. However, for almost 100 years, water suppliers in America and other countries have used chlorine to treat or disinfect drinking water. According to the U.S. Environmental Protection Agency and other health agencies, Chlorine is currently one of the most effective disinfectants to kill harmful microorganisms. Disinfection of all public water supplies is required by federal and state laws and regulations, including the Safe Drinking Water Act and the Surface Water Treatment Rule.

What is Turbidity?

Turbidity is the measure of the cloudiness of water. The city monitors it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of dissinfection.

Does Newark add fluoride to my water?

No. Newark does not add fluoride to the water in your community. However, a small amount of fluoride may occur naturally in your water. Less than 0.10 parts per million fluoride was detected in your water supply last year. You my have noticed media attention to public water supply issues related to radiological substances, mercury, lead, radon, arsenic, and Cryptosporidium. At Newark, they are well aware of these water quality matters. They have performed - and continue to perform - extensive testing of all our water supplies. We want to assure our customers that we are providing the high-quality water you expect and deserve. You may be interested to know the following information:

Radiological Substances:

Newark's tests show radiological substances level in our water supplies is significantly less than the level deemed acceptable by the U.S. EPA. In some cases, the level is so low that it cannot be detected. These substances are naturally occurring radioactive compounds.

Mercury:

Newark's testing equipment can detect mercury at a level 10 times less than the standard. They detected a mercury level of < 0.0002 parts per million in 2018.

Lead:

While the concentration of lead leaving the NJDWSC treatment facility and the Newark Pequannock facility is far below the action level (AL) of 15 parts per billion mandated by the Federal Lead and Copper Rule (most times it is non-detectable), some communities which the Commission and Newark serves, have failed to meet the AL at the water tap. It has been determined that this lead is most likely caused by lead pipes or lead solder and faucet fixtures in home plumbing and is not coming from the source supply. It should be noted that infants and children, who drink water containing lead in excess of the action level, could experience delays in their physical and mental development. Children could show deficits in attention span and learning abilities. Also, adults who drink this water over many years could develop kidney problems or high blood pressure. High concentrations of lead are more prevalent in water which sits in home plumbing pipes for a number of hours (particularly overnight). One way to reduce these levels below the AL would be to flush a toilet or run a tap for 30 seconds to a minute or until a discernable temperature change in the water is noted. The city of Newark has run laboratory studies on water from Newark households and found that lead levels consistently dropped below the 15 ppb, after the tap was left running for 30 seconds to a minute prior to its use. Customers are encouraged to employ this technique at least once a day or when water has remained stagnant in pipes for long periods. This would generally occur in the morning or when returning home from work or school.

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The Bloomfield Water Department is a public community water system consisting of one purchased ground water source. Bloomfield purchases water from the City of Newark. The system's source water comes from the Pequannock watershed, Cedar Grove reservoir.

SUSCEPTIBILITY RATINGS FOR NEWARK WATER DEPARTMENT SOURCES

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program,, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking 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. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility rating.

	Pathogenes			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursers		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 0																								
GUI - 0																								
Surface water intakes - 1	1					1			1			1	1					1			1	1		

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- **Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chloride) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

In response to the events of September 11, and to the State's Domestic Security Preparedness Act, Newark has completed a vulnerability assessment of its water supplies, treatment plant and transmission system, provided additional security, and reviewed operations to include a greater emphasis on security issues. The City is taking the necessary proactive steps to implement the conclusions of this study.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
The Bloomfield Water System Has Levels of Haloacetic Acids Above the Drinking Water Standards

Our water system recently violated a drinking water standard during the second quarter of 2019. Although **this is not an emergency**, as our customers, you have a right to know what happened; what you should do and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. On June 6, 2019 we received notice that samples collected on May 15, 2019 showed that our system exceeds the standard, or maximum contaminant level (MCL), for haloacetic acids. Please note that obtaining results for these contaminants from the lab can take up to three weeks or more to obtain. The average levels of haloacetic acids at four of four sampling locations were 85 µg/L, 107 µg/L, 93 µg/L and 101 µg/L respectively. The MCL for haloacetic acids is 60 µg/L.

What should I do?

- There is nothing you need to do. **YOU DO NOT NEED TO BOIL YOUR WATER or take other corrective actions.** However, if you have specific health concerns, consult your doctor.
- If you have a severely compromised immune system, have an infant, are pregnant or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

What does this mean?

THIS IS NOT AN EMERGENCY. IF IT HAD BEEN YOU WOULD HAVE BEEN NOTIFIED WITHIN 24 HOURS. However, some people who drink haloacetic acids in excess of the MCL **over many years** may experience problems with their liver, kidney or central nervous system and may have increased risk of getting cancer. The township has been actively working toward resolving violations related to chlorine by-products over the past two years.

