



# City of North Canton Drinking Water Plant 2016 Consumer Confidence Report

**The City of North Canton**  
145 North Main Street  
North Canton, Ohio 44720

**David Held, Mayor**  
**Michael Grimes, Director  
of Administration**

**Drinking Water Plant**  
7300 Freedom Avenue NW  
North Canton, Ohio 44720  
**Mark Leichtamer,  
Superintendent**

<b>City of North Canton Contact Phone Numbers:</b>	
Water treatment information or water quality problem: North Canton Drinking Water Plant	24 hours a day, 7 days a week 330-499-6473
Billing related questions or water service on/off: North Canton Utilities Department	Monday thru Friday 8am to 4pm 330-499-4801
Backflow assemblies or inspections: North Canton Backflow Department	Monday thru Friday 6:30am to 3:00pm 330-499-3801
Main breaks, meter repair and water taps: City of North Canton Service Center, Distribution	Monday thru Friday 7:00am to 4:00pm 330-499-1528
Water main breaks (after hours): North Canton Police Department, Non-emergency	24 hours a day, 7 days a week 330-499-5911

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**The City of North Canton DWP-** identification number (PWSID) OH-7604312. The city of North Canton has a population of 17,488 residents. There are currently 7,780 residential accounts and 1,234 commercial accounts for a total of 9,014 water accounts. The City of North Canton has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report are general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

**Source Water Information (141.453)(b)**

**The City of North Canton** receives its drinking water from nine ground water wells in five different locations. The City of North Canton averaged 3.01 million gallons of water per day (MGD) and pumped a total of 1.100 billion gallons for the year of 2016. The North Canton Drinking Water Plant also has an emergency connection with the Canton Water System and Aqua Ohio Water System of Massillon, which we did not have to use in 2016. All of this water was drawn from the Buried Valley and Massillon Sandstone Aquifers. These aquifers, although plentiful, have been deemed to be HIGHLY susceptible to contamination due to the fact that there is only a very thin layer of clay cap protecting our aquifers. Protecting the drinking water source from contamination is the responsibility of everyone please dispose of hazardous chemicals in the proper manner report polluters to the appropriate authorities. More detailed information is provided in the City of North Canton Water Source Assessment which can be found at the Ohio EPA’s website <http://epa.ohio.gov/ddagw/swap.aspx> and selecting “drinking Water Source Assessment Reports” in the box under “Quick Links”. When the map appears, you can search by your water system name or PWS ID- OH7604312.

**What are sources of contamination to drinking water? (141.153)(b)(1)**

The source 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 water 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 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, 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.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- Lead \*see “*About Your Drinking Water (141.153(d))*”

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems; FDA 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 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 at 1-800-426-4791.

### **About your drinking water (141.153)(d)**

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 North Canton Drinking Water Plant 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 at <http://www.epa.gov/safewater/lead>.

### **Who needs to take special precautions? (141.154)**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as individuals with cancer undergoing chemotherapy, those 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 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).

## **MORE ABOUT YOUR DRINKING WATER**

The EPA requires regular sampling to ensure drinking water safety. The City of North Canton conducted sampling for the following contaminants: bacteria, inorganics, synthetic organics, radioactive substances, and volatile organics. Samples were analyzed for different contaminants, most of which were not detected in the City of North Canton water supply. The Ohio EPA requires us to monitor for some contaminants less often than once per year because the concentrations of these contaminants do not change frequently. Consequently, some of our data, though accurate, are more than one year old.

### **2016 License To Operate (LTO) Status Information.**

The City of North Canton was issued a green LTO in 2016. In 2016 we have an unconditional license to operate our water system.

### **How do I participate in decisions concerning my drinking water? (141.153)(h)(4)**

Public participation and comment are encouraged at regular meetings of City Council, which meets the second and fourth Monday of each month. Call the Council office (330) 499-3986 for further information on Council meetings.

