

## **Sebewaing Light & Water Department Water Quality Report 2009**

The Safe Drinking Water Act (SDWA) requires utilities issue an annual “Consumer Confidence” report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains and the risks our water testing and treatment are designed to prevent. Sebewaing Light & Water is committed to providing you with the safest and most reliable water supply. Informed customers are our best allies in maintaining safe drinking water.

### **Overview**

**Approximately 4.776 miles of Sebewaing’s distribution system dates to the 1930’s. The Light & Water department remains committed to improve the system and to deliver the best water quality possible. In 2008 the department continued development of its five year plan by replacing some the oldest main in the system. In 2008, 2872 feet of main was replaced on E. Sebewaing Street (from Beck to East ST.). The department also continued to maintain its five year plan by preparing construction plans for five locations in the distribution system. Plans for maintenance of the 300,000 gallon storage tank were developed in 2008. These projects were submitted for Stimulus grants in early 2009. Call us for the next opportunity for public participation in decisions about our drinking water. The Light & Water Commission meets the last Monday of every month.**

### **Source Water Assessment Report**

The Village of Sebewaing is supplied by groundwater pumped from 3 wells located in the Village. Well # 1 is located on E. Main Street with a depth of 300 feet. Well #2 is located on Sharpsteen ST. with a depth of 321 feet and Well # 3 is located on Pine Street with a depth of 250 feet. The State preformed an assessment of our source water in the year 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from “very-low” to “high” based primarily on geological sensitivity, water chemistry and contaminant sources. The susceptibility of our source water for well # 1 is moderate, Well # 2 is moderately high and Well # 3 is moderate.

Significant sources of contamination include septic tanks, sewer lines, storm sewers, fuel tanks, landfills, lagoons or known plumes of groundwater contamination.

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.

If you would like to know more about the report please contact Jeff Schock at Sebewaing Light and Water Department (989) 883-2700.

### **Required Additional Health Information.**

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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline ( 800-426-4791) The sources of drinking water (both tap 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 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:

- **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 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, storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic, which are by-products of industrial processes and petroleum production, and can also come from gas stations, under 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.

**Some people may** be more vulnerable to contaminants in drinking water than is the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, disorders, some elderly, and infants can particularly be 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 are available from the Safe Drinking Water Hotline (800-426-4791).

### Water Quality Data

The table below lists all the drinking water contaminants that were detected during the 2008 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, 2008. The State allows us to monitor for certain contaminants less than once per year because 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 level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- Maximum Contaminant Level (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.
- N/A Not applicable
- Action Level: The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
- ND: Not detectable at testing limit
- Ppb: parts per billion or micrograms per liter

### Inorganic Contaminants

	Health Limit MCL	Source	Test Result	Tested
SODIUM	N/A	Erosion of Natural Deposits	Well # 1 167mg/L	7/11/08
			Well # 2 323mg/L	7/11/08
			Well # 3 192mg/L	7/11/08
BARIUM	2/mg/L	Erosion of Natural Deposits	Well #3 .03mg/L	8/30/04
			Well #1 .03mg/L	7/8/03
			Well #2 .03mg/L	7/8/03
CHROMIUM	.1mg/L	Erosion of Natural Deposits	Well#3 .01mg/L	8/30/04
			Well#2 .01mg/L	7/8/03
			Well#1 .01mg/L	7/8/03
SELENIUM	.05mg/L	Erosion of Natural Deposits	Well #3 .003mg/L	8/30/04
			Well #1 .003mg/L	7/8/03
			Well #2 .007mg/L	7/8/03
7/8/03 ARSENIC	.01mg/L	Erosion of Natural Deposits	Well #2 .003	7/14/08
Well #1 not detected			7/14/08	
Well #3 not detected			7/14/08	

### Contaminant - Lead and Copper

Action Level	Results of this monitoring period		# of Samples Required	Date Tested
	90 <sup>th</sup> Percentile	Number of Samples Above Action Level		
Lead 15 ppb	6 ppb	0	10	July 14, 2008
Copper 1300ppb	170 ppb	0		

**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 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 at <http://www.epa.gov/safewater/lead>.

Copper--- Some people who drink water containing copper in excess of the action level over a relatively short period 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 or kidney damage. People with Wilson’s Disease should consult their personal doctor.

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

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

Chromium---Some people who drink water-containing chromium in excess of the MCL over many years could experience allergic dermatitis.

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.

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.

**Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5)**

Total Trihalomethanes for the 2008 test were .014 mg/L MCL is .080

Total Haloacetic Acids for the 2008 test were .002 mg/L MCL is .060

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

**Chlorine Residuals**

Maximum residual disinfectant level, or MRDL, means the highest level of 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 or MRDLG, means the level of a drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MDRL for Chlorine is 4.0

MDRLG for Chlorine is 4.0

Sebewaings highest running annual average for chlorine (RAA) is 1.25 and range of detection is .6 to 1.9.

**Note:** The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are not the only contaminants detected in your drinking water. For a complete list, contact Sebewaing Light and Water Department. We met all the monitoring and reporting requirements for 2008.

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.

Copies of this report will be available at Sebewaing Light & Water Department. For more information about your water or the contents of this report, contact Jeff Schock, Supt. at (989) 883-2700.

The Sebewaing Light & Water department will not mail individual copies. Copies of the CCR can be obtained from the Light & Water office or at [www.sebewainglightandwater.com](http://www.sebewainglightandwater.com) click on the Links tab followed by the water report tab.