

2016 Annual Drinking Water Quality Report (Consumer Confidence Report)

This report covers the drinking water quality for the City of Auburn for the calendar year 2016. This information is a snapshot of the quality of the water that was provided to you in 2016. Included are details about where your water comes from and what it contains.

Source Water Information

The City of Auburn receives its water from the city of Midland. Midland has received its source water supply from Lake Huron since 1948. The source water pumping system is jointly owned and operated by the cities of Midland and Saginaw and is called the Saginaw-Midland Municipal Water Supply Corporation (SMMWSC). Water is drawn into the system through two intake structures located in Lake Huron off the shores of Whitestone Point. The water is chlorinated at the lake intake structures to remove harmful bacteria and zebra mussels and is then pumped through 65 miles of pipeline to Midland. The water treatment complex is able to provide 48 million gallons per day (MGD) of treated Lake Huron water to the communities. The water treatment plant is staffed by state-certified water treatment operators, water analysts and maintenance personnel that monitor, test, maintain and adjust the treatment process to provide high quality and reliable water service.

In June 2004, the Michigan Department of Environmental Quality (MDEQ) released a Source Water Assessment Report (SWAR) for our community's source of raw water. Included in the Source Water Assessment is a susceptibility analysis of our raw water. Susceptibility is a measure of the factors within the source water area that may pose a risk to the water supply. The Source Water Assessment Report concluded that potential contaminant sources present a negligible risk due to the physical location of the intakes. Based on the intake's infrequent experience with abnormal current flows, the Saginaw-Midland source water is defined as moderately low for susceptibility to potential contamination. Midland has effectively treated this source to meet drinking water standards.

A copy of Source Water Assessment is available for review at City Hall. If you have any questions or need additional information on the report, please call the Midland Water Plant at 989-837-3515.

Information on Lead and Copper

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. The City of Auburn 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 www.epa.gov/drink/.

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 or kidney damage. People with Wilson's Disease should contact their physician. If you are

concerned about elevated copper levels in your home's water, you may wish to have the water tested, and flush your tap for 30 seconds to 2 minutes before using the water.

Contact the City's DPW at 989-662-6761 for further information on water testing.

Special Information Available

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 healthcare providers. Environmental Protection Agency(EPA) and the 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 EPA's Safe Drinking Water Hotline(800-426-4791) or www.epa.gov/drink/.

Health and Safety Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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) or www.epa.gov/drink/.

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 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 which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to insure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems.

The Food and Drug Administration (FDA) regulation establish limits for contaminants in bottled water, which must provide the same protection for public health.

CITY OF AUBURN TEST RESULTS FOR 2016

SUBSTANCES REGULATED AT MIDLAND'S WATER TREATMENT PLANT

<u>Substance</u>	<u>Unit</u>	<u>Amount Detected</u>				<u>Likely Source</u>	<u>Violation?</u>
		<u>Range</u>	<u>Average</u>	<u>MCL</u>	<u>MCLG</u>		
Fluoride	ppm	0.59 - 0.79	0.69	4	4	Erosion of natural deposits; Water Treatment additive which promotes strong teeth	NO
Turbidity	ntu	0.03 - 0.21	n/a	TT ^a	n/a	Soil runoff; suspended matter in surface water	NO
Barium ^b	ppm	0.01	0.01	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	NO
						Discharge from petroleum refineries; erosion of natural deposits; discharge from mines	NO

a. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system. The treatment technique for turbidity requires that all samples be below 1 ntu, and at least 95% of the samples each month be lower than 0.3 ntu. 100% of our samples were below 0.3 ntu.
b. Testing for this substance conducted every nine years. Test date 2013.

SUBSTANCES REGULATED IN THE DISTRIBUTION SYSTEM

<u>Substance</u>	<u>Unit</u>	<u>Amount Detected</u>				<u>Likely Source</u>	<u>Violation?</u>
		<u>Range</u>	<u>Highest RAA^c</u>	<u>MCL</u>	<u>MCLG</u>		
Total Trihalomethanes	ppb	28 - 84	n/a	80		By-products of drinking water chlorination	NO
Total Haloacetic Acids	ppb	15 - 42	n/a	60		By-products of drinking water chlorination	NO
Chlorine	ppm	0.56 - 1.20	0.92	<u>MRDL</u> 4.0	<u>MRDLG</u> 4.0	Water Treatment additive for control of microbial contaminants	NO

c. Highest Running Annual Average (RAA) calculated quarterly.

SUBSTANCES REGULATED AT THE CUSTOMER'S TAP (CITY OF AUBURN)

<u>Substance</u>	<u>Unit</u>	<u>Amount Detected</u>			<u>Likely Source</u>	<u>Violation?</u>
		<u>90th Percentile</u>	<u>MCL</u>	<u>MCLG</u>		
Copper ^{d,f}	ppm	0.325	AL=1.3	1.3	Corrosion of household plumbing systems	NO
Lead ^{e,f}	ppb	3	AL=15	0	Corrosion of household plumbing systems	NO

d. No testing site exceeded the Copper Action Level of 1 300 ppm.
e. No testing sites exceeded the Lead Action Level of 15 ppb.
f. Testing for this substance conducted every three years. Test date 2016.

UNREGULATED (SINGLE SAMPLE AT WATER TREATMENT PLANT)

<u>Substance</u>	<u>Unit</u>	<u>Amount Detected</u>	<u>Likely Source</u>	<u>Violation?</u>
Sodium	ppm	6	Erosion of natural deposits	NO

IMPORTANT DEFINITIONS

The following tables contain scientific terms and measures, some of which may require an explanation.

Action Level or AL: The concentration of a contaminant which, if exceeded, triggers the need for additional treatment or other requirements which a water system must meet.

Maximum Contaminant Level or MCL: The highest level of a contaminant, which is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: 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.

Maximum Residual Disinfectant Level or 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.

Maximum Residual Disinfectant Level Goal or 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 contamination.

Nephelometric Turbidity Units (ntu): Is a measure of the clarity of water. The lower the numbers, the more clear the water.

Not Applicable: n/a

Part per million (ppm); part per billion (ppb): These units describe the levels of detected contaminants. One part per million is about 1/2 of a dissolved aspirin tablet (162.5 mg) in a full bathtub of water (about 50 gallons). One part per billion is about one dissolved aspirin tablet (325 mg) in a typical 25-meter swimming pool (about 100,000 gallons).

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