Water System Information

If you would like to know more about the information contained in this report, please contact SWL&P's Lead Water Plant Operator-In-Charge, Donald Vollmer at (715) 398-4421.

Opportunity for input on decisions affecting your water quality

Superior Water, Light & Power (SWL&P) is a private utility. Public meetings to voice concerns regarding water quality and/or usage is not offered. However, should you have a question or concern regarding the quality or usage of your drinking water, please feel free to contact Donald Vollmer.

Health Information

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 safe drinking water hotline (800-426-4791).

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 systems 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 microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (ft)	Waterbody Name	Status
1	Surface Water		Lake Superior	Active

To obtain a summary of the source water assessment, please contact Donald Vollmer.

Educational Information

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.

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 stormwater 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 stormwater 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. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

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

Level 1 Assessment A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

Level 2 Assessment A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.

MCL Maximum Contaminant Level: 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 contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MFL Million fibers per liter.

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.

MRDLG Maximum Residual Disinfectant Level Goal: 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.

mrem/year Millirems per year: A measure of radiation absorbed by the body.

NTU Nephelometric Turbidity Units.

pCi/l Picocuries per liter (a measure of radioactivity).

ppm Parts per million, or milligrams per liter (mg/l).

ppb Parts per billion, or micrograms per liter (ug/l).

ppt Parts per trillion, or nanograms per liter.

ppq Parts per quadrillion, or picograms per liter.

TCR Total Coliform Rule.

TT Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

DISINFECTION BYPRODUCTS								
Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
HAA5 (ppb)	SM-4	60	60	33	17 - 38		NO	Byproduct of drinking water chlorination
TTHM (ppb)	SM-4	80	0	44.1	27.5 -54.6		NO	Byproduct of drinking water chlorination
HAA5 (ppb)	SM-5	60	60	30	19 - 31		NO	Byproduct of drinking water chlorination
TTHM (ppb)	SM-5	80	0	54.4	44.9-61.2		NO	Byproduct of drinking water chlorination
HAA5 (ppb)	SM-6	60	60	2	1 - 3		NO	Byproduct of drinking water chlorination
TTHM (ppb)	SM-6	80	0	49.5	37.1-60.8		NO	Byproduct of drinking water chlorination
HAA5 (ppb)	SM-7	60	60	24	9 - 36		NO	Byproduct of drinking water chlorination
TTHM (ppb)	SM-7	80	0	36.6	24.8-48.0		NO	Byproduct of drinking water chlorination

2016 CONSUMER CONFIDENCE REPORT

Superior Water, Light & Power Company, PWS ID: 81601476

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Know your tap water.

SWL&P

AN ALLETE COMPANY

The U.S. Environmental Protection Agency requires water suppliers, such as Superior, Water, Light and Power, to deliver a Consumer Confidence Report, also known as an annual drinking water quality report, to customers.

This report provides important information about local drinking water quality—where your water comes from, our testing results in compliance with the regulated detected contaminants, and other educational information.

SWL&P is proud of our record to safely deliver reliable, quality water to our customers for more than 100 years.

For more information about the report, contact Donald Vollmer, SWL&P lead water plant operator, at 715-398-4421.

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INORGANIC CONTAMINANTS

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
Barium (ppm)		2	2	0.011	0.011		NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cyanide (ppb)		200	200	9	9	4/23/2014	NO	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)		4	4	0.7	0.7		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (N03-N) (ppm)		10	10	0.47	0.47		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)		n/a	n/a	4.00	4.00		NO	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
Copper (ppm)	AL=1.3	1.3	0.0720	0 of 30 results were above the action level	9/12/2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15	0	5.90	2 of 30 results were above the action level	9/16/2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits

SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
Hexachlorocyclopentadiene (ppb)		50	50	0.0	0.0-0.0	7/14/2014	NO	Discharge from chemical factories

UNREGULATED CONTAMINANTS Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

Contaminant (units)	Level Found	Range	Sample Date (if prior to 2016)
Sulfate (ppm)	5.30	5.30	

UCMR3 - SAMPLES COLLECTED IN 2014

Contaminant (units)	Site	Average (ppb)	Range
Hexavalent Chromium	EPTDS	0.04	.033-.046
Strontium	EPTDS	25	24-25
Chromium	Field Blank	0.11	0.11
Strontium	DSMRT	25	24-25
Hexavalent Chromium	DSMRT	0.034	0.034

Health effects for any contaminants with MCL violations or Action Level Exceedances

Contaminant Health Effects

LEAD: Infants and children who drink water containing lead in excess of the action level 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.

ADDITIONAL HEALTH INFORMATION

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. Superior Water Light & Power Company 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 www.epa.gov/safewater/lead.

OTHER COMPLIANCE

Turbidity Monitoring

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm that the filtered water is less than 0.1 NTU/0.3NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is a good indicator of the effectiveness of our filtration system. During the year, the highest single entry point turbidity measurement was .14 NTU. The lowest monthly percentage of samples meeting the turbidity limits was 100 percent.