# Ontelaunee Township Municipal Authority

## PWSID #3060098

## Annual Drinking Water Quality Report

## Water Testing Performed in 2015

*Este informe contiene informacion m*uy importante sobre su aqua beber. Tranduzcalo o hable con alguien que lo entienda bien.

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 at *http://www.epa.gov/safewater/lead*.

**IMPORTANT INFORMATION:**
**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-comprised persons such as person 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 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).**

# 2015 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, 2015. 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 Ms. Kelly Burdick 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 Thursday of every month at 1:00 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 | MRDLG =4 | 2.37 | 1.89-2.37 | Dec 2015 | N | Water additive used to control microbes |
| Haloacetic Acids * (HAA5) (ppb) | 60 | 60 | 41 *** | 25-47 **** | Apr 2015 | N | By-product of drinking water disinfection. |
| Trihalomethanes (TTHMs) (ppb) ** | 80 | 80 | 44 *** | 22-67 **** | Apr 2015 | 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 | 2 | 0.96 | 0.43-0.96 | Oct & Nov 2015 | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Nitrate as Nitrogen(ppm) | 10 | 10 | 4.26 | 2.14-4.26 | Jan 2015 | N | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Barium (ppm) | 2 | 2 | 0.018 | 0.018 | Jan 2015 | 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 | 0.39 | 0.39-4.00 | Jul 2015 | N | Water additive used to control microbes. |

**Lead and Copper** - In June 2013, to comply with the Lead and Copper rule, RAWA conducted one study of 31 samples. 2 samples out of 31 samples were found to be above the required Action Levels established for lead.

| Contaminant | Action Level (AL) | MCLG | 90th Percentile Value | # of Sites above AL of Total Sites | Sample Date | Violation Y/N | Sources of Contamination |
|---|---|---|---|---|---|---|---|
| Copper (ppm) | 1.3 | 1.3 | 0.246 | 0 out of 31 | 2013 | N | Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives |
| Lead (ppb) | 15 | 0 | 3.0 | 2 out of 31 | 2013 | 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 | 1.00 | 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 | 0.202 NTU | May 2015 | 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 all of 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 | 19.4 | Jan 2015 | 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 | May 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 2015 is 15%-53%.
Lowest Reading = 0.8ppm (April 2015)
Amount detected / Highest Reading = 1.6ppm (Jun & Nov 2015)

**Synthetic Organic Compounds (SOCs)**

We were not required to monitor for SOCs in 2015.

**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. 17th Street/DSMRT** | | | |
| March | 0.27 | 113 | 0.18 |
| June | ND | 123 | 0.078 |
| September | ND | 127 | 0.043 |
| December | 0.28 | 133 | 0.10 |

## 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)

## ARE LEAKS COSTING YOU MONEY?

| Leak Size | | Gallons Per Day | Gallons Per Month |
|---|---|---|---|
|  | A dripping leak consumes: | 15 gallons | 450 gallons |
|  | A 1/32 in. leak consumes: | 264 gallons | 7,920 gallons |
|  | A 1/16 in. leak consumes: | 943 gallons | 28,300 gallons |
|  | A 1/8 in. leak consumes: | 3,806 gallons | 114,200 gallons |
|  | A 1/4 in. leak consumes: | 15,226 gallons | 456,800 gallons |
|  | A 1/2 in. leak consumes: | 60,900 gallons | 1,827,000 gallons |

**Leak Facts:**

- Leaks can account for, on average, 10,000 gallons of water wasted in the home every year, which is enough to fill a backyard swimming pool.
- Ten percent of homes have leaks that waste 90 gallons or more per day.
- Fixing easily corrected household leaks can save homeowners more than 10% on their water bills.
- If your toilet is running constantly, you could be wasting 200 gallons of water or more per day.
- A showerhead leaking at 10 drips per minute wastes more than 500 gallons per year. That's enough water to wash 60 loads of dishes in your dishwasher.

**Check for Leaky Toilets:**

The most common source of leaks is the toilet. Check toilets for leaks by placing a few drops of food coloring in the tank. If after 15 minutes the dye shows up in the bowl, the toilet has a leak.

Toilets can account for almost 30% of all indoor water use, more than any other fixture or appliance.

Replacing an old toilet with a new model can save the typical household 7,900 to 21,700 gallons of water per year, cutting both your water and wastewater bills.