

# **The Village of Marblehead Drinking Water Consumer Confidence Report For 2010**

The Village of Marblehead public water system 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 Marblehead public water system uses surface water drawn from an intake placed 575 feet out from shore in Lake Erie.

Protecting our source water from contamination is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the appropriate authorities. Only by working together can we ensure an adequate safe supply of water for future generations.

The Village of Marblehead public water system also has an emergency backup connection with the Ottawa County Regional Water System. During 2010 we did not use this connection.

## **Source Water Protection.**

The Village of Marblehead's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie.

For the purpose of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare. The Village of Marblehead's drinking water source protection area contains potential contaminant sources such as municipal sewage treatment plants, industrial wastewater, and home sewage disposal systems discharges, air contaminant deposition, combined sewer overflows, runoff from residential, agricultural and urban areas, and mining operations, as well as accidental releases and spills, especially from commercial shipping operations and recreational boating. More detailed information is provided in the Village of Marblehead's Drinking Water Source Assessment report, which can be obtained by calling Robert Biers at 419-798-5836

## **What are the sources of contamination to drinking water?**

The sources of drinking water both tap water and bottled waters 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, 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).

### About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Village of Marblehead public water system conducted sampling for *{bacteria; inorganic; radiological; synthetic organic; volatile organic}* contaminants during 2010. Samples were collected for approximately 60 different contaminants most of which were not detected in the Village of Marblehead 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 a year old.

### We have a current, unconditional license to operate our water system.

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

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Inorganic Contaminants</b>							
Copper	AL=1.3 mg/l	AL=1.35 mg/l	.16 mg/l	N/A	N	2009	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
Lead	0 mg/l	AL=15 ug/l	.52 ug/l	N/A	N	2009	Corrosion of household plumbing; erosion of natural deposits
Nitrate	10 mg/l	10 mg/l	1.55 mg/l	0.10 mg/l to 1.55 mg/l	N	2010	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Volatile Organic Contaminants</b>							
Total-Trihalomethanes	N/A	80 ug/l	57.4 ug/l	20.2 ug/l to 79.1 ug/l	N	2010	By-product of drinking water chlorination
Haloacetic Acids	N/A	60 ug/l	14.2 ug/l	6.3ug/l to 36.8 ug/l	N	2010	By-product of drinking water chlorination
<b>IDSE Volatile Organic Contaminants</b>							
IDSE Total-Trihalomethanes	N/A	N/A	N/A	20.8 ug/l to 29.8 ug/l	N	2009	By-product of drinking water chlorination
IDSE Haloacetic Acids	N/A	N/A	N/A	12.8 ug/l to 16.4 ug/l	N	2009	By-product of drinking water chlorination
<b>Bacteriological Contaminants</b>							
Turbidity	N/A	TT NTU	.30 NTU	.04 to .30 NTU	N	2010	Soil runoff
Turbidity (% meeting standard)	N/A	TT	N/A	100%	N	2010	
Total Organic Carbon	TT	TT	1.56 mg/l	1.56 mg/l to 1.87 mg/l	N	2010	Naturally present in the environment
<b>Residual Disinfectants</b>							
Chlorine	MRDLG = 4 mg/l	MRDL = 4 mg/l	2.43 mg/l	0.42 mg/l to 2.43 mg/l	N	2010	Water additive used to control microbes

### TOC

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value less than one (1) indicates a violation of the TOC removal requirements.

### **Turbidity**

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is {0.3 NTU) in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above the Village of Marblehead public water supply's highest recorded turbidity result for 2008 was .20 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%

### **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. The Village of Marblehead public water system 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. A list of laboratories certified in the State of Ohio to test for lead may be found at <http://www.epa.ohio.gov/ddagw> or by calling 614-644-2752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### **IDSE**

Under the stage 2 disinfectants/ Disinfection Byproducts Rule (D/DBRP), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for IDSE may be used for compliance monitoring under Stage 2 DBRP, beginning in 2013. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and from when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acid (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water, including both THMs and HAAs

### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of The Village of Marblehead Board of Public Affairs which meets the 2<sup>nd</sup> Tuesday of each month at the Water Treatment Plant. The meetings start at 7:00 PM. For more information on your drinking water, contact Robert I. Biers Sr. at (419) 798 -5836.

### **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.

MCL'S are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**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 (ug/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Pico curies per Liter (PCI/L)** are units of measure for radioactivity in water.

**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 (N/D):** Laboratory analysis indicates that the contaminant is not present.

**Nephelometric Turbidity Units (NTU):** Nephelometric turbidity unit is a measure of clarity of water. Turbidity in excess of 5NTU is just noticeable to the average person.

**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.

**IDSE: Initial Distribution System Evaluation.**

**In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.**

**Please share this report with renters or others who may not have gotten one. If you need more copies, please call 419-798-5836.**