VILLAGE OF EDMORE WATER SUPPLY

CONSUMER CONFIDENCE REPORT

January 1, 2016 through December 31, 2016

The purpose of this report is to give residents of Edmore a closer look at the drinking water serving this community. We are proud of the Edmore water system and its reputation for quality. As we continue to hear about communities that wrestle with quality and pollution problems, it is important to continually assess our system to ensure that it is the best it can be. Steps have been taken in village government to develop a plan to protect our wells and the water that they provide. This effort, called wellhead protection, studies the flow of groundwater and the impacts of ground level pollution. The pages to follow describe how Edmore monitors its water supply. If you have any questions or concerns, please do not hesitate to contact the Village office at (989) 427-5641.

Well Descriptions:

The Village maintains a water system with (3) wells located inside the Village limits. Well #3 is about 100 feet deep and pumps 220 gallons per minute. This well brings us the majority of our weekend water. Well #5 is 200 feet deep and pumps 1050 gallons per minute. Well #6 is 380 feet deep and pumps 1140 gallons per minute. This workhorse, along with Well #5, provides the majority of our water at peak times.

Well Testing:

The Village tests each of its three wells 13 times a year. During these tests we check for a variety of metals and chemicals. This does not represent items directly injected into the water supply. A small amount of Fluoride is found naturally as is Sulfate, Sodium, Chloride, and Nitrate. We do treat the water with a mixture of chlorine and phosphate. These chemicals are used to protect the water from bacteria and to protect the pipes from deterioration.

The Village of Edmore monitors for contaminants according to State and Federal requirements. The table below shows the results of our monitoring for the period of January 1 to December 31, 2016. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic or organic chemicals, and radioactive substances. All drinking water, including bottled water, may be expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

In the table you may find terms and abbreviations that you are not familiar with. To help you better understand these terms, here are some definitions;

Not Detected (ND) - laboratory analysis indicates that the constituent is not present.

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

Action Level - (AL) the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of contaminant in drinking water.

Maximum Contaminant Level - The “maximum allowed” (CML) is 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 Contaminant Level Goal - The “goal” (MCLG) is 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 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.

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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 disinfectant to control microbial contaminants.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment of other requirements which a water system must follow.

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.

Date	Contaminant
2014	**Lead** 90th percentile=6 ppb AL=15 ppb # exceeding action level=0 MCLG=0 No violation Typical Source=Corrosion of household plumbing systems; Erosion of natural deposits
2014	**Copper 90th** percentile=790 ppb AL=1300 ppb # exceeding action level=0 No violation Typical source=Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
2016	**Fluoride** (ppm) Highest Level Detected = 0.21 Range = 1-2 MCL = 4 MCLG = 4
2016	**Sodium** (ppm) Highest Level Detected = 7 Range = 0-7 Typical Source=Erosion of natural deposits
2016	**Total Trihalomethanes** (TTHM) (ppb) Running Annual Average (RAA) = 5 Range = .0014-.0043 MCL = .080 MCLG = N/A = non applicable Typical Source = By-product of drinking water chlorination
2015	**Combined Radium (**pCi/L**)** Highest Level Detected=0.130 Range Detected=0.112-0.130 MCL=5 MCLG=0
2016	**Barium** (ppm) Highest Level Detected = .03 MCL=2 MCLG=2 Typical Source = Discharge of Drilling Wastes; Discharge from metal refineries; Erosion of natural deposits
2016	**Chlorine** Highest Running Annual Average = .5 Range detected = .05-3 MRDL – 4 MRDLG = 4 Typical Source = Drinking water disinfectant

We also test for 55 other elements at each of our wells. None have ever tested positive. Copper and Lead is tested randomly at homes throughout the Village. If you would like to view past test results of these, please feel free to contact the Village office.

What does it all mean?

As you can see by the table, our system has had no violations. The EPA has determined that our water is safe. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can 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 discharge, 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 or may be the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are the byproducts of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems. 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 Water Hotline at 1-800-426-4791.

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Some people may be more vulnerable to contaminants in the drinking water than the general population. Immuno-compromised persons such as persons 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 infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

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. Village of Edmore 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.

Tritium: Tritium is a low level of radioactivity that is found in all water that was above ground when the United States began nuclear testing in 1956. Traces of tritium are found around the globe. The Village has tested its water supply for tritium levels. These tests were done to better understand whether our ground water has been exposed to the environment. When tritium is not detected, it means that our water has not seen the light of day since before 1956. As a result, water with no tritium has not been exposed to pollutants that can plague air and surface water. Our tritium levels are as follows:

Well #3:	Detected
Well #5:	Detected
Well #6:	Not Detected

Radon: We conducted some radon sampling in 2015, and the highest recorded level was 0.130 pCi/L, which is considered acceptable. Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up though the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will be (in most cases) a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. For additional information on radon, call EPA's Radon Hotline, 800-426-4791.

Well #6 pumps the majority of our water. The detection of tritium in wells 3 and 5 indicates, to us, that we need to be aware of where our surface water is coming from and how we can better plan in the future. If you have any questions about anything contained in this report or about specific water quality issues, please don't hesitate to contact the Village Office. The Village of Edmore works around the clock to ensure the safest drinking water possible.

Your water comes from three groundwater wells located within the Village limits. The depths of the wells are as follows: Well #3 – 100 feet deep, Well #5 – 200 feet deep, and Well #6 – 390 feet deep. The Village and its production wells lie within the Tittabawassee River Basin. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential on contamination. The susceptibility rating is on a six-tiered scale from "very-low" to "high" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our sources is moderate to high.

Significant sources of contamination could include Hitachi Magnetics, Inc. We are making efforts to protect our water sources. In 2000 Edmore began a Wellhead Protection Program to demonstrate to the community the Village's progressive attitude toward protecting the water supply.

A copy of the full report can be obtained by contacting the Edmore Village Office, 209 South Sheldon Street, P.O. Box 170, Edmore, MI. 48829. Phone: (989) 427-5641