

Ontelaunee Township Municipal Authority

PWSID #3060098

Annual Drinking Water Quality Report

Water Testing
Performed in 2016

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.

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 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 run-off, 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 run-off 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 run-off 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 assure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 some contaminants. The presence of contaminants does not necessarily indicate that the 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).

Information about 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. Ontelaunee Township Municipal Authority 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

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

Important Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as a person with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from 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).

2016 Annual Drinking Water Quality Report of the Ontelaunee Township Municipal Authority.

We are pleased to present to you this year's Annual Drinking Water Quality Report. The Reading Water Authority (RAWA) and the Ontelaunee Township Municipal Authority (OTMA) routinely monitor for constituents in your drinking water according to Federal and State Laws. The table shows the results of this monitoring for the period of January 1st to December 31st, 2016. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Water Drinking Act. The date has been noted on the sampling results table. Our water source comes from the RAWA. Lake Ontelaunee is the RAWA water source. The water is collected by RAWA and is tested by both RAWA and OTMA.

If you have any questions about this report or concerning your water utility, please contact us at 610-916-3445. We want our valued customers to be informed about their water quality. If you want to learn more, please attend our regularly scheduled monthly meetings. They are held on the second Tuesday of every month at 7:00 P.M. at the Ontelaunee Township Municipal Building.

Chemical Contaminant (unit of measurement)	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination
Chlorine (ppm) (Monthly Average of Distribution System)	MRDL 4.0	MRDL G 4.0	0.92	0.92-2.758	2016	N	Water additive used to control microbes
Haloacetic Acids * (HAA5) (ppb)	60	60	43.5 ***	38-55 ****	2016	N	By-product of drinking water disinfection.
Trihalomethanes (TTHMs) (ppb) **	80	80	46.425 ***	30.2-65.1 ****	2016	N	By-product of drinking water disinfection.

* Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

** Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

*** Based on a running annual average

**** Based on the quarterly averages for the CCR year

Inorganic Chemicals (IOCS)

Chemical Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination
Fluoride (ppm)	2	4	0.8	N/A	2016	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as Nitrogen(ppm)	10	10	3.89	0.0 – 3.89	2016	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (ppm)	2	2	0.018	N/A	2016	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination
Chlorine (ppm)	0.20	0.67	0.67 - 4.12	2016	N	Water additive used to control microbes.

Lead and Copper - In June 2016, to comply with the Lead and Copper rule, RAWA conducted one study of 35 samples. 0 samples out of 35 samples were found to be above the required Action Levels established for lead.

Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	# of Sites above AL of Total Sites	Sample Date	Violation Y/N	Sources of Contamination
Copper (ppm)	1.3	1.3	0.281	0 out of 10	2016	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives

Lead (ppb)	15	0	2	0 out of 10	2016	N	Corrosion of household plumbing ; Erosion of natural deposits
Microbial Contaminants	MCL		MCLG	Highest # or % of Positive Samples	Violation Y/N	Sources of Contamination	
Total Coliform Bacteria	For systems that collect ≥ 40 samples/month: 5% of monthly samples are positive		0	0	N	Naturally present in the environment.	
RAWA is required, based on population served, to do ninety bacteriological samples per month. In September 2015, 1 routine samples out of 100 confirmed to be positive for total coliform.							
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Sources of Contamination	
Turbidity	TT = 1 NTU for a single measurement	0	0.085 NTU	2016	N	Soil runoff	
	TT = at least 95% of monthly samples ≤ 0.3 NTU		100%	N/A	N		
Safe Drinking Water Act monthly filter plant performance level requirements (PLR) state 95% of the monthly samples must be ≤ 0.3 NTU. The required treatment technique (TT) value for a conventional plant is 1.0 NTU. RAWA maintained 100% of its samples at the PLR and its TT value through 2015.							
Volatile Organic Chemicals (VOCS)							
Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Sample Date	Violation Y/N	Sources of Contamination	
Trihalomethanes (TTHM) (ppb)	80	80	44.93	2016	N	By-product of drinking water chlorination.	
Radionuclides							
Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Sample Date	Violation Y/N	Sources of Contamination	
Radium 228 (pCi/L)	5	0	3.2	2014	N	Erosion of natural deposits	
Total Organic Carbon (TOC)							
Percent removal range required for TOC is 0-35%. The percent removal achieved by RAWA in 2016 is 34%-55%.							
Synthetic Organic Compounds (SOCs)							
We were not required to monitor for SOCs in 2016.							
Unregulated Contaminant Monitoring Regulation – Cycle 3 (UCMR3)							
The purpose of UCMR3 is to “collect occurrence data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Water Drinking Act”. All figures list in Parts per Billion (ppb). All testing performed quarterly starting in 2013.							
Detectable Chemicals (3): Chromium, Strontium, Chromium (Hexavalent)							
Location	Chromium		Strontium	Chromium (Hexavalent)			
Sources of contamination:	Naturally occurring used in making steel and other alloys. Other forms also used for chrome plating, dyes and pigments, leather tanning and wood preservation.		Naturally occurring element historically, commercial use has been in the faceplate glass of cathode ray tube televisions to block x-ray emissions.	Naturally occurring used in making steel and other alloys. Other forms also used for chrome plating, dyes and pigments, leather tanning and wood preservation.			
Location #1: EP101/Pumping Station							
March	0.22		104	0.18			
June	ND		123	0.043			
September	0.31		127	0.051			
December	0.26		131	0.12			
Location #2: 320 S. 17 th Street/DSMRT							
March	0.27		113	0.18			
June	ND		123	0.078			
September	ND		127	0.043			
December	0.28		133	0.10			

