2011 Quality Water Report for The Village of Mattawan



This report covers the drinking water quality for Village of Mattawan for the calendar year 2011. This information is a snapshot of the quality of the water that we provided to you in 2011. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from 4 groundwater wells located with in the village. In September of 2008 we completed construction and start up for our Iron/Arsenic Removal Plants. With that process we now add Chlorine and Sodium Permanganate to the water, run them through pressurized filters to remove the Iron and Arsenic .In 2003 the State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven tiered scale from "very-low" to "very-high" based on the geologic sensitivity, well construction, and water chemistry and contamination sources. Copies of the reports are available from Superintendent Tom Anthony. Our wells were determined to have Moderate susceptibility to contamination.

The Village has been moving forward with a plan for system improvements. In the distribution system we have replaced several fire hydrants, installed a new well, painted our Concord Ave Water Tower, and will be completing the final large water main look from East McGillen to Freedom Lane later this summer. We have been diligently working on our Cross Connection program, this program makes sure that any backflow preventer on the water system is tested to keep contaminants from entering the water system. We have received yet another grant from the State of Michigan to further our efforts in the villages Well Head Protection Program. This year we did our first annual calendar contest in conjunction with our 7th grade students. All village water customers should be receiving the 2013 calendar soon. We have added a variety of information and a cute movie to the web site as well as information on how to dispose of chemicals, prescriptions, and the addition of rain gardens. As always if you would like more information on this program visit www.mattawanwellhead.com.

In June of 2012 the village will be collecting a full gamete of routine samples on our drinking water system. They range from Partial Chemistry (that test for Chloride, Fluoride, Hardness, Iron, Nitrate, Nitrite Sodium and Sulfate) to Pesticides, Herbicides Carbamates, and Volatile Organic Compounds. We are also required to monitor for bacteriological samples every month and Arsenic samples every quarter. With our water system we strive to provide not only great fire protection and economic development opportunities but clean safe drinking water.

- * Contaminants and their presence in water: Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants *does not necessarily indicate that water poses a health risk*. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).
- * Vulnerability of sub-populations: Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. 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 (800-426-4791).
- * Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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:

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 wastewater discharges, oil and gas production, mining or farming. Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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.

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

CONTACT INFORMATION:

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. We invite public participation in decisions that affect drinking water quality.

Meeting Location: Mattawan Village Hall 24221 Front Ave

Meeting Time: 2nd and 4th Monday of every month.

For more information about your water, or the contents of this report, contact Tom Anthony at 269-668-2300. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

Village of Mattawan routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2009. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

TERMS AND ABBREVIATIONS USED BELOW:

- * 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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- * Maximum 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Inorganic Contaminants	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violation	Typical source of Contaminant
Fluoride (ppm)	4	4	0.195	.1720	2011	No	Erosion of Natural Deposits
Fluoride (ppiii)	4	4	0.193	.1720	2011	NO	Erosion of
Arsenic (ppb)	10	0	5.6**	4-6	2011	No	Natural Deposits
41	-			-	-		Erosion of
Barium (ppm)	2	2	0.21	0.13-0.29	2009	No	Natural Deposits
Lead / Copper	AL	90 th Percentile		No. of sites exceeding AL			
Lead (ppb)	15	0	1	0-1	2009	No	Corrosion of household plumbing
Copper (ppb)	1300	180	111	0-180	2009	No	Corrosion of household plumbing
Total Trihalomethanes	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violation	Typical source of Contaminant
TTHM (ppm)	.08	.08	.0071	.00110130	2010	No	Disinfection Bi Product
Total Haloacetic Acids 5	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violation	Typical source of Contaminant
HAA5 (ppm)	0.060	0.060	0.003	ND-0.003	2010	No	Disinfection Bi Product
Special Monitoring	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violation	Typical source of Contaminant
Sodium (ppm)	N/A	N/A	16.3	11-21	2011	No	Erosion of Natural Deposits

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^{*} N/A: not applicable ND: not detectable at testing limit ppb: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter pCi/l: picocuries per liter (a measure of radioactivity). RAA: running annual average

^{*}Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements that a water system must follow.

^{*}TTHM is Total Trihalomethanes

^{*}HAA is Haloacetic Acids

^{*}RAA is Running Annual Average

^{**}While your drinking water meets EPA's standards 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.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the Village of Mattawan

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2011 we did not monitor or test for disinfection byproducts and therefore cannot be sure of the quality of our drinking water during that time.

What should I do? There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time.

The table below lists the contaminants we did not properly test for during 2011 how often we are supposed to sample for these contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we will collect follow-up samples.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were (or will be) taken
Total Trihalomethan es	2 samples / year	0	06/01/2011 to 09/01/2011	06/01/2012 to 09/30/2012
Haloacetic Acids	2 samples / year	0	06/014/2011 to 09/30/2011	06/01/2012 to 09/30/2012

What happened? What is being done? We inadvertently missed collecting required monitoring for disinfection byproducts. The Village will collect these samples next summer as law requires that these samples are collected during the warmest months of the year. We are taking steps to ensure that all future monitoring is collected as required.

For more information, please contact Public Works Superintendent Tom Anthony at 269-668-2300 or the Michigan Department of Environmental Quality at 269-567-3612.

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 Village of Mattawan.

HEALTH EFFECTS:

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 Mattawan 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. 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. EXPLANATIONS:

Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

The table shows that our system uncovered some problems this year. The duration of the violation was January t through September. We the completion of our Iron Removal Plants we have corrected the problem.

All sources of drinking water including bottled water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the

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 at 1-800-426-4791.

MCL's are set at very stringent levels. The MCL's are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

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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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions. We at Village of Mattawan work around the clock to provide top quality water to every tap. 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.