



LOCH ALPINE SANITARY AUTHORITY

4530 W. Huron River Drive • Ann Arbor, MI 48103 • 734.426.4545

2006 Annual Water Quality Report

The Loch Alpine Sanitary Authority of Webster and Scio Townships provides your drinking water and is pleased to present you with our seventh-annual water quality report. This report follows the guidelines set by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). Our goal is to provide you with a safe and dependable drinking water supply. This report will illustrate that we are achieving our goal.

The Authority contracts the operation and maintenance of its water facilities to Magnum Plant Services, Inc. The operators routinely monitor your drinking water according to Federal and State laws. The table on the backside of this report shows the results of monitoring for the period of January 1st to December 31st, 2006, unless otherwise noted. The test results show that your drinking water meets or surpasses all Federal and State requirements.

Your drinking water is drawn from underground through three different wells. This raw well water benefits from natural filtration as it travels underground through sand and gravel. Raw water is pumped to a filter to remove iron. Treatment equipment then injects the water with chlorine (to inactivate potentially harmful bacteria in the water). Finished water is distributed directly to customers or is stored in a 125,000 gallon elevated tank for use during peak demands.

The State performed an assessment of our source water wells to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source water wells is moderate. If you would like to know more about the report please contact system operator David Ruhlig.

Water system operations staff work year-round to provide quality water to residents. If you have any questions or comments, or would like to receive more specific information about LASA's water system, please feel free to call David Ruhlig, System Operator from Magnum Plant Services at 426.4545, or Neil Gerl, Chairman of the Board at 426.2934. Additional copies of this report are available through either contact or on-line at www.lochalpine.org.

- **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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.
- **Vulnerability of sub-populations:** 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

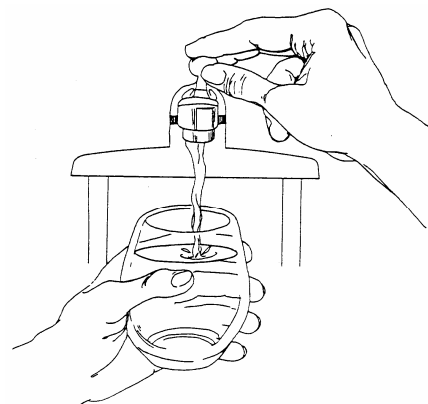
of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

- **Sources of drinking water:** 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.
- 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.
 - **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
 - **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.

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

Water Quality Data

The table on the back of this page lists all the drinking water contaminants that we detected during the 2006 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, 2006. 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 are 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. MCLGs 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.
- **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.
- **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.
- **N/A:** Not applicable
- **ND:** not detectable at testing limit
- **ppb:** parts per billion or micrograms per liter
- **ppm:** parts per million or milligrams per liter
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Inorganic Parameters							
Substance	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Possible Sources of Contaminant
Arsenic* (ppb)	10	0	ND	N/A	3/8/2005	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.115	0.09-0.12	2001	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.16	N/A	6/6/2006	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Total Trihalomethanes (ppb)	80	N/A	8.6	N/A	2004	No	By-product of drinking water chlorination.
Regulated Monitoring in the Distribution System							
Substance	MRDL	MRDLG	Your Water	Range	Sample Date	Violation Yes/No	Possible Sources of Contaminant
Chlorine Residual (ppm)	4	4	0.51	0.08-0.91	Daily	No	Water additive used to control microbes
Microbial Contaminants	MCL		MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant	
Total Coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)		0	0	No	Naturally present in the environment	
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive		0	0	No	Human and animal fecal waste	
Regulated Monitoring at the Customers' Tap							
Contaminant Subject to AL	Action Level	90% of Samples ≤ This Level	Sample Date	Number of Samples Above AL	Possible Sources of Contaminant		
Lead (ppb)**	15	ND	8/30/2005	0	Corrosion of household plumbing systems; Erosion of natural deposits		
Copper (ppm)	1.3	0.18	8/30/2005	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives		
Special and Unregulated Contaminant Monitoring***							
Substance	MCL	MCLG	Your Water	Range	Sample Date	Possible Sources of Contaminant	
Sodium (ppm)	N/A	N/A	12	N/A	6/6/2006	Erosion of natural deposits	
Chloride (ppm)	N/A	N/A	40	N/A	6/6/2006	Discharge from steel and pulp mills; Erosion of natural deposits	

* These arsenic values were effective January 23, 2006. Until then, the MCL was 50 ppb and there was no MCLG. 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.

** 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. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 800-426-4791.

*** 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.

IMPORTANT CONTACTS (clip and save this for future reference)

Water System Emergencies: 800.776.1731 (24-hour pager)
 System Operator, David Ruhlig: 734.426.4545
 Chairman of the Board, Neil Gerl: 734.426.2934
 Scio Township Hall: 734.665.2123
 Webster Township Hall: 734.426.5103
 EPA Safe Drinking Water Hotline: 800.426.4791
 Loch Alpine Sanitary Authority Email: LASA@MagnumPS.com
 Loch Alpine Website: www.lochalpine.org

View this Report On-Line at: www.lochalpine.org/lasa/lochalpine_water_report_2006.pdf