VILLAGE OF PAW PAW
WATER QUALITY REPORT-2008

The Village of Paw Paw strives to produce the best quality drinking water possible. The purpose of this report is to provide you with information about your drinking water. The report explains to you where your water comes from and the treatment it receives before it reaches your tap. The report also lists all of the contaminants detected in your water and an explanation of all violations in the past year.

The bottom line is the Village of Paw Paw's water supply is safe. This report is emailed to area media outlets such as the daily and weekly newspapers, radio stations and television stations servicing the area. It is also mailed to the County Health Department. Please take time to review the report. Copies are available at Village Hall. The report is also posted on the Village's Website, www.pawpaw.net (click on the left hand menu item titled Public Services and then click on the item titled "Consumer Confidence Report 2008". This report is not being mailed to all water customers.

Your drinking water comes from 3 wells located on the west side of the Village. Well #4 is located on Miller Street and is on stand-by status. It is 110' deep and pumps 750 gallons per minute. Well #6 and #8 operate daily and are located on Johnson Road. Well #6 is 178' deep and Well #8 is 160' deep. Both Wells pump about 1,500 gallons per minute. The water is pumped from the ground by the wells, then chlorine and phosphate are added for disinfection and corrosion control, respectively. The water then goes to a 500,000 gallon water tower located across from the Department of Public Service Building. We are making efforts to protect our well water supply by completing a Wellhead Protection Program which was started in 1996.

The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from "very-low" to "high" based on geologic sensitivity, water chemistry and contaminant sources. The Susceptibility of Wells #6 and #8 is "Moderate". The susceptibility of Well #4 is also "Moderate". A copy of the full report can be obtained by contacting John Small, Department of Public Services Director, 110 Harry L. Bush Blvd, Paw Paw, Michigan, 49079.

The sources of drinking water, both tap water and bottled water, including rivers, lakes, streams, ponds, reservoirs, springs, and wells may contain contaminants. 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.

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 the contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general populations. 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of the infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

The Paw Paw water supply comes from groundwater. As water travels through the ground, it dissolves naturally occurring minerals and can pick up substances from the presence of animals or from human activity. These include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock, and wildlife.

- **Inorganic contaminants**, such as salts and metals, which can be natural or may result from storm runoff, wastewater discharges, oil and gas production and farming

- **Organic chemicals**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also originate from gas stations, storm runoff and septic systems.

- **Radioactive substances**, which can be naturally occurring or be the result of oil and gas production and mining activities.

- **Pesticides and herbicides,** which may come from a variety of sources such as agriculture, urban runoff, and residential uses.

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 the service lines and home plumbing. The Village of Paw Paw 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 the 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.

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems.

If you would like more information about your water, or a copy of this Consumer Confidence Report, please contact the Village of Paw Paw Department of Public Service Director John Small at 657-3169, located at 110 Harry L. Bush Blvd. Individual copies of this report are not being mailed without request. Also, you may contact the Village of Paw Paw Council, which meets the second and fourth Monday of every month at 7:30 p.m. at Village Hall, 111 West Michigan Avenue.

The table below lists all the drinking water contaminants that were detected. The detected concentration can be either below or above the state/federal safe drinking water standard (also known as the Maximum Contaminant 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. EPA requires water suppliers to report the most recent sampling results within a five-year period from 2004 to 2008. 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.

WATER QUALITY DATA

Terms and Abbreviations used below:

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

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.
N/A: not applicable
ND: not detectable at testing limit
ppb: parts per billion per liter
ppm: parts per million per liter
pCi/l: picocuries per liter (a measure of radiation)
Action Level: the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Regulated Contaminants

Inorganic Contaminants	MCL	MCLG	Village of Paw Paw Water	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Arsenic(ppb)	10*	0	6.3	3.7-6.3	3/10/2008 6/30/2008	No	Erosion of natural deposits
Barium (ppm)	2	2	0.33	.129 - .33	8/28/2000	No	Erosion of natural deposits
Fluoride (ppm)	4	4	ND	0.1 - 0.2	6/16/2008	No	Erosion of natural deposits
Radionuclides							
Combined Radium-226 & 228(pCi/l)	5	0	1.2	N/A	6/11/2001	No	Erosion of natural deposits

Distribution Monitoring

	MCL	MCLG	Village of Paw Paw Water	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	NA	3	NA	7/19/2004	No	Byproduct of water Chlorination
Lead and Copper	**AL**	**MCLG**	**Village of Paw Paw Water**	**No. of sites exceeding AL****			
Copper (ppm)	1.3	1.3	90 percentile***	0	6/27/2006	No	Corrosion of household plumbing systems
Lead (ppb)	15	0	2	0	6/27/2006	No	Corrosion of household plumbing systems

Special Monitoring

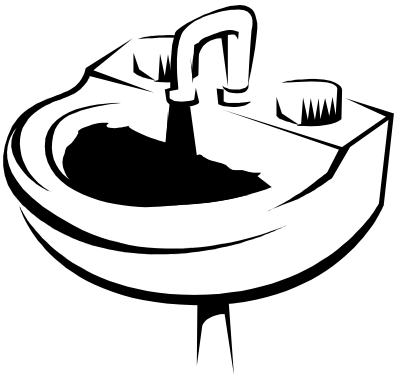
Sodium(mg/L)	N/A	N/A	18	13-23	6/16/2008		

1. The Village of Paw Paw's Drinking Water System was analyzed for at least 80 other contaminants; all analyses showed no detection.