What is being done?

1. The City of Newark has provided a remedial treatment plan to the Township, as well as the NJDEP, for the source water coming into Bloomfield to reduce the Disinfection By-Products (DBP's) such as HAA5, prior to entering our distribution system. The Bloomfield Water Department will continue to monitor DBP's at our Interconnections where we receive the source water and report all results and feedback to the City of Newark. As stated before, the Bloomfield Water Department does not treat our drinking water but receives it pre-treated from the City of Newark. Newark's remedial treatment plan has been provided on our website at the link below. It is anticipated that the new treatment will begin within the next two or three weeks. The Bloomfield Water Department has been continuously engaged with the City of Newark to resolve this problem over the last calendar year.

2. Phase 1 of a major cleaning and lining project targeting the township's larger transmission mains has been completed. Phase 2 of this project has been awarded to J. Fletcher Creamer, a utility contractor, and is scheduled to begin in July of 2019. This project, as well as additional Phases of this work, will improve the flow of water as well as the quality of the water as it moves through our piping system.

3. A second phase of water valve exercising has been completed. Additional phases will continue until all valves within the system are exercised and found to be functioning properly or are replaced.

4. Design of a potable water pumping station to obtain water from a different source is underway. Demolition of the existing building will commence within 30 to 60 days. Bid documents are currently being prepared for the construction of a new building and pumps.

Please note that this violation is related to the previous notices for MCL exceedence of Disinfection By-Products (DBP's). Due to the continued elevated levels of DBP's entering our system from the Newark Water System, we cannot anticipate this violation being rectified until the last quarter of 2019 or later. Please be aware that even if these contaminants are significantly reduced by the next quarterly sampling, there is the possibility of continued quarterly notices until the high quarterly concentrations are factored out of the running average. **Furthermore, this violation is NOT related to the lead action level notices previously issued. Our findings indicate that elevated lead levels are related to lead leaching from plumbing of individual buildings where samples were collected and not to the source water.**

For more information, please contact Paul D. Lasek, P.E., at 973-680-4130 or via e-mail at plasek@bloomfieldtwpnj.com or via mail at the Bloomfield Engineering Department, One Municipal Plaza, Room 203, Bloomfield, NJ 07003 or visit our website at the following link:

http://www.bloomfieldtwpnj.com/main/node/340

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 Bloomfield Water Department; State Water System ID#: NJ0702001.
Date distributed: June 30, 2019

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

The Bloomfield Water Department found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

We collected drinking water samples at 61 locations throughout the sampling and testing period January 1, 2018 to June 30, 2018 and water samples at 64 locations throughout the sampling and testing period July 1, 2018 to December 31, 2018.

The 90th percentile value for our water system from January to June was 22 parts per billion (0.022 ug/l) and from July to December was 20 parts per billion (0.020 ug/l). Both were greater than the lead action level of 15 parts per billion.

What Does This Mean?

Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the taps used for human consumption do not exceed this level in at least 90 percent of the sites sampled (90th percentile result). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is 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.

Health effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-brass faucets, and in some cases, pipes made of lead that connect houses and buildings to water mains (service lines).

New brass faucets, fittings, and valves, including those advertised as "lead-free", may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent lead to be labeled as "lead free". However, prior to January 4, 2014, "lead free" allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

EPA estimates that up to 20 percent of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

When water stands in Lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead.

The township of Bloomfield is currently sampling for lead at sixty (60) pre-determined locations for the periods from January to June 2019 and once again from July to December 2019. Notices such as this one will be distributed quarterly until such time that the township complies with the lead action level. The township also replaced forty (40) known lead service connections from January 2018 to date.

Steps you can take to reduce exposure to lead in drinking water

1. Run the water to flush out lead. Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer the water resides in plumbing the more lead it may contain. Flushing the tap means running the cold-water faucet for about 15-30 seconds. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water.

2. Use cold water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap. Hot water can dissolve lead more quickly than cold water. If you need hot water, draw water from the cold tap and then heat it. Do not use water from the hot water tap to make baby formula.

3. Do not boil water to remove lead. Boiling water will not reduce lead.

4. Look for alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Be sure the filter is approved to reduce lead or contact NSF International at 1-800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer.

5. Get your child tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead.

For more information, call us at 973-680-4009 or visit our website www.bloomfieldtwpnj.com. You can also e-mail the Township Water Operator at plasek@bloomfieldtwpnj.com. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at, http://www.epa.gov/lead call the National Lead Information Center at 800-424-LEAD or Safe Drinking Water Act hotline at 1-800-426-4791, or contact your health care provider. You can also watch a Township Public Meeting with the Mayor held on November 16, 2017 on WBMA-TV or on the WBMA-TV website.

