

# WATER QUALITY REPORT FOR The Village of Mattawan-2007

This report covers the drinking water quality for The Village of Mattawan for the calendar year 2007. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. **The Village of Mattawan's** water comes from 3 groundwater wells, and the well water supply is currently not treated. 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 geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is moderately susceptible. Please contact the Village of Mattawan if you wish to have a copy of the results.

We have been moving forward with a plan for system improvements. In the distribution system we have replaced several fire hydrants, upgraded all three wells and upgraded all of our residential water meters to the touch read system and are now moving forward with radio read system. This has sped up the reading time from 3 days to 1 and a half days and the accuracy rate has dramatically improved. We have been diligently working on our Cross Connection program to not only stay in compliance but to ensure that you have a safe source of drinking water. We have received a grant from the State of Michigan to further our efforts in the villages Well Head Protection Program. If you would like more information on this program visit [www.mattawanwellhead.com](http://www.mattawanwellhead.com). The Village of Mattawan is moving forward with building two iron removal water treatment plants. The plants will go on line between July and August of 2008. The iron removal plants will not only remove the iron and manganese in our water but also bring the arsenic limits (12 & 9.75 ppb) to well below the new limit (1/23/06) of 10 parts per billion. However, the new facilities estimated costs are \$2.4 million dollars to construct and \$40,000 annually to maintain and operate. This is why the Village of Mattawan is working to find and receive grant-funding sources to help off set the cost of building the treatment facilities. The Village of Mattawan has received a \$500,000 grant from the Michigan Economic Development Corporation. Our Department of Public Works staff has taken several courses this year to learn about any safe drinking water rule changes, or programs that may benefit our community. The Village of Mattawan has signed an administrative order with the Department of Environmental Quality in order to extend or deadline for arsenic compliance until 2008. However the village believes it will be in compliance sooner than that.

**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. Immuno-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) includes 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 stormwater 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 are naturally occurring.

**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 stormwater 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 provides the same protection for public health.

## WATER QUALITY DATA

The table below lists all the drinking water contaminants that were detected. EPA requires that water supplier to report the most recent sampling results within a five-year period from January 2004 to December 2006. The detected concentration can be either below or above the state/federal safe drinking water standard (also known as the Maximum Contamination Level). If the detected concentration is above the safe drinking water standard a violation has occurred and a "YES" in bold will be indicated in the violation column. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

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.

N/A: Not applicable; ND: Not detectable at testing limit; ppm: parts per million or milligrams per liter; ppb: parts per billion or micrograms per liter; Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

Inorganic Contaminants	MCL	MCLG	Our Water	Range of Detection's	Sample Date (if not in 2005)	Violation	Typical source of Contaminant
Fluoride (ppm)	4	4	0.17	0.16-018	4/17/07	No	Erosion of Natural Deposits
Arsenic (ppb)	10	0	11	9.8-11.6	2007	yes	Erosion of Natural Deposits
Barium (ppm)	2	2	0.327	ND-0.327	7-13-03	No	Erosion of Natural Deposits
<b>Lead / Copper</b>	<b>AL</b>	90 <sup>th</sup> Percentile		<b>No. of sites exceeding AL</b>			
Lead (ppb)	15	0	1	0	8/25/06	No	Corrosion of household plumbing
Special Monitoring	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violation	Typical source of Contaminant
Sodium (ppm)	N/A	N/A	13.5	11-16	4/17/07	No	Erosion of Natural Deposits

The Village of Mattawan's water does not meet the EPA standard for Arsenic, it exceeds the current standard of 10 parts per billion. We have exceeded the limit since the reduction of the standard January 23<sup>rd</sup> 2006. We are in the process of installing two iron removal plants, the water treatment plants will not only remove the iron but the arsenic as well. This will once again bring us into compliance with the new standard. 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.

**Is our water system meeting other rules that govern our operations?** The state and EPA requires us to test our water on a regular basis to ensure its safety. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the fourth quarter of 2007 we did not monitor for Arsenic 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 your water or use an alternative source of water at this time.

**What Happened?**

The Public Works Superintendent did not sample in the fourth quarter for arsenic. He accidentally took 2 samples in the third quarter and not any in the fourth quarter.

**What is being done?**

The Public Works Superintendent has purchased software to schedule work orders, tasks, and sampling that must be done to try and keep this from happening again.

We are committed to providing you safe, reliable and healthy water. We are pleased to provide you with this information to keep you fully informed about your water. We will be updating this report annually, and will also keep you informed of any problems that may occur throughout the year, as they happen.

If you would like more information about your water, or the contents of this report, contact DPW Superintendent **Tom Anthony** at **269-668-2300** or visit **[www.mattawanwellhead.com](http://www.mattawanwellhead.com)**. We invite public participation on decisions regarding the water system at our council meetings that are on the 2<sup>nd</sup> and 4<sup>th</sup> Monday of the month, 7:00 PM at Village Hall.