2019 BARRY TOWNSHIP PUBLIC WATER SYSTEM WATER QUALITY REPORT WSSN 0426

This report covers the drinking water quality for Barry Township: Delton Water system for the 2019 calendar year. 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 drinking water comes from three groundwater wells located at Pleasant Lake Road. The well water supply is treated with sodium hypochlorite (liquid chlorine) for water supply disinfection to kill bacteria. Also, polyphosphate is added to the water supply for corrosion control to eliminate the presence of rusty water. The water is pumped to a pneumatic holding tank within the wellhouse building. 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 veryhigh, based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is "moderately" from these three wells. A copy of the Source Water Assessment report can be obtained through Perceptive Service & Operations: Facility **Operator Carey Williams**

Sources of drinking water:

The sources of drinking water (both tap 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 human activity.

Vulnerability of sub-populations:

Some people may be more vulnerable to contaminants in drinking water than the general populations. Immunecompromised persons such as persons with cancer undergoing chemotherapy, persons who have under gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. 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. ** Barry TWSP has 329 Service connections of which none are Lead, nor galvanize previously connected to lead*

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 the water poses a health risk. More information about the contaminants and potential health effects can be obtained by calling the **EPA's Water Hotline at 1-800-426-4791.**

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 Storm water 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 agricultural and residential uses. "Radioactive Contaminants" which can be naturally occurring or be the result of oil and gas production. "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 storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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 must provide the same protection for public health.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. For more information about your water system, please contact: Water Operator Carey Williams @ 269-384-9345. Barry Township Meetings are held the Second Tuesday of each month at 155 E. Orchard St. Delton Mi. 49046 Phone # 269-623-5171 to obtain a copy also contact Barry TWSP. For more information, contact the Michigan Dept of Environmental Quality at 616-356-0269.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools and businesses)

BARRY TOWNSHIP WATER QUALITY DATA

The table below lists all the drinking water contaminants that were detected during the 2019 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, 2019. 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 below:

Maximum Contaminant Level Goal (MCLG): The Goal 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.
RAA: Running annual Average
Maximum contaminant Level (MCL): The maximum allowed, is the highest level of a contaminant that is allowed in drinking water.
Parts per Million (ppm) or Milligrams per Liter (mg/L): One part per million corresponds to one minute in two years.
Parts per Billion (ppb): One part per billion corresponds to one minute in 2,000 years.

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.

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 disinfectants to control microbial contaminants. pCi/l: picocuries per liter (a measure of radiation) N/A: Not applicable N/D: Not detectable at testing limit. Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

Regulated Contaminants			Sample	Our				1	
Regulated Containmants	MCL	MCLG	Date	Water	Range	Violation	Typical Sources		
Fluoride Well #1 &2\3 ppm	4.0	4.0	8/28/19	0.22-ND	022	No	Erosion of natural deposits		
Barium ppm	2.0	2.0	6-18-2013	0.11 RAA	0.5- .18	No	Erosion of natural deposits		
Combined Radium <i>pCi/l</i> <i>Well# 1</i>	5.0	n/a	9-13-2016	2.29	N/A	No	Erosion of natural deposits		
Combined Radium pCi/l Well# $2\backslash 3$	5.0	N/A	9-01-2016	1.53	N/A	No	Erosion of natural deposits	sits	
Nitrates Well # 1 & 2	10	10	8/28/19	\1.4	N/A	No	Erosion of natural deposits]	
TTHM- <i>ppb</i> Total Trihalomethanes	80	N/A	8-17-2017	18.4	N/A	No	Byproduct of drinking water disinfection		
HAA5 Haloacteic Acids ppb	60	N/A	8-17-2017	5.0	N/A	No	Byproduct of drinking water disinfection		
Chlorine Residual ppm	4.0 MRDL	4.0 MRDLG	Monthly	1.92 RAA	.64- 2.21	No	Water additive used to control microbes		
Unregulated Contaminants	_						-		
Sodium *** (ppm)1 and $2\backslash 3$	N/A	N/A	7/19/18	8	0-8	No	Erosion of Natural Deposits		
Hardness well 2\3	N/A	N/A	7/19/18	352	308- 561	No	Erosion of Natural Deposits		
***- 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.

Contaminant Subject To Action Level	Action Level (AL)	Sample Date	90% of Samples	Number of Samples above AL	Violation	Typical Sources
Copper (ppb)	1300	7-13-2017	900 ppb	0	No	Corrosion of plumbing;
Lead (ppb)	15	7-13-2017	1 ppb	0	No	Corrosion of plumbing;

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. Perceptive Service & Operations & Barry Township are 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" at 1-800-426-4791 or http://www.epa.gov/drink/info/lead