Test your water for lead. Call us at 973-680-4009 to find out how to get your water tested for lead. The Bloomfield Water Department through the Bloomfield Health Department will review your request and either provide the testing free of charge or, depending upon demand, coordinate with you directly to arrange for lead sampling at a minimum charge to you.

Contact us at 973-680-4009 to obtain a translated copy of the public education materials or to request assistance in the appropriate language.

This notice is being sent to you by the Bloomfield Water Department, 1 Municipal Plaza, Bloomfield NJ 07003;
New Jersey Public Water Supply (NJPWS) Identification Number NJ0702001.
Date Notification was distributed June 30, 2019

(continued from page 5)

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.

Cryptosporidium:
Lakes, rivers and reservoirs may contain this tiny microbe. It is found in feces of humans and many domestic wild animals. Newark tests for Cryptosporidium on a monthly basis in their Pequannock finished water surface water supplies. It has never been detected in a viable state in any of their treated water supplies. Neither has it been found in the Wanaque Supply.

Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s):
Trihalomethanes and Haloacetic Acids are formed when raw water is treated with chlorine. Chlorine is used as a disinfectant to inactivate the disease causing organisms in the water. Trihalomethanes are a group of four chemicals Chloroform, Bromodichloromethane, Dibromochloromethane, and Bromoform. The Maximum Contaminant Level (MCL) of Total Trihalomethanes in drinking water is 80 parts per billion. The five regulated Haloacetic Acids are monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, mono-bromoacetic acid and tribomoacetic acid. The Maximum Contaminant Level (MCL) for Haloacetic Acids is 60 parts per billion. The United States Environmental Protection Agency has set the MCL for both TTHMs and HAA5s because they are cancer causing contaminants. People who drink Trihalomethanes and Haloacetic Acids in excess of the MCL over many years may experience problems with their liver, kidney or central nervous system and may have increased risk of getting cancer. People with a severely compromised immune system, have an infant, are pregnant or are elderly, may be at increased risk and should seek advise from their health care providers about drinking this water.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
The Bloomfield Water System Failed to Submit an Operational Evaluation (OEL) for Total Trihalomethanes (TTHM) to the N.J. Department of Environmental Protection (NJDEP) within 90 Days After Being Notified of Analytical Result.

The Bloomfield Water Department recently failed to comply with a required Reporting Requirement. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

A public water system that exceeds the Stage 2 Disinfection Byproducts Rule Operational Evaluation Level must conduct an operational evaluation (OEL) and submit a written report to the state no later than 90 days after being notified of the analytical result that caused the operational evaluation level to be exceeded. Please note that an "OEL" exceedance does not mean that we exceeded the MCL for total trihalomethanes (TTHM's) but requires the water system to evaluate methods to reduce TTHM's to avoid a future exceedence.

What should I do?

There is nothing you need to do at this time.

What is being done?

The Operational Evaluation was due on March 7, 2019 and was completed and submitted to the NJDEP on March 28th, thereby satisfying the requirement twenty-one days past due.

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Date distributed: June 30, 2019

Solutions to Stormwater Pollution

• If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.

• Use natural or less toxic alternatives when possible.

• Recycle used motor oil.

• Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

Keep pollution out of storm drains

• Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.

• Do not let sewage or other wastes flow into a stormwater system.

Clean up after your pet

• Many municipalities and public agencies must enact and enforce local pet-waste rules.

• An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.

• Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:

• Use newspaper, bags or pooper-scoopers to pick up wastes.

• Dispose of the wrapped pet waste in the trash or un-wrapped in a toilet.

• Never discard pet waste in a storm drain.

Don't feed wildlife

• Do not feed wildlife, such as ducks and geese, in public areas.

• Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

Don't litter

• Place litter in trash receptacles.
• Recycle.Recycle.Recycle.
• Participate in community cleanups.

Dispose of yard waste properly

• Keep leaves and grass out of storm drains.
• If your municipality or agency has yard waste collection rules, follow them.

• Use leaves and grass clippings as a resource for compost.

• Use a mulching mower that recycles grass clippings into the lawn.

As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.

Limit your use of fertilizers and pesticides

• Do a soil test to see if you need a fertilizer.

• Do not apply fertilizers if heavy rain is predicted.

• Look into alternatives for pesticides.

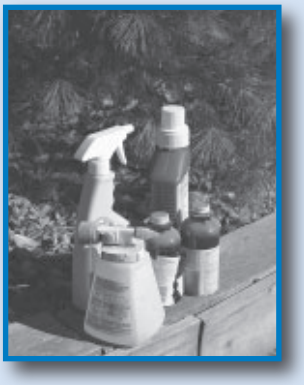
• Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.

• If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it. Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

• Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.

• Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.



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IMPORTANT CONSUMER INFORMATION