* These arsenic values are effective January 23, 2006. Until then the MCL is 50 PPB and there is no MCLG.
** Lead/copper samples were collected from ten sampling sites and none exceeded the lead/copper action level.
***90 percent of the samples do not exceed this evel.

Supplemental Information on the
Quality of Tap Water Provided by the Village of Paw Paw

How Could I Have Used That Much Water?



The biggest complaint we hear from customers is that they think their water bill is too high. We explain how the meter works – that water only goes through the meter when something (a faucet, the toilet, a water softener, etc.) in the house or business asks for more water. It is impossible for water to pass through a meter unless something in the house asks for water. This could be someone turning on a faucet, taking a bath or flushing a toilet. It could also be a water softener recycling, leak or a break in some water line! You may want to carefully check all faucets, toilets, and anything that has water pipes connected to it. Most often people come back or call back to say they found the leak. Most often it is a toilet that was running silently!

Not all leaking faucets or toilets, breaks or water softener recycling makes noise. We advise customers to put a drop of food coloring in their toilet tank at night before they go to bed. If there is no color in their tank in the morning (or a lighter color) and they did not flush the toilet over night, then the toilet leaks a little and money is going down the drain. We also advise people to look at their meter and write down the numbers on the meter. Then don't use any water for at least 6 hours and then look at the numbers again. If they are different, there is a leak somewhere.

Leaks are very costly!

People are also amazed that even a small leak can be so costly. They forget, leaks can run 24 hours a day, seven days a week. Toilets, however, can 'stick' only occasionally, which requires you check them more frequently. Repair leaks promptly.

Money down the drain and you pay twice!

That's what happens when you don't fix a leak right away – it is money down the drain, twice. You pay for the water and you pay for the sewer charge. Sewer is billed on the amount of water that goes in, so it is expensive and you can help yourself by fixing leaks quickly.

- A leak as small as 1/32" wastes 170 gallons every 24 hours.
- A leak 1/16 of inch in diameter wastes 600 gallons every 24 hours
- A leak 1/8' in diameter wastes 2,500 gallons every 24 hours.

Troubleshooting Common Water Complaints

WATER SMELLING LIKE SULFUR OR ROTTEN EGGS?

Sulfur smells come from the iron in the water. Iron is a natural thing to find in water that comes from ground wells. As the iron collects in pipes, it will give off a sulfur smell. Iron especially builds up in hot water heaters and in

seldom-used water lines. Letting water run through seldom used water lines will prevent the sulfur smells that come from the iron build up. Your water heater should be cleaned and drained at least once a year. Over time, water heaters collect particles of iron sediment from the water. Overtime, as the sediment settles to the bottom of your water heater it gives off smells that comes out when you turn on your hot water faucets or use hot water in your laundry wash. To fix this…

1) Turn off the water supply to the water heater.
2) If it is a gas water heater, turn off the gas to the heater. If it is an electric heater, turn off the breaker or unscrew the fuse that works the water heater.
3) Open the spigot on the bottom of the water heater and drain the heater completely. To do this you may want to connect a hose to the spigot and run it to your sump pump, floor drain or into a bucket. You'll want a bucket that you can dump out during this process.
4) Drain the water heater.
5) Once it has drained, turn the water supply back on and let it wash the iron particles (sediment) out of your water heater. Let it run this way for about 15 minutes or until no more particles is being washed out the spigot.
6) If it doesn't drain, that is a real problem. You probably need a new water heater. Call a plumber.

How do I know if it is my water heater that is causing the smell?

Simple, run the cold and the hot water separately and smell each. If you only smell the sulfur smell when the hot water is turned on, it's the water heater.

How Does My Water Heater Cause Smells?

It is relatively common to have this rotten egg odor in hot water only. That is because the water heater's "sacrificial" anode rod is to blame. This rod, made of magnesium, helps protect the tank lining from corrosion; instead, the rod itself corrodes. Unfortunately, as it does, the magnesium gives off electrons that nourish sulfate reducing bacteria – the bacteria that eats up the iron particles and in the process releases the sulfur smell. Removing this rod may eliminate the problem. Some have found aluminum rods can be installed with success.

Temperature is Important

Once you get the sulfate-reducing bacteria in your water heater you will want to get them out. Even if you drain your water heater, change the anode you'll still have the bacteria. But, there is an easy way to kill them off. To eliminate sulfate-reducing bacteria from the water heater, you need to raise the water temperature above 140 degrees for 8 hours. Bacteria die out at temperatures above 140 degrees. To safely follow this procedure, first make sure your water heater has a functioning temperature and pressure relief valve. Also, to prevent accidental scalding, warn users that water will come out of faucets extremely hot and should not be used at the increased temperature.

How do we know if it is because the line is seldom used?

