

Annual Drinking Water Quality Report for 2009

*West Bloomfield Water District
PO Box 87 West Bloomfield NY 14585
(Public Water Supply ID#3401181)*

Introduction

To comply with State and Federal regulations, West Bloomfield will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality statement. Last year, the City of Rochester conducted tests for over 130 contaminants, detected 12 of those contaminants, and only found 0 of those contaminants at a level higher than the State allows. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Jim Powers, System Operator at (585) 624-2900. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the 2nd Wednesday of each month at 7:00 PM at the Town Hall.

Where does our water come from?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the City of Rochester, which takes surface water from Hemlock Lake which is located south of the hamlet of Hemlock on RT 15A and uses coagulation, filtration, fluoridation, and disinfection, prior to distribution to treat the water. Our water system serves 2000 people through 300 service connections.

Our system is one of the many drinking systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. Fluoride is added to your water by the City of Rochester Water Bureau before it is delivered to us. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the City of Rochester Water Bureau monitor fluoride levels on a daily basis. During 2009 monitoring showed fluoride levels in your water were in the optimal range 99% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

2009 Highlights

- There was 100% compliance with Federal and State drinking water regulations.
- Granular activated carbon was added to the City's filtration process to help remove a seasonal musty/earthy flavor. The city believes the problem is related to the proliferation of zebra mussels in Hemlock Lake.
- At the end of 2009 a project was started to upgrade controls at our pumping station for increased system reliability and energy efficiency. The project will be completed in the 1st quarter of 2010.
- More information can be found at www.cityofrochester.gov

Are there contaminants in our drinking water?

As the State regulations require, the City of Rochester and we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might be reasonably 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 (800-426-4791) or the New York State Health Department at (315-789-3030).

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average)		Unit Measurement	Regulatory Limit		Likely Source of Contamination	# of samples greater than AL
			(Range)			MCLG (MCL, TT or AL)			
Barium	N	2009	0.017		Mg/l	2	2	Erosion of natural deposits	
Nitrate	N	2009	0.18 (0.06 – 0.29)		Mg/l	10	10	Runoff from fertilizer, leaching from septic tanks; erosion of natural deposits;	
Fluoride	N	2009	.83 (0.58 – 1.01)		Mg/l	NA	2.2	Water treatment additive to promote dental health	
Hardness	N	2006	5		Grains	NA	NA	Erosion of natural mineral deposits	
Sodium	N	2009	19		Mg/L	NA	NA	Natural deposits, road salt, water treatment	
Chloride	N	2009	34 (33-36)		Mg/l	NA	250	Natural deposits; road salt	
Sulfate	N	2009	15 (14-17)		Mg/l	NA	250	Natural deposits	
Selenium	N	2008	2.1		UG/L	50	50	Erosion of natural deposits	
Chromium	N	2008	2.1		UG/L	100	100	Erosion of natural deposits	
Turbidity ¹	N	2009	(.04-.23)		NTU	NA	TT=95% of samples<0.3	Soil runoff	
					Detection level based on 90th percentile sample	AGL	AL		
Copper ²	N	2009	88		Ug/L		1300	Corrosion of household plumbing	0 out of 55
Lead ³	N	2009	15 (.001 - .22) (ND-42)		Ug/L		15	byproduct of water chlorination	3 out of 55
Chlorine	N	2009	.82 (0.4-1.1)		Mg/L		4	Required treatment chemical	
Total THMs	N	2009	42 (15-52)		Ug/L		NA	By-product of chlorination	
Haloacetic Acids	N	2009	32 (13-54)		Ug/L		NA	By-product of chlorination	

Disinfectant and Disinfectant By-Products (DBP's) Within West Bloomfield Water District

Chlorine	N	2009	.49 (0.29-.68)		Mg/L		MRDL=4	Required treatment chemical	
Total THMs ⁴	N	2008	38.4 (19-54)		Ug/L		NA	By-product of chlorination	
Haloacetic Acids ⁴	N	2008	10.6 (0-29)		Ug/L		NA	By-product of chlorination	

Notes:

1. Turbidity is a measure of the cloudiness of the water. The City of Rochester tests it because it is a good indicator of the effectiveness of its filtration system. Our highest single turbidity measurement for the year was (0.07NTU). State regulations require that turbidity must always be below 5 NTU. The regulations

- require that 95% of the turbidity samples collected have measurements below 0.3 NTU. The City of Rochester was 100% in compliance.
2. The level presented represents the 90th percentile of the 50 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. The action level for copper was not exceeded at any of the sites tested.
 3. The level presented represents the 90th percentile of the samples collected. The action level for lead was exceeded at three of the sites tested.
 4. This level represents the annual quarterly average calculated from data collected.

Definitions:

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.

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.

Action Level (AL) : The concentration of a contaminant which, if 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 in drinking water.

Non-Detects (ND) : Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU) : A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l) : Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l) : Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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 Level Goal (MRDLG) : The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

What does this information mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

Is our water system meeting other rules that govern operations?

During 2009, our system was in compliance with all applicable State drinking water requirements.

Do I Need to Take Special Precautions?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

Why Save Water and How to Avoid Wasting It?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.

- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

Closing

Thank you for allowing us to continue to provide your with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

We would also ask, to improve water system security, that if you see any suspicious activities around or near our water delivery system that you immediately contact Jim Powers, Water Operator at 585-624-2900.

Please call our office if you have questions.