**For more information on** your drinking water contact Mark Leichtamer, Superintendent of the North Canton Drinking Water Plant. Mr. Leichtamer is available to answer any questions you may have about your water and is available weekdays from 7 a.m. to 4 p.m. at (330) 499-6473. You can also call the local office of the Ohio Environmental Protection Agency at (330) 963-1200 with any water questions.

## **HOW TO READ THIS REPORT**

The City of North Canton is required to provide this annual report on drinking water quality to every North Canton water customer. The Environmental Protection Agency (EPA) requires regular sampling to ensure drinking water safety and the results of testing those samples are in this report. In addition, since it is your water system and you pay for it, we believe you should understand where the water comes from, how it is processed and transported to you, and what the city is doing to make certain the system is not only safe, but reliable.

As you read this report, please note that the chemicals listed are at different detection levels. **None of these levels are in violation of EPA standards. We test more frequently than required so that when we detect any elevation in levels. We can take action immediately to correct it.**

#### **WHERE YOUR WATER COMES FROM**

**Buried Valley and Massillon Sandstone aquifers provided all of the source water for North Canton DWP in 2016.**

The City of North Canton is a ground water system. Nine wells at five different locations. Two on the water plant freedom ave. property, two on the price park property, two on the dressler road well property, two at the east maple ball field property, and one on the oster property.

#### **DEFINITIONS OF SOME TERMS CONTAINED WITHIN THIS REPORT. (141.153)(c)**

**First Tap or EP001:** First entry point from treatment plant into the system.

**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 contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Picocures Per Liter (pCi/L):** Measure of radioactivity in water.

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

**Parts per Billion (ppb) or Micrograms per Liter (ug/L):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**"<" symbol:** a symbol which means "less than." : A result of < 5 means that the lowest a chemical can be detected is 5.0 or greater. < 5 means the analytical laboratory's equipment will not detect below this threshold, of less than 5.

**ND -  
Non-detection of chemicals tested for.**

**NR-  
Not Required.**

**CT-  
Contact time(CT)-the mathematical product of a "residual Disinfectant Concentration" (C), which is determined beforeor at the first customer, and the corresponding "disinfectant contact time" (T).**

**AL-  
Action Level** – Requires action be taken if concentration of contaminant exceeded the **AL** level. The action could be different types of testing and require increased treatment methods.

**MRDL -  
Maximum Residual Disinfection Level.**

**MRDLG -  
Maximum Residual Disinfection Level Goal.**

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

**Haloacetic Acids or HAAs**

**Total Trihalomethanes or TTHM's**

#### **REVISED TOTAL COLIFORM RULE (RTCR) INFORMATION ----**

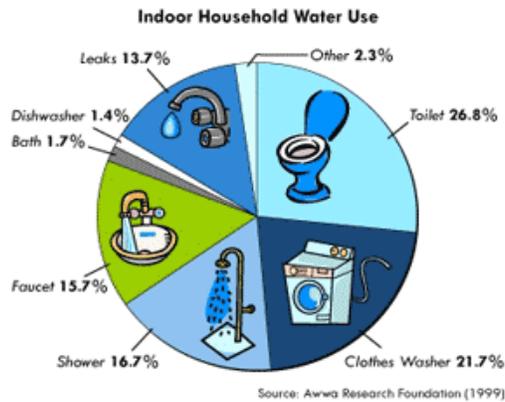
**The Consumer Confidence Report (CCR) reflects changes in the drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect the public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. Coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead the new requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any deficiencies exist. If found, these must be corrected by the PWS. No coliform events occurred for North Canton PWS in 2016.**