Violations: RAWA reported the following violations for 2016: Late reporting violation for August 2016. When one sample in August 2016 tested positive for total coliform bacteria they also tested that sample for E.coli. No E.coli was detected however, they reported the E.coli portion of the test on September 28th and it was due to be reported by September 10th.

What's In My Water?

In the summary table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms and abbreviations we've provided you with the following definitions:

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

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 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 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.

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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

Detection Limit - The lowest level detected by the laboratory.

Non-Detectable (ND) - A result below the detection limit for the chemical

Nephelometric Turbidity Unit (NTU) - Measure of turbidity using a specific instrument to measure the cloudiness of water.

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity) **ppb** = parts per billion, or micrograms per liter (µg/L)

ppm = parts per million, or milligrams per liter (mg/L)

Water Q & A

Q. How does water come out of my faucet?

A. Water comes into the house through a series of underground pipes that lead to a water main outside, usually near the edge of the yard or the street. The water main is connected through more pipes to the water supply. The water is under pressure, and this pressure is what causes the water to rush out when a faucet is turned on. Water pressure can vary from home to home depending on the land elevation and how close to the home is to the main water supply.



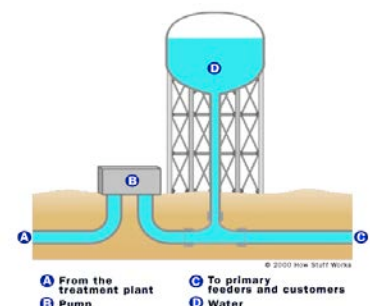
Q. How do I get hot water out of my faucets?

A. Water coming into a home is also piped into a device called a water heater. The heater, usually run by electric or gas, contains a thermostat to control the temperature inside the tank. Cold water, being more dense than hot water, remains at the bottom of the tank. Water coming into the hot water faucet is pumped from the top of the tank, causing warm water to pour out. Water that starts to turn cold may indicate that all the warm water is used or that the heating coil at the bottom of the tank is bad.

Q. What is that?

A. That is a water tower! A water tower is a large elevated tank of water. Water towers are tall and are typically located on high ground to provide pressure. Although it may look small from far away, the tank is normally quite large and normally would hold enough water to fill 50 backyard swimming pools or a day's worth of water for the community. Water is treated in a water treatment plant and a high-lift pump pressurizes the water and sends it to the water systems primary feeder pipes. At night, when demand normally falls to practically zero, the pump can make up the difference and refill the water tower.

Water towers come in various shapes and sizes. Many small towns will paint the town's name on their water tank making it easy for pilots of small aircrafts to see. When you don't have a GPS, water towers make navigation a lot easier!



Sources: www.geeksonhome.com and www.howstuffworks.com