Go to the faucet you use the most and turn the cold and hot water on separately. If you don't smell the sulfur from this faucet, it means the ones you do smell it from are seldom used and the smells build up in this line. Also, if the smell goes away, the smell is because the water line is seldom used and the smells build up in that line and are released when you do turn the water on.

WHAT IF THE WATER SMELLS OF CHLORINE

There are two reasons for chlorine smells in water lines. One, it is common in seldom used lines. Thus, you may notice more smells with water lines that you don't use very often. Second, it is from the chlorine we add to the water supply.

First, Chlorine and sulfur collect in little used lines and dead-end lines. When these lines are used, you may smell chlorine or sulfur. If this is the case, briefly turn these lines on more frequently.

Secondly, this may be caused by the injection of chlorine in the water main at each well. Chlorine helps purify the water. When we turn a well on, chlorine is injected into the water. Customers a short distance from the well may smell the burst of the chlorine. Customers further away may not notice this smell as the injection disperses better over distance.

WHAT IF IT IS BROWN OR RUSTY WATER?

While brown and rusty looking water is safe, it just isn't appealing, tasty or good for washing clothes. Sometimes, this is a problem caused by the water system (run by the Village). Sometimes it may mean a problem in your home system (from the shut-off valve to faucets).

It may mean that we have been working on a water line, flushing hydrants, or that the fire department fought a fire and opened a hydrant. All of these actions can rapidly change the pressure in the line or the direction of the water in the line. This loosens particles of iron that collect on the walls of the water lines. They break loose and flow into the line going into your home.

When a waterline breaks and we work to fix the line we bang on the waterline. This loosens the particles of iron that then flow into your home.

Older pipes in your home will build up with particles too. Banging or working on your pipes will also cause discolored water. Changing temperatures cause pipes to expand or shrink. This process loosens up the particles and you'll get brown / rusty water. If an indoor water line runs by a window or an exterior wall the pipe and the water in it may get really cold, almost freeze, or actually freeze. This causes the water in the pipe to expand. This puts pressure on the pipe. This expansion loosens the particles that have collected on the walls of the pipe. Then, when you turn on the water, you get a brown or rusty colored water.

COST: VILLAGE WATER VS. BOTTLED WATER

We know money doesn't grow on trees in our yard or in your yard. We monitor our rates closely. We compare our rates with other ground-water supplied municipal systems. We are not the highest and we are not the lowest. Our rates are in the middle of the pack. Residents pay two fees. One is what we call the "Ready-to-Serve" fee (RTS). This RTS fee covers all our expenses for the ground wells that pump water out of the ground, the storage tank (water tower) that keeps the pressure in the water lines so when you turn on a faucet water comes out, and the delivery of the water to your home (water mains, hydrants, valves, etc). As of July 2008, costs residents $13.65 per month. The second cost is what we call the "Consumption" fee. This consumption fee covers the cost for treating the water once it comes out of the ground, reading meters, billing and such.

In July 2008, the consumption cost is just $1.49 for 1,000 gallons of water.

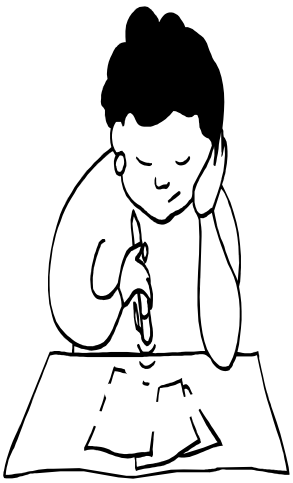
The American Water Association estimates that the typical family of four (two parents and two children) uses 180 gallons a day or 5,400 gallons a month. In this case, this typical person would pay the $13.65 for the RTS fee and $8.05 for the amount of water; a total of $21.70 for the month.

How Does This Compare To Bottled Water?

Our water is really cheap compared to bottled water you buy at a store. Let's assume you can buy a 16.9 ounce bottle of water in Paw Paw for $0.99. Since a gallon is 128 ounces, you would need to but 7.57 bottles to equal a gallon of water. This would cost you $7.49. Two gallons of bottled water - roughly 15 bottles - would cost you $14.98.

For $15.14 you get 1,000 gallons from the Village. This is the monthly RTS fee ($13.65) and the Consumption fee ($1.49) added together.

- **Bottled water is 500 times more expensive than Village water!**
- **To buy 1,000 gallons in bottled water, you would need to purchase 7,570 bottles - 315.41 cases of bottled water. This would cost you a grand total of $7,494.30.**



READING YOUR METER

We read your bill each month weather permitting. When we need to estimate your bill you will see an ' E ' on the bill. Sometimes the snow is too deep to get to pit meters and we have to estimate your bill.

READY-TO-SERVE FEE

Residential customers in the Village are charged $9.00 (more for those out of the Village and more for those with larger meters) a month as a ' Ready-to-Serve' fee. This amount is for the 'infrastructure' - the wells, the meters, the pumps, all the water testing equipment, and the waterlines, etc. - needed so the Village can bring water to your home or business. This fee is used, in part, to make repairs or replace any part of the infrastructure.

For more information visit the village's website at www.pawpaw.net. Explore the website for information on water, village organization and services, history, and much, much more!