## WATER USAGE AND SAVINGS CHART FOR COMPARISON

Source: City of Columbus, Ohio, 2015 CCR

	Normal Usage		Conservation Usage		
	Gals Used	Method	Gal Used	Method	Savings
Shower (10 mins)	50	Shower head running continuously	25	Shorter Showers (5 mins) OR	50%
			25	Low flow shower head (10 min) OR	50%
			12.5	Low flow shower head (5 min) OR	75%
Tub Bath	36	Standard tub, full	18	Standard tub, half full	50%
Toilet Flushing	2-4	Depends on tank size	4-6	Use a displacement bag, or milk jug in tank reservoir OR	20%
			1.6	Replace with low flow toilet	73%
Washing hands	5	With tap running continuously	1	Fill a standard basin	80%
Brushing teeth	10	With tap running continuously	1	Wet brush with brief rinses	90%
Shaving	20	With tap running continuously	1	Fill a standard basin	95%
Washing dishes	30	With tap running continuously	10	Wash and rinse with a half filled standard sink	66%
Dishwasher	16	Full Cycle	7	Short cycle	56%
Washing Machine	60	Full cycle: Highest water level	27	Short cycle	55%
Outdoor Watering	10	Per minuet; Average garden hose	Varies	Eliminate, Night watering, etc	Varies

Less than 1% of the worlds fresh water supplies are available for human consumption



**Consumer Confidence Report  
Test Results**

**Volatile Organic Compounds Plant Tap EP-001 (monthly average reported result)**

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
Monthly 2016	Regulated PPB	No	0	80	ND	ND	Discharge from industrial facilities; byproducts of drinking water chlorination
	Chloroform PPB	No	0	Unreg	1.36	0.52 to 2.54	
	Bromodichloromethane PPB	No	0	Unreg	3.01	1.57 TO 4.56	
	Dibromochloromethane PPB	No	0	Unreg	4.41	2.96 TO 5.73	
	Bromoform PPB	No	0	Unreg	2.71	1.60 TO 3.63	
	Cis-1,2-Dichloroethylene PPM	No	0	70	0.34	0.00 to 1.24	
	Xylenes (total) PPM	No	0	100	0.12	0.00 to 0.74	

**DISINFECTION BYPRODUCTS**

**TOTAL TRIHALOMETHANES**

Regulated in distribution system. Location DS- 201 First Friends Church

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
7/13/2016	T. Trihalomethanes PPB	No	0	80	48.0 ug/l	0.00 to 48.0 ug/l	Byproduct of drinking water chlorination
DS-201	Sample Location	5455 Market Ave					

**TOTAL TRIHALOMETHANES**

Regulated in distribution system. Location DS-202 Walsh University

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
7/13/2016	T. Trihalomethanes PPB	No	0	80	35.1 ug/l	0.00 to 35.1 ug/l	Byproduct of drinking water chlorination
DS-202	Sample Location	2020 East Maple ST.					

**HALOACETIC ACIDS (FIVE) (HAA5)**

Regulated in distribution system. Location DS-201 First Friends Church

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
7/13/2016	T. HAA5 PPB	No	0	60	7.90ug/l	<6.0 to 7.9ug/l	Byproduct of drinking water chlorination
DS-201	Sample Location	5455 Market Ave					

**HALOACETIC ACIDS (FIVE) (HAA5)**

Regulated in distribution system. Location DS-202 Walsh University

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
7/13/2016	T. HAA5 PPB	No	0	60	<6.0 ug/l	<6.0 to 6.0ug/l	Byproduct of drinking water chlorination
DS-202	Sample Location	2020 East Maple St.					

**RADIOACTIVE SUBSTANCES (PCI/L)**

Required in 2016.

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
6/8/16	Gross Alpha PCI/L	No	0	15	ND	<3	Certain minerals, which can be naturally occurring or the results of oil and gas production and mining activities; are radioactive and may emit forms of radiation known as protons and beta radiation
6/8/16	Gross Beta PCI/L	No	0	AL50	ND	<3	
6/8/16	Radium 228 PCI/L	No	0	5	ND	<1	

**SYNTHETIC ORGANIC CHEMICALS: Including Pesticides and Herbicides**

**NOT Required in 2016, results from 7/8/15**

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
7/8/15	Alachlor PPB	No	0	2	ND	<0.20	Runoff from herbicide used on row crops
7/8/15	Atrazine PPB	No	3	3	ND	<0.30	
7/8/15	Simazine PPB	No	4	4	ND	<0.35	

