Sebewaing Light & Water Department
Water Quality Report 2021

Is my water safe?
Yes. The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all monitoring and reporting requirements, for 2021. There were not any violations. This report is designed to provide details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Do I need to take special precautions?
There are no significant sources of contamination in our well water supply. Yet, 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 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. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline 800.426.4791.

Where does my water come from?
Light and Water Department provided over 84.3 Million gallons of ground water, supplied from three well pumps located within the Village. Well #1 has a depth of 300 feet, Well #4 has a depth of 220 feet, and Well #3 has a depth of 250 feet. Approximately, 5.48 miles of Sebewaing's distribution system was installed in the 1930's. Today, the oldest water mains date back to the 1950's. We currently, maintain 17.8 miles of underground water mains and use 2 elevated storage tanks. In 2021, both water towers were inspected and maintenance was done on the sample tap on the 75,000 gallon tower. We also installed another automatic flusher to eliminate an additional dead end. The Light and Water department remains committed to making improvements to the water system and delivering the best water quality possible.

Source water assessment and its availability
The Michigan Department of Environmental Quality (MDEQ), now EGLE, performed an assessment of our source water in 2018, to determine the susceptibility of the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "high", based primarily on geological sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source water for well # 1 is moderately low, Well # 3 is moderate and Well #4 is moderate. You may obtain a copy of this report at our Sebewaing Light and Water office.

What type of contaminants could be in my drinking water?
Sebewaing Light and Water monitors the quality of your drinking water and maintains adherence to the state requirements. Although, drinking water, including bottled water, may 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 U.S. EPA's Safe Drinking Water Hotline 800.426.4791. 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:

- **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 agriculture urban stormwater runoff, and residential uses.
- **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.
- **Radioactive contaminants,** which can be naturally occurring or be the result of oil and gas production and mining activities.

How can I get involved?
Call us for the next opportunity for public participation in decisions that affect our drinking water. The Light and Water Committee meets once a month, at the Village Office, 222 N Center St., Sebewaing, MI 48759, 989.883.2700. The Village Council Meetings are the third Monday, of every month, at 7:00pm, 222 N Center St., Sebewaing, MI 48759, 989.883.2150.

Water Quality Data

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. The Federal Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The table below lists all the drinking water contaminants that we detected during the 2021 calendar year. All sources of drinking water contain some naturally occurring contaminants. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few, naturally occurring minerals may improve the taste of drinking water and have nutritional values at low levels. 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.

Note: The EPA requires monitoring of over 80 drinking water contaminants. Below is the list of the contaminants found in your water. For a complete list, contact Sebewaing Light and Water Department.

Disinfectants						
Regulated Contaminants	**MRDL**	**MRDLG**	**Range of Results**	**RAA**	**Year Tested**	**Typical Source of Contaminant**
Chlorine (ppm)	4	4	0.19 – 0.93	0.54	2021	Water additive used to control microbes

Inorganic Contaminants						
Regulated Contaminants	**MCL**	**MCLG**	**Range of Results**	**Highest Level Detected**	**Year Tested**	**Typical Source of Contaminant**
Arsenic (ppb)	10	0	0.0 – 4.0	4.0	2019	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
Barium (mg/L)	2.0	2.0	0.0 – 0.04	0.04	2019 & 2021	Erosion of natural deposits; discharge of drilling wastes; discharge of metal refineries
Selenium (ppb)	50	50	2.0 – 12.0	12.0	2019 & 2021	Erosion of natural deposits; discharge from petroleum refineries; discharge from mines
Fluoride (mg/L)	4.0	4.0	0.66 – 0.74	0.74	2021	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Sodium[2] (mg/L)	N/A	N/A	190 – 440	440	2021	Erosion of natural deposits
[2]Sodium is not a regulated contaminant						

Inorganic Contaminants Subject to Action Level (AL)							
Inorganic Contaminants Subject to Action Level	**Action Level**	**MCLG**	**Your Water[4]**	**Range of Results**	**Number of Samples Above Action Level**	**Year Tested**	**Typical Source of Contaminant**
Lead (ppb)	15	0	9	0.0 - 123	2	2020	Lead service lines, corrosion of household plumbing, including fittings and fixtures; erosion of natural deposits;
Copper (ppm)	1.3	1.3	0.3	0.0 – 1.1	0	2020	corrosion of household plumbing systems; erosion of natural deposits
[4]Ninety (90) percent of the samples collected were at or below the level reported for our water.							

Radionuclides						
Regulated Contaminants	**MCL**	**MCLG**	**Range of Results**	**Level Detected**	**Year Tested**	**Typical Source of Contaminant**
Alpha Particles (pCi/L)	15	0	0.0 – 13.3	13.3	2016, 2018, & 2021	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	0.0 – 4.4	4.4	2016, 2018, & 2019	Erosion of natural deposits

Additional Unregulated Contaminants

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA to determine where certain contaminants occur and whether regulation of those contaminants is needed.

Unregulated Contaminants	**Average Level Detected**	**Range of Results**	**Year Tested**
Chloride (mg/L)	486	305 – 827	2021
Iron (automated) (ppb)	407	340 – 440	2021
Sulfate (mg/L)	174	85 – 336	2021
Hardness as Calcium Carbonate (mg/L)	438	294 – 698	2021
Calcium (mg/L)	124	83 – 200	2021
Magnesium (mg/L)	31	21 – 48	2021

Health Effects:

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. Sebewaing Light & Water Dept. 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 800.426.4791 or at http://www.epa.gov/safewater/lead

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper--- Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level, over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper, in excess of the action level, over many years could suffer liver and kidney damage. People with Wilson's Disease should consult their personal doctor.

Arsenic--- Some people who drink water containing arsenic, in excess, of the MCL, over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

Barium--- Some people who drink water containing barium, in excess, of the MCL, over many years could experience an increase in their blood pressure.

Fluoride--- Water additive which promotes strong teeth

Selenium--- Selenium is an essential nutrient. However, some people who drink water containing selenium, in excess, of the MCL, over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Sodium---High levels of salt intake may be associated with hypertension in some individuals

Alpha Particles---Increased risk of cancer

Combined Radium--- Increased risk of cancer

Chlorine---Eye/nose irritation; stomach discomfort

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Important Drinking Water Definitions	
Term	**Definition**
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.
MCLG	Maximum Contaminant Level Goal: the level of a contaminant in drinking water below which there is no known or expected risk of health. MCLG's allow for a margin of safety.
MRDL	Maximum Residual Disinfectant Level: 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.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to heath. MRDLGs do not reflect the benefits of the use of disinfectants to control Microbial contaminants.
N/A	Not Applicable
pCi/L	picocuries per Liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/L)
mg/L	milligrams per liter or parts per million (ppm)
ppb	parts per billion or micrograms per liter (ug/L)
RAA	Running Annual Average
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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.

Individual copies will not be mailed out. Please call our office, at 989.883.2700, if you would like a paper copy mailed to you. You may also pick up a copy of this report at Sebewaing Light and Water's Office 110 W Main St, Sebewaing, or the Village Office 222 N Center St, Sebewaing. It is also posted on our website at www.slandw.com/images/ccr2021.pdf

For more information about your water or the contents of this report, please contact:
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Phone: 989.883.2700 Website: www.slandw.com E-Mail: inquiry@slandw.com

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