

# **NORTH CANTON DRINKING WATER QUALITY REPORT FOR 2009**

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 eight ground water wells. The North Canton Water Treatment 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 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 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.

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).

## **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).

## **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>.

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 Rich Steinhebel, Superintendent of the North Canton Water Treatment Plant. Mr. Steinhebel 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. We have separated these additional, voluntary test results in the charts, for ease of reading.

#### **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:** 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.

**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.**

# Consumer Confidence Report

(141.153)(D)(6) OHIO EPA REQUIRED TESTING

**VOIATILE ORGANIC COMPOUNDS**

Sample Date	Substance (Units)	Violation	MCL/C	Results	Range of Detection	Typical Source Contaminants
1-13-09	Bromodichloromethane (PPB)	No	Unreg	1.99	<.5	
1-13-09	Bromolorm (PPB)	No	Unreg	2.07	<.5	Discharge from industrial facilities; byproduct of drinking water chlorination
1-13-09	Dibromochloromethane(PPB)	No	Unreg	2.66	<.5	
1-13-09	Chloroform (PPB)	No	Unreg	0.75	<.5	

**DISINFECTION BYPRODUCTS**

Sample Date	Substance (Units)	Violation	MCL/C	Results	Range of Detection	Typical Source Contaminants
7-13-09	Trihalomethanes (PPB)(TTHM)	No	80	20.5	<.5	Byproduct of drinking water chlorination

**HALOACETIC ACIDS (Five) (HAA5)**

Sample Date	Substance (Units)	Violation	MCL/C	Results	Range of Detection	Typical Source Contaminants
7-13-09	HAA5 (PPB)	No	60.0	5.52	<1.0	Byproduct of drinking water disinfection

**USEPA IDSE - SIX LOCATIONS @ - FIRST THREE QUARTERS 2009**

TTHMs	RESULTS RANGE OF DETECTION
HAA5	2.5 TO 34.5 PPB 0.0 TO 5.84 PPB

**RADIOACTIVE SUBSTANCES (PCI/L)**

Sample Date	Substance (Units)	Violation	MCL/C	Results	Range of Detection	Typical Source Contaminants
7-14-09	Gross Alpha (PCI/L)	No	15	ND	<.3	Certain minerals, which can be naturally occurring or the result of oil and gas production and mining activities; are radioactive and may emit forms of radiation known as protons and beta radiation
7-14-09	Gross Beta (PCI/L)	No	15	ND	<.3	
7-14-09	Radium 228 (PCI/L)	No	5	ND	<.1	

**USEPA UCMR2 LIST 1**

SAMPLE DATE	SUBSTANCE (UNITS)	VIOLATION	MCL/C	RESULTS	RANGE OF DETECTION	TYPICAL SOURCE CONTAMINANTS
8-12-09	EPA 529 PPB	No	Unreg	ND	<0.8 > .1	TESTING FOR 3 EXPLOSIVES
8-12-09	EPA 527 PPB	No	Unreg	ND	<0.3-0.9	TESTING FOR 2 INSECTICIDES AND 5 FLAME RETARDANTS

**INORGANIC SUBSTANCES**

Sample Date	Substance (Units)	Violation	MCL/C	Results	Range of Detection	Typical source contaminants
2007	Fluoride (PPM)	No	4	0.9	0.2	Erosion of natural deposits; water additive that promotes strong teeth
2009	Fluoride (PPM)	No	4	1.0	Monthly Average	
2008	Lead (PPB)	No	15	<1.0	2,6-9.1	Corrosion of household plumbing systems and erosion of natural deposits
2008	Copper (PPB)	No	1300	<50	ND	

@ 30 Samples

2009	Nitrogen, Nitrate & (PPM), Nitrite (As Nitrogen)	No	10	10	ND	0.04	Animal waste and agricultural uses; may be naturally occurring
2004	Nitrite (PPM)	No	1	1	ND	0	
2007	Arsenic Total (PPB)	No	0	10	ND	<0.6	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
2007	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
2007	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 industrial uses
2007	Barium Total (PPB)	No	2000	2000	ND	<100	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
2007	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 and paints
2007	Chromium Total (PPB)	No	100	100	1.2	<1.0	Discharge from steel and pulp mills; erosion of natural deposits
2007	Cyanide Total (PPB)	No	200	200	ND	<10	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
2007	Mercury Total (PPB)	No	2	2	ND	<0.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and crop lands
2007	Nickel Total (PPM)	No	100	100	1.1	<1.0	A metallic element used in alloys; in electroplated protective coatings; in alkaline storage batteries, and as a catalyst
2007	Thallium Total (PPB)	No	2	2	ND	<0.30	A metallic element with miscellaneous industrial uses, including in mercury alloys, rodenticides, and photodectric applications. Thallium is regulated by the US Environmental Protection Agency. See also <i>rodenticide</i> .
2007	Selenium Total (PPB)	No	50	50	3.4	<1.0	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines

SYNTHETIC ORGANIC CHEMICALS

Sample Date	Substance (Units)	Violation	MCLG	MCL	Results	Range of Detection	Typical source contaminants
6-10-09	Alachlor PPB	No	0	2	ND	<0.2	
6-10-09	Atrazine PPB	No	3	3	ND	<0.2	Runoff from herbicide used on row crops
6-10-09	Simazine PPB	No	4	4	ND	<0.2	
TOTAL CHLORINE RESIDUAL							
Sample Date	Substance (Units)	Violation	MCLG	MCL	Results		
2009	Annual Average Total Chlorine (PPM)	No	4.0	4.0	0.99		Product of drinking water disinfection

2009 MICROORGANISMS: Total coliforms (including fecal coliform and *E. Coli*)

MCL G	MCL	Required Tests	Completed Tests	Results
0	TT4/TT5	20 Per Month	32 Per Month	ND
Typical source contaminants				
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 <i>E. coli</i> only come from human and animal fecal waste				