

# VILLAGE OF PINCKNEY CONSUMER CONFIDENCE REPORT FOR CALENDAR YEAR 2016 ANNUAL DRINKING WATER QUALITY REPORT

This report covers the drinking water quality for the Village of Pinckney, for the calendar year 2016. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Our water source is from the groundwater. In 1990 the Village of Pinckney installed two wells that comprise the wellfield; they are situated in a sandstone aquifer at a depth of 200 feet. The wells are both 12-inch production wells, and have the capacity to pump 500 gallons per minute. The well logs show an abundance of gray clay approximately 30 feet in depth in this area. The bedrock of water-bearing sandstone interbedded with limestone and shale was reached at 60 feet.

In June of 1997 the Village of Pinckney established a Wellhead Protection Plan, a voluntary program to protect our source water from potential sources of groundwater contamination. By reducing the threat of contamination of our wells it may allow us to defer or waive certain costly monitoring requirements. To help indicate the susceptibility of the groundwater to contamination, we have tested our source water for tritium. Tritium is a naturally occurring isotope whose presence increased as a result of nuclear weapons testing in the 1950's causing groundwater to be "tagged" with excess tritium. Groundwater recharged prior to the 1950's will have a tritium level at or below one "tritium unit" (TU). Our system detected tritium at <0.8 and may be considered not as vulnerable to contamination as water with higher tritium levels. Although tritium levels may indicate an aquifer is "not vulnerable," it is important to realize that a potential for contamination may still exist. For that reason, we've taken steps to protect our wellhead area.

**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-population:** 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 transplant, 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 means to lessen the risk of infection by Cryptosporidium and other microbial contaminants, the guidelines 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. 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, this may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Inorganic Contaminants:** such as salt and metals, this 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:** This may come from a variety of sources such as agriculture and residential uses.

**Radioactive Contaminants:** are naturally occurring or can 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 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 provide the same protection for public health.

The Village has sampled for lead and copper and no residents have exceeded the action level. We have complied with EPA Lead and Copper regulations for the monitoring period of 2014. The Village will begin testing for lead and copper again in the 2017 calendar year.

This past year while taking our scheduled gross alpha sample the initial test showed a result of 32pCi/l; any result over 15pCi/l mandates a year of quarterly sampling. I am pleased to say that we have done three of the four required samples and all have been under 5pCi/l.

The Village also collects monthly bacteriological samples throughout the Village, and all the test results indicated non-detection limits. I'm pleased to report that our drinking water has met all federal and state requirements.

The Village of Pinckney routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2016. The State allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some are more than one year old.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- **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):** means 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):** means 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.
- **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).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years, or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	10	0	6*	N/A	2012	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.093	N/A	2012	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.23	N/A	2016	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	10.4	N/A	2016	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	5	N/A	2016	No	Byproduct of drinking water disinfection
Chlorine (ppm)	MRDL	MRDLG	0.202	0188 to .219	2016	No	Water additive used to control microbes
	4	4					
Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes/No	Typical Source of Contaminant
Alpha emitters (pCi/L)	15	0	13.8	4.3 - 32	2016	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.7	N/A	2013	No	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant ****			Your Water	Range	Sample Date	Typical Source of Contaminant	
Sodium (ppm)			21.0	N/A	2016	Erosion of natural deposits	
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level	Sample Date	Number of Sample above AL	Typical Source of Contaminant	
Lead (ppb)	15	0	0	2014	0	Corrosion of household plumbing systems; Erosion of natural deposits	
Copper (ppb)	1300	1300	450	2014	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	

\*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 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.

\*\* One June gross alpha 2016 sample had a result of 32pCi/L, which triggered us to collect quarterly samples. The "level detected" value in this report was calculated using three quarters of data from 2016, even though compliance is determined using four quarters. As of our most recent sampling event in 2017 with the results being 4.1pCi/L, our water meets health standards for gross alpha and has never violated the MCL.

\*\*\* EPA considers 50pCi/l to be the level of concern for beta particles.

\*\*\*\* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

**Information about 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 Pinckney 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 1-800-426-4791 or at <http://www.epa.gov/drink/info/lead>.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5% of monthly samples positive)	0	0	No	Naturally present in the environment

The State and EPA requires us to test our water on a regular basis to ensure its safety. As you can see by the tables shown above, the Village Water System had no violations.

We're proud to inform you that your drinking water meets or exceeds all Federal and State requirements for 2016.

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.

We invite public participation in decisions that affect drinking water quality. You can attend Village regular scheduled council meetings, on the second and fourth Monday of each month at 7:00 p.m., at 220 South Howell Pinckney, Michigan.

If you have any questions about this report or concerns about your water utility, please contact Scott Mills the Department of Public Works Director at 734-878-0666 or email correspondence to [dpw@villageofpinckney.org](mailto:dpw@villageofpinckney.org). We want our valued customers to be informed about their water utility. For more information about safe drinking water, visit the U. S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).

You may review or receive a copy of this report at the Village Office at 220 South Howell Pinckney, Michigan. Office hours are from 8:00 am to 4:00 pm Monday thru Thursday.

We at the Village of Pinckney work around the clock to provide top quality water to every tap. We ask that all our customers help us to protect our water sources, which is the heart of our community, our way of life, and our children's, children's future.

This report will **NOT** be mailed to individual customers.

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