**TOTAL CHLORINE RESIDUAL (monthly average)**

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
Avg for 2016	Annual Average PPM	No	4	4	0.93	0.79 to 1.04	Product of drinking water disinfection

**MICRO-ORGANISMS: Total Coliforms (Including fecal coliform and E. Coli)**

**REVISED TOTAL COLIFORM RULE ( 0 positive results out of 288 tests for coliform or E-coli on routine monthly testing)**

Sample Date	Contaminant (Units)	MCL	MCL Goal	Highest Monthly % of Samples with Total Coliform Present	Required Test/month	Violation	Typical Source Contaminants
2016	Total Coliform (for systems that collect less than 40 samples/month)	5% monthly sample positive	0	0.0%	20 per mo.	NO.	Coliforms are naturally present in the environment as well as feces, fecal coliforms, and E. Coli, coming from human and animal fecal waste.

**NITRATE; AND FLUORIDE RESULTS 2016**

**2016 monthly averages**

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
Monthly avg. 2016	Phosphorus PPM	NO	0	2 PPM	0.13	0.11 to 0.15 PPM	Additive to help pipe corrosion; water additive that promotes strong teeth
Monthly avg 2016	Fluoride PPM	NO	4	4 PPM	1.01	0.98 to 1.03/month	
6/8/2016	Nitrate, Nitrate-Nitrite PPM	NO	10	10 PPM	0.10	0.10	Animal waste and agricultural uses. May be
6/8/2016	Nitrite PPM	NO	10	10 PPM	<0.10	< 0.10	

**LEAD & COPPER – Tested at Customer’s Tap. Testing done every 3 years. Last test 6/25/14 & 7/17/14**

Contaminant	EPA’s Action Level	Ideal Goal (EPA’s MCLG)	90% of Test Levels were less than	# of Tests with Levels Above EPA’s Action Level	VIOLATION	Typical Source
LEAD	90% of homes less than 15 PPB	0 PPB	0.0 PPB	0 out of 36	NO	Corrosion of household plumbing
COPPER	90% of homes less than 1.3 PPM	1.3 PPM	0.0 PPM	0 out of 36	NO	Corrosion of household plumbing

# INORGANIC CHEMICALS

Required in 2016

Date	Contaminant/Unit	Violation	MCLG	MCL	Result	Detection LIMIT	Typical Source Contaminants
6/8/2016	Arsenic Total PPB	NO	0	10	ND	< 0.6	Erosion of natural deposits; runoff from orchards, glass and electronics production waste
6/8/2016	Antimony Total PPB	NO	6	6	ND	< 0.8	A naturally occurring trivalent or pentavalent metalloid used as a constituent of metal in the manufacture of flame retardants, ceramics, glass, pesticides, and tin-antimony solder, as well as in medicine
6/8/2016	Beryllium Total PPB	NO	4	4	ND	< 0.2	An alkaline-earth metal. In nature, beryllium is found in the ores of beryl. Beryllium has various industrious uses.
6/8/2016	Barium Total PPB	NO	2000	2000	ND	< 100	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
6/8/2016	Cadmium Total PPB	NO	5	5	ND	< 0.2	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries deposits and paints
6/8/2016	Chromium Total PPB	NO	100	100	ND	< 1.0	Discharge from steel and pulp mills; erosion of natural deposits
6/8/2016	Cyanide Total PPB	NO	200	200	ND	< 10.0	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
6/8/2016	Mercury Total PPB	NO	2	2	ND	< 0.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and crop lands
6/8/2016	Nickel Total PPB	NO	100	100	ND	< 1.0	A metallic element used in alloys; in electroplated protective coatings; in alkaline storage batteries, and as a catalyst
6/8/2016	Thallium Total PBB	NO	2	2	ND	< 0.30	A metallic element with miscellaneous industrial uses, including in mercury alloys, rodenticides, and photoelectric applications. Thallium is regulated by the US Environmental Protection Agency. See also rodenticide
6/8/2016	Selenium Total PBB	NO	50	50	ND	< 1.0	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines