

OTTAWA COUNTY REGIONAL WATER
2011 DRINKING WATER
CONSUMER CONFIDENCE REPORT

What is the purpose of this Annual Report?

The Ottawa County Regional Water System has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, information explaining how to participate in decisions concerning your drinking water, and water system contacts.

Where does our water come from?

The source of our water is a submerged intake in Lake Erie. This source is considered surface water and requires extensive treatment before it can be used as drinking water. For the purpose of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens, which may rapidly arrive at the public drinking water intake with little warning or time to prepare. Ottawa County's drinking water source protection area contains potential contaminant sources such as agriculture, home sewage disposal system discharges, leaking underground and aboveground storage tanks, landfills, municipal sewer systems, combined sewer overflows, accidental releases and spills, recreational boating, roadways, and railways

The Ottawa County Regional Water System's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. Implementing measures to protect Lake Erie can further decrease the potential for water quality impacts. More detailed information is provided in the Ottawa County Regional Water System's Source Water Assessment report, which can be reviewed by calling Ron Wetzels, Water Superintendent, at 419-734-7312.

What are sources of contamination to drinking water?

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, 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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) 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 that must provide the same protection for public health.

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 (1-800-426-4791).

Who needs 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 infection. 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 (1-800-426-4791).

License to Operate (LTO) Status-"We have a current, unconditioned license to operate our water system."

How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the Ottawa County Commissioners who meet on Tuesdays and Thursdays at the Ottawa County Courthouse. Please call the Clerk of the Board of Commissioners' office at 419-734-6700 for times and meeting agendas.

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal: 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.

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.

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

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

The "<" Symbol: A symbol that means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Units Description:

NA: Not applicable

NTU: Nephelometric Turbidity Units. A nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppm: Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. (A part per million corresponds to one second in a little over 11.5 days.)

ppb: Part per Billion (ppb) or Micrograms per Liter (µg/l) are units of measure for concentration of a contaminant. (A part per billion corresponds to one second in 31.7 years.)

pCi/L: Picocuries per liter are a measure of the radioactivity in water

TC: Total Coliform Bacteria

The Ottawa County Sanitary Engineering Department does not discriminate in provision of services or employment because of race, color, national origin, sex, age, religion, or disability.

**OTTAWA COUNTY REGIONAL WATER TREATMENT PLANT
2011
CONSUMER CONFIDENCE REPORT DATA**

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The Ohio EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminant (units)	MCLG	MCL	Level Found	Range of Detection / Findings	Violation	Year Sampled	Typical Source of Contaminants
Microbiological Contaminants							
Total Coliform Bacteria (TC)	0	0	0	0	No	2011	Naturally present in the environment
Turbidity (NTU)	NA	TT	0.26	0.02 - 0.26	No	2011	Soil runoff
Turbidity (% samples meeting standard)	NA	TT	100%	100%	No	2011	Soil runoff
Inorganic Contaminants							
Fluoride at Plant Tap (ppm)	4	4	1.20	0.74-1.20	No	2011	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	4.28	0.45 - 4.28	No	2011	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Copper (ppb)	1300	AL=1300	100	0 - 169	No	2010	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Zero out of thirty samples was found to have copper levels in excess of the Action level of 1.3 ppm							
Lead (ppb)	0	AL=15	<5.0	0-32.7	No	2010	Corrosion of household plumbing systems; Erosion of natural deposits
One out of thirty samples was found to have lead levels in excess of the Action level of 15 ppb							
Barium (ppm)	2	2	0.02	N/A	No	2011	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Residual Disinfectants							
Total Chlorine	4	4	1.7	1.4-1.8	No	2011	Water additive to control microbes
Volatile Organic Contaminants							
TTHMs [Total Trihalomethane] (ppb)	NA	80*	66.4	19.2-117.0	No	2011	By-product of drinking water chlorination
Bromodichloromethane (ppb)	NA	NA	14.3	7.0-19.6	No	2011	By-product of drinking water chlorination
Chloroform (ppb)	NA	NA	47.7	7.8-92.9	No	2011	By-product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	5.4	2.4-7.8	No	2011	By-product of drinking water chlorination
HAA5 [Haloacetic acids] (ppb)	NA	60*	29.8	6.8-46.6	No	2011	By-product of drinking water chlorination
Synthetic Organic Contaminants							
Atrazine (ppb)	3	3	Not detected	N/A	No	2011	Runoff from herbicide used on row crops
<p>Turbidity has no health effects. However, turbidity can interfere with the disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Turbidity is the measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the E.P.A. is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the highest recorded turbidity result for 2011 was 0.26 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.</p>							
<p>Ottawa County Regional Water monitored for Cryptosporidium in the lake water during 2008,2009 and 2010. Cryptosporidium was detected in one of twenty-four samples collected from Lake Erie. Cryptosporidium is a microbial parasite found in surface water throughout the US. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring of the lake water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within weeks. However, immuno-compromised people are at greater risk of developing a life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Effective treatment for the removal of Cryptosporidium from drinking water includes specific filtration equipment. Ottawa County treatment facilities are considered effective by the EPA.</p>							
<p>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. Ottawa County Regional 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 drinking 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 at http://www.epa.gov/safewater/lead.</p>							
* An annual running average.							