2017 Water Quality Report for the Village of Webberville

This report covers the drinking water quality for the Village of Webberville, for the calendar year 2017. This information is a snapshot of the quality of the water that we provided to you in 2017. 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 the Basal Member of the Saginaw Formation via three groundwater wells at a depth of 220 and 210 feet located at 425 S. Maple St. and 180 Pine St. 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 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-high.

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by participating in a wellhead protection program and conducting regular source water monitoring. If you would like to know more about the report, please contact John Teague, DPW Supervisor, at (517) 375-8671 or iteague@villageofwebberville.com.

- 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) 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:
 - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
 - T **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.
 - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
 - T **Radioactive contaminants**, which are naturally occurring or can be the result of oil and gas production and mining activities.
 - T 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.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2017. The State allows 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. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used:

- <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.
- <u>Maximum Contaminant Level (MCL)</u>: 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
- ppb: parts per billion or micrograms per liter
- ppm: parts per million or milligrams per liter
- pCi/I: 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.
- <u>Maximum Residual Disinfectant Level (MDRL):</u> 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 (MDRLG): Means the level of a drinking water disinfectant below which
 there is no known or expected risk to health. MDRLGs do not reflect the benefits of the use of disinfectants to
 microbial contaminants.
- TTHM: (Total Trihalomethanes) A byproduct of Chlorine disinfectant.

Regulated Contaminant	MCL	MCLG	Level Detected	Test Date	Violation Yes / No	Typical Source of Contaminant
Chlorine* (ppm)	4	4	Average: 0.19 Range: 0.03 to 0.85	2017	No	Water additive for Disinfection.
Arsenic** (ppb)	10	0	6	2016	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2	2	0.25	2016	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.30	2017	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Alpha Particles (pCi/L)	15	0	Range: 5 to 7	2014	No	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Radium 226 and 228 (pCi/L)	5	0	Range: 0 to 1.96	2017	No	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation.
Volatile Organics			Range Detected			
TTHM (ppm)	60	N/A	0.0033	2017	No	Disinfectant Byproduct
Unregulated Contaminant ***			Level Detected	Test Date		
Manganese (ppm)			0.02	2016	No	Erosion of natural deposits
Sodium (ppm)			Average: 23 Range: 16 to 30	2017	No	Erosion of natural deposits
Contaminant Subject to AL	Action Level		90% of Samples < This Level	Test Date	Number of Samples Above AL	Typical Source of Contaminant
Copper (ppm) 1.3 ppm		0.140	2015	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	

^{*}Chlorine was calculated using a running annual average.

** While your drinking water meets the 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 the arsenic from the 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.

***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.

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 Webberville 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.

Is our water system meeting other rules that govern our operations? The State and EPA require us to test our water on a regular basis to ensure its safety. , Yes, we met all monitoring and reporting requirements for 2017. 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. Our village council meetings are held the second Tuesday of each month at 6:30 P.M. at the village hall at 115 S. Main Street. The public is invited.

For more information about your water, or the contents of this report, contact John Teague, DPW Supervisor at (517) 375-8671 or iteague@villageofwebberville.com. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/

We will not send you a copy of this report. Copies are available at the Webberville Village Office at 115 South Main Street or you can print them from our website.