Sebewaing Light & Water Department
Water Quality Report 2017

Is my water safe?
We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?
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. 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?
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 18.7 miles of underground water mains and use 2 elevated storage tanks. In 2017, we replaced 1,250 feet of 4" water main with 8" water main. Last year, Light and Water department provided over 78 million gallons of ground water which was supplied from three 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. Well #4 was not used in 2017 until June 28th, when it was put back in service after refurbishing of the iron removal plant media. The Light & 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 Source Water Assessment Score is a process that factors geologic and water well attributes, water chemistry, and potential contaminant sources for each drinking water source into a ranking system to determine the relative potential for contamination. This assessment is required by the Michigan Source Water Assessment Program under the provisions of the 1996 amendments to the Federal Safe Drinking Water Act. Significant sources of contamination include septic tanks, sewer lines, fuel tanks, landfills, lagoons or known plumes of groundwater contamination.

The State preformed an assessment of our source water in the year 2003 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 moderate, Well # 2 is moderately high and Well # 3 is moderate.

Why are there contaminants in my drinking 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 Environmental Protection Agency's (EPA) 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. 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 that 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 storm water 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.

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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Call us for the next opportunity for public participation in decisions about our drinking water. The Light and Water Committee meets the last Monday of every month at the Light and Water Department Office, 110 W. Main St., Sebewaing, MI 48759, (989-883-2700).

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Has your water usage gone up? Check your toilet, faucets and pipes for leaks. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak.
- Install water saving showerheads and ultra-low-flush toilets.
- Take shorter showers.
- Never use your toilet as a wastebasket.
- Turn off your water while brushing your teeth or shaving.
- Run your clothes washer and dishwasher only when they are full.
- When washing dishes by hand, don't run the water. Fill the sink with water or use a wash tub/basin for rinsing.
- When cleaning fruits and vegetables don't let the water run. Use a wash basin or plug the sink.
- Scrape dishes instead of rinsing before placing in the dishwasher.
- Keep a bottle of drinking water in the refrigerator instead of running the faucet until the water is cold.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Cover your pool to reduce evaporation.
- Use mulch around trees, shrubs and plants. This will slow down evaporation and prevent weed growth.
- Visit www.epa.gov/watersense for more information.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. 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 actually, improve the taste of drinking water and have nutritional values at low levels. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than a year old. In this table you will find terms and abbreviations that might not be familiar to you. A list is found at the end of this report to help you better understand these terms.

Disinfection Byproducts

	MCL	MCLG	Source	Level Detected	Date Tested
TOTAL TRIHAOLMETHANES (TTHM)	80ppb	N/A	Byproduct of drinking water disinfection	not detected	7/25/17
TOTAL HALOACETIC ACIDS (HAA5)	60ppb	N/A	Byproduct of drinking water disinfection	not detected	7/25/17

System collection site was 41 North Beck St. With these test levels no action was required.

Disinfectants

	MRDL	Source	Range	RAA
CHLORINE RESIDUAL	4.0ppm	Water additive use to control microbes	0.11-1.36ppm	0.63ppm

Inorganic Contaminants

	MCL	MCLG	Source	Range	Level Detected	Date Tested
BARIUM	2.0mg/L	2.0mg/L	Erosion of natural deposits; discharge of drilling wastes; discharge of metal refineries	0.03mg/L-0.04mg/L	0.04mg/L	5/6/16
SELENIUM	50ppb	50ppb	Erosion of natural deposits; discharge from petroleum refineries; discharge from mines	1ppb-5ppb	5ppb	5/6/16
FLUORIDE	4.0mg/L	4.0mg/L	Erosion of natural deposits; discharge from fertilizer and aluminum factories	0.75mg/L-0.82mg/L	0.82mg/L	7/20/17
SODIUM[1]	N/A	N/A	Erosion of natural deposits	161mg/L-389mg/L	389mg/L	7/20/17

[1]Soduim is not a regulated contaminant

	Action Level	MCLG	90% of Samples ≤This Level	Source	# of Samples Exceeding Action Level	Date Tested
LEAD-action level at consumer taps	15ppb	0ppb	4ppb	Erosion of Natural Deposits; household plumbing corrosion;	0	9/22/17
COPPER-action level at consumer taps	1.3ppm	1.3ppm	0.19ppm	Erosion of Natural Deposits; household plumbing corrosion; leaching from wood preservatives	0	9/22/17

Radionuclides

	MCL	MCLG	Source	Range	Level Detected	Date Tested
ALPHA PARTICLES	15pCi/L	0pCi/L	Erosion of natural deposits	0pCi/L-3.36pCi/L	3.36pCi/L	2016 & 2017

Monitoring Requirements were not met for Alpha Particles and Radionuclides in 2017

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the fourth quarter of 2017 we did not complete all monitoring for gross alpha and radionuclides and therefore cannot be sure of the quality of our drinking water during that time. The table below lists the contaminants that we did not properly test for, how often we are supposed to sample for these contaminants, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken. Although we did miss the increased frequency sample due to the new well installation, samples taken before and after were all within the allowable range for contaminants.

Contaminant	Required Sampling Frequency	Number of Samples Taken	When All Samples Should Have Been Taken	When Samples Were Taken
Gross Alpha	1 every 3 months	0	10/1/17-12/31/17	1/31/18
Radium 226 & 228	1 every 3 months	0	10/1/17-12/31/17	1/31/18

What Should I do? There is nothing you need to do. This is not an emergency. You do not need to boil your water or use an alternative source of water.

What happened? What is being done? We inadvertently, did not take a sample for gross alpha, radium 226 and radium 228 within the required time frame. We are making every effort to assure that this does not happen again.

Additional Unregulated Contaminants

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

	Average Level Detected	Range	Year Tested
CHLORIDE[2]	459mg/L	298mg/L-769mg/L	2017
IRON(automated)[2]	470ppb	100ppb-800ppb	2017
SULFATE[2]	148mg/L	70mg/L-297mg/L	2017
HARDNESS AS CALCIUM CARBONATE[2]	393mg/L	271mg/L-629mg/L	2017

[2]Results of monitoring are available upon request.

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 (1-800-426-4791) or on the USEPA Web site. (http://water.epa.gov/drink/info/lead/index.cfm).

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

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.

Chlorine---Eye/nose irritation; stomach discomfort

Note: The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are not the only contaminants tested for in your drinking water. For a complete list, contact Sebewaing Light and Water Department.

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.

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. MCL's are set as close to the MCLG's 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 disinfection 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.
N/A	Not Applicable
pCi/L	picocuries per Liter
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 treatments or other requirements which a water system must follow.

For more information about your water or the contents of this report, please contact:
Name: Melanie McCoy, Superintendent
Address: 110 W. Main St., Sebewaing, MI 48759
Phone: (989) 883-2700 Fax: (989) 883-2792
Website: www.slandw.com

Copies of this report are available at www.slandw.com/images/pdf/CCR-2017.pdf and at Sebewaing Light and Water Dept