



City of North Canton Drinking Water Plant 2014 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**

| City of North Canton Contact Phone Numbers: | |
|--|---|
| 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 6:30 am to 3:00 pm 330-499-3801 |
| Main breaks, meter repair and water taps: City of North Canton Service Center, Distribution | Monday thru Friday 7:00 am to 4:00 pm 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 public water system identification number (PWSID) OH-7604312, which currently serves a population of 17,404 residents. There are currently 7,743 residential accounts and 1,217 commercial accounts for a total of 8,960 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 four different locations. The City of North Canton averaged 2.82 million gallons of water per day (MGD) and pumped a total of 1.028 billion gallons for the year of 2014. The North Canton Drinking Water Plant also has an emergency connection with the Canton Water System and Aqua Ohio Water System of Massillon.

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; and 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).

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.

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 detection levels. **None of the levels is 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

The City of North Canton is a ground water system.

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 that could be detected was 5 and the contaminant in that was not detected.

ND

Non-detection of chemicals tested for.

NR

Not Required

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.

RAA

Running Annual Average.

LRAA

Locational Running Annual Average

Treatment Technique (TT)

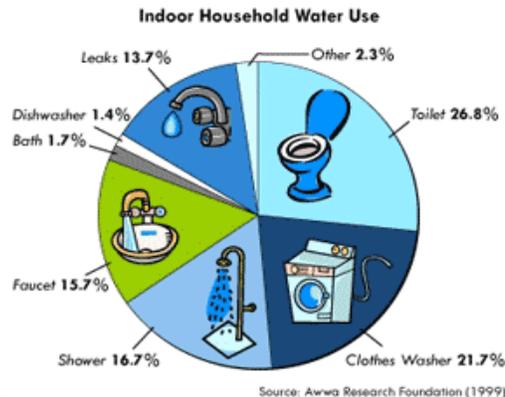
A required process intended to reduce the level of a contaminant in drinking water.

Haloacetic Acids or HAAs

Total Trihalomethanes or TTHM’s

| WATER USAGE AND SAVINGS CHART FOR COMPARISON | | | | | |
|--|--------------|----------------------------------|--------------------|--|---------|
| Source: City of Columbus, Ohio, 2009 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 | 5-7 | 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-0001 (monthly average reported result)

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|--------------|--------------------------|-----------|------|-------|---------|-----------------|---|
| Monthly 2014 | Regulated PPB | No | 0 | 80 | ND | ND | Discharge from industrial facilities: byproducts of drinking water chlorination |
| | Chloroform PPM | No | 0 | Unreg | 1.47 | 0.60 to 2.4 | |
| | Bromodichloromethane PPB | No | 0 | Unreg | 2.86 | 1.3 to 4.4 | |
| | Dibromochloromethane PPB | No | 0 | Unreg | 3.88 | 2.2 to 5.7 | |
| | Bromoform PPB | No | 0 | Unreg | 2.15 | 1.3 to 2.9 | |

VOLATILE ORGANIC COMPOUNDS Stage 2 Disinfection Byproducts Rule

Distribution System (Highest LRAA reported)

| Location | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|---------------|--------------------------|-----------|------|-------|---------|-----------------|---|
| | Regulated PPB | No | 0 | 80 | ND | ND | Discharge from industrial facilities: byproducts of drinking water chlorination |
| DS 201 | Chloroform | No | 0 | Unreg | 5.20 | 2.30 to 8.8 | |
| DS 201 | Bromodichloromethane PPB | No | 0 | Unreg | 11.00 | 7.1 to 14.9 | |
| DS 201 | Dibromochloromethane PPB | No | 0 | Unreg | 17.30 | 14.7 to 19.2 | |
| DS 201 | Bromoform PPB | No | 0 | Unreg | 11.40 | 9.0 to 14.1 | |
| Avg. for 2014 | | | | | | | |

DISINFECTION BYPRODUCTS

TOTAL TRIHALOMETHANES

Regulated in distribution system. Highest LRAA reported

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|---------------|------------------------|-----------------|------|-----|---------|-----------------|--|
| AVG. for 2014 | T. Trihalomethanes PPB | No | 0 | 80 | 44.9 | 35.7 to 50.7 | Byproduct of drinking water chlorination |
| DS-201 | Sample Location | 5455 Market Ave | | | | | |

HALOACETIC ACIDS (FIVE) (HAA5)

Regulated in distribution system. Highest LRAA reported

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|---------------|---------------------|-----------------|------|-----|---------|-----------------|--|
| Avg. for 2014 | T. HAA5 PPB | No | 0 | 60 | 7.00 | <6.0 to 8.3 | Byproduct of drinking water chlorination |
| DS-201 | Sample Location | 5455 Market Ave | | | | | |

RADIOACTIVE SUBSTANCES (PCI/L)

Not Required in 2014. Results from last test.

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|-------------|---------------------|-----------|------|------|---------|-----------------|--|
| 6/13/12 | 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 |
| 6/13/12 | Gross Beta PCI/L | No | 0 | AL50 | ND | <3 | |
| 6/13/12 | Radium 228 PCI/L | No | 0 | 5 | ND | <1 | |

RADIOACTIVE SUBSTANCES (PCI/L) NEW WELL IN OPERATION FOUR QUARTERS

Not required in 2014 , results from last test required.

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|-------------|---------------------|-----------|------|------|---------|-----------------|--|
| 12/08/2010 | Gross Alpha PCI/L | No | 0 | 15 | ND | ND to 9.34 | 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 |
| 03/09/2011 | Gross Alpha PCI/L | No | 0 | 15 | 5.99 | ND to 9.34 | |
| 06/08/2011 | Gross Alpha PCI/L | No | 0 | 15 | 9.34 | ND to 9.34 | |
| 09/14/2011 | Gross Alpha PCI/L | No | 0 | 15 | ND | ND to 9.34 | |
| 12/08/2010 | Gross Beta PCI/L | No | 0 | AL50 | ND | ND to 17.3 | |
| 03/09/2011 | Gross Beta PCI/L | No | 0 | AL50 | 6.72 | ND to 17.3 | |
| 06/08/2011 | Gross Beta PCI/L | No | 0 | AL50 | 17.3 | ND to 17.3 | |
| 09/14/2011 | Gross Beta PCI/L | No | 0 | AL50 | ND | ND to 17.3 | |
| 12/08/2010 | Radium 228 PCI/L | No | 0 | 5 | ND | ND | |
| 03/09/2011 | Radium 228 PCI/L | No | 0 | 5 | ND | ND | |
| 06/08/2011 | Radium 228 PCI/L | No | 0 | 5 | ND | ND | |
| 09/14/2011 | Radium 228 PCI/L | No | 0 | 5 | ND | ND | |
| 12/08/2010 | Radium 226 PCI/L | No | 0 | 5 | NR | NR | |
| 03/09/2011 | Radium 226 PCI/L | No | 0 | 5 | ND | ND | |
| 06/08/2011 | Radium 226 PCI/L | No | 0 | 5 | ND | ND | |
| 09/14/2011 | Radium 226 PCI/L | No | 0 | 5 | NR | NR | |

SYNTHETIC ORGANIC CHEMICALS: Including Pesticides and Herbicides

Not required in 2014 , results from 2012

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|-------------|---------------------|-----------|------|-----|---------|-----------------|---|
| 6/13/12 | Alachlor PPB | No | 0 | 2 | ND | <0.20 | Runoff from herbicide used on row crops |
| 6/13/12 | Atrazine PPB | No | 3 | 3 | ND | <0.20 | |
| 6/13/12 | Simazine PPB | No | 4 | 4 | ND | <0.20 | |

TOTAL CHLORINE RESIDUAL

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|--------------|---------------------|-----------|------|-----|---------|-----------------|--|
| Avg for 2014 | Annual Average PPM | No | 4 | 4 | 0.98 | 0.91 to 1.11 | Product of drinking water disinfection |

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

| Sample Date | Contaminant (Units) | Violation | MCL | Results | Req Test | Completed Test | Typical Source Contaminants |
|-------------|---------------------|-----------|---------|---------|-----------|----------------|---|
| 2014 | Total Coliforms P/N | No | TT4/TT5 | ND | 25 per mo | 29 per mo | Not a health threat in itself. It is used to indicate whether other potentially harmful bacteria may be present. Coliforms are naturally present in the environment as well as feces, fecal coliforms, and E. Coli, coming from human and animal fecal waste. |

LEAD & COPPER ; NITRATE ; AND FLUORIDE RESULTS 2014

2014 monthly averages (36 sample sites for lead and copper, 30 are required)

| Sample Date | Contaminant (Units) | Violation | MCLG | MCL | Results | Detection Range | Typical Source Contaminants |
|---------------------|------------------------------|-----------|------|------|-----------|--------------------|--|
| monthly | Phosphorus PPM | NO | 0 | 2 | 0.14 | 0.12 to 018 | Additive to help pipe corrosion; water additive that promotes strong teeth |
| monthly | Fluoride PPM | NO | 4 | 4 | 1.03 | 1.00 to 1.06/month | |
| 6/25/2014-7/17/2014 | Lead 30 Samples PPB | NO | 0 | 15 | None > AL | ND to 6.5 | Corrosion of household plumbing systems and erosion of natural deposits |
| 6/25/2014-7/17/2014 | Copper 30 Samples PPB | NO | 0 | 1300 | None > AL | ND to 34 | |
| 07/09/2014 | Nitrate, Nitrate-Nitrite PPM | NO | 10 | 10 | 0.16 | < 0.10 to 0.16 | Animal waste and agricultural uses. May be |
| 07/09/2014 | Nitrite PPM | NO | 10 | 10 | ND | < 0.10 | |

naturally occurring

INORGANIC CHEMICALS

not required in 2014 results, from 2013

| | | | | | | | |
|------------|---------------------|----|------|------|------|--------|---|
| 07/10/2013 | Arsenic Total PPB | NO | 0 | 10 | ND | < 0.6 | Erosion of natural deposits; runoff from orchards, glass and electronics production waste |
| 07/10/2013 | 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 |
| 07/10/2013 | 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. |
| 07/10/2013 | Barium Total PPB | NO | 2000 | 2000 | 29.0 | < 100 | Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits |
| 07/10/2013 | 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 |
| 07/10/2013 | Chromium Total PPB | NO | 100 | 100 | ND | < 1.0 | Discharge from steel and pulp mills; erosion of natural deposits |
| 07/10/2013 | Cyanide Total PPB | NO | 200 | 200 | ND | < 10 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| 07/10/2013 | Mercury Total PPB | NO | 2 | 2 | ND | < 0.2 | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and crop lands |
| 07/10/2013 | 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 |
| 07/10/2013 | 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 |
| 07/10/2013 | Selenium Total PBB | NO | 50 | 50 | ND | < 1.0 | Discharge from petroleum refineries; erosion of natural deposits; discharge from mines |