

The Village of Baltimore Public Water System Consumer Confidence Report 2009



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The Village of Baltimore Drinking Water Consumer Confidence Report For 2009

Introduction

The Village of Baltimore has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

The Village of Baltimore continues to work diligently to provide safe potable drinking water to all of its consumers. The Village has constructed a new .500 MGD (Million Gallons per Day) water tank to allow plenty of capacity to ensure the village has a necessary supply of water for daily human needs and increased fire fighting capacity.

License to Operate

The Village of Baltimore has a current, unconditioned license to operate our water system.

Source Water Information.

The Village of Baltimore is a community public water system serving approximately 3600 people. The water system operates three wells that pump approximately 392,000 gallons of water per day.

In 2002 the Ohio Environmental Protection Agency (OEPA) completed a Source Water Protection Assessment of the Village of Baltimore. This assessment indicates that the Village of Baltimore's source of drinking water has a low susceptibility to contamination because the depth to the bottom of the confining layer in the sand and gravel buried valley aquifer is greater than 100' below the ground surface. This layer provides protection from contaminants from infiltrating from the grounds surface to the aquifer and that the water quality results do not indicate that contamination has impacted the aquifer.

The drinking water protection zone is combined by two protection areas. The Inner Protection Zone which provides ground water to the wells for one year of pumping. A chemical spill in this zone poses a greater threat to the drinking water, so this area warrants a more stringent protection. The Outer Protection Zone is the additional area that contributes water when the wells are pumped for five years. Together, they compromise the drinking water source protection area.

The Village of Baltimore is part of the Fairfield County Regional Well Head Protection Team and we are working diligently to provide the safest Source Water Protection for our well's that we possibly can. A copy of the Source Water Protection plan can be obtained by contacting the village offices at (740) 862-8550.

What are sources of contamination to drinking water?

The sources of drinking water both tap water and bottled water includes 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 include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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 stations, urban storm water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions?

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 infection. 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 (1-800-426-4791).

Monitoring and Reporting Violations

During the month of October 2009 the Village of Baltimore failed to provide required source water language in the 2008 Consumer Confidence Report and to provide required information to the Village's Satellite Water System (Thurston) by April 1, 2009. The necessary information has been included in this report and delivered by the correct deadline date.

During the month of December 2009, the Village of Baltimore violated by constructing the State Route 256 Water line without first acquiring plan approval from the Director of the Ohio EPA. All actions were corrected quickly and the proper approval was obtained.

During the month of July 2009, the Village of Baltimore received a Delinquency Notice for failing to monitor Nitrate at the correct sampling location. In July 2009 a sample was collected at the correct location and all action requirements were resolved.

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Village of Baltimore conducted sampling for Nitrates; Bacteria; and Disinfection By-Product contaminant's during 2009. Samples were collected for a total of twenty three different contaminants most of which were not detected in the Village of Baltimore water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Water Quality Monitoring Information-Table of Detected Contaminants

Listed below is information on those contaminants that were found in the Village of Baltimore drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Total Coliform Collected 36 Samples	0	>1 Monthly	0	0-1	No	2009	Naturally Present in the Environment
Inorganic Contaminants							
Antimony	6	6	<4.0	<4.0	No	2008	Discharge from petroleum refineries; fire retardants;ceramics;electronics;solder
Copper	1.3	AL=1.3	.236	<.50-.313	No	2008	Corrosion of Household Plumbing
Lead	0	AL=15	<5.0	<5.0	No	2008	Corrosion of Household Plumbing
Arsenic	0	10	<3.0	<3.0	No	2008	Erosion of Natural Deposits
Nitrate	10	10	.82	.82	No	2009	Run off from fertilizer use; leaching from septic tanks;sewage;Erosion of natural deposits
Barium	2	2	.138	.138	No	2008	Djsharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits.
Beryllium	4	4	<.0001	<.0001	No	2008	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace, and defense industries.
Cadmium	5	5	<.0001<	<.0001<	No	2008	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries&paints
Chromium	100	100	<.005	<.005	No	2008	Discharge from steel or pulp mills; Erosion of natural deposits
Cyanide	200	200	<.010	<.010	No	2008	Discharge from steel/metal factories; Discharge from fertilizer and aluminum factories
Fluoride	4	4	1.81	1.81	No	2008	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and Aluminum factories
Mercury	2	2	<.0005	<.0005	No	2008	Erosion of Natural deposits; Discharge from refineries and factories; Run off from landfills; Run off from crop land
Nickel	No MCL	No MCL	<.010	<.010	No	2008	Erosion of natural deposits.
Selenium	50	50	<.005	<.005	No	2008	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	0.5	2	<.0015	<.0015	No	2008	Leaching from ore processing sites; Discharge from electronics,glass,and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides							
Atrazine	3.0	3.0 ug/l	<1.0	N/A	No	2008	Run off from herbicide used on row crops
Alachlor	2.0	2.0 ug/l	<.20	N/A	No	2008	Run off from herbicide used on row crops
Simazine	4.0	4.0 ug/l	<.40	N/A	No	2008	Herbicide Run off

Volatile Organic Contaminants							
Total Trihalomethanes (TTHM)	N/A	80	21.1	1.7-8.5	No	2009	By-Product of Drinking Water Chlorination
Haloacetic Acids (HAA5)	N/A	60	9.1	<1.0-3.8	No	2009	By-Product of Drinking Water Chlorination
VOC group	N/A	N/A	<0.5 UG/L	<0.5 UG/L	No	2008	Discharge from Industrial Chemical Factories
Residual Disinfectants							
Total Chlorine	4.0	4.0	.84	.53-1.33	No	2009	Water additive used to control microbes.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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 advice from your health care provider. In 2009 the Village of Baltimore's Nitrate level was well under the MCL.

Arsenic

While your drinking water meets EPA'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 cost 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. Test indicated during the last required sampling that the level of Arsenic in the Village of Baltimore's drinking water was under the MCL.

Lead and Copper

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. The Village of Baltimore Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. During the 2008 sampling year the Village of Baltimore met all MCL limits. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in you home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Total Trihalomethanes (TTHM'S)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Village Council which meets the second and fourth Monday of each month.

For more information on your drinking water contact Joe Taylor at 740-862-8015.

Definitions of some terms contained within this report.

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 Contaminant level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g/L}$) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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 contaminants.

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 (MRDL): The highest residual disinfectant level allowed.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.

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.

Ug/l: Micro grams per liter.

The $\lt 5$ symbol: A symbol which means less than. A result of $\lt 5$ means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): A common measure of radioactivity.

IDSE: Initial Distribution System Evaluation