



## **2017 Drinking Water Consumer Confidence Report**

The Stow Public Water System has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

### **What is the source of my water?**

The City of Stow purchases its potable water from the City of Akron. This surface water is taken from the Upper Cuyahoga River, via three impounding reservoirs. Water is stored and released from two upstream reservoirs; the Wendell R. LaDue and East Branch, both located in Geauga County. These serve to supplement the Lake Rockwell Reservoir, located in Franklin Township, Portage County. Water is taken from Lake Rockwell, for treatment at the Lake Rockwell Treatment Plant, and pumped to Stow via a transmission main along North River Road.

Water is received at the Marsh Road and North Main Street (Munroe Falls) Booster Pump Stations. It is then distributed throughout our system. The Stow Public Water System serves over 34,000 residents, via 155+ miles of water main, and 13,000 individual service taps within the City. The Stow Public Water System has been licensed to operate a public water system through the Ohio EPA since 2001.

For the purposes of the source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can readily be contaminated by chemicals and pathogens, with relatively short travel times from source to the intake. The drinking water source assessment for the City of Akron indicates that the source water is susceptible to potential contamination. Potential sources of contamination include agricultural runoff, home sewage disposal systems, failing on-site wastewater treatment systems (septic systems), municipal wastewater treatment plant discharges, and non-point sources. In addition, the source water is susceptible to contamination through derailments, motor vehicle accidents or spills at sites where the corridor zone is crossed by roads and rail lines, or at fuel storage and vehicle service areas located adjacent to the corridor zone.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of Akron Public Water System is considered susceptible to contamination, historically the City of Akron Water System has effectively treated this source water to meet drinking water quality standards.

For more information about the source water assessment program, go to [www.epa.ohio.gov/ddagw/swap.aspx](http://www.epa.ohio.gov/ddagw/swap.aspx) . Copies of the source water assessment report prepared for the City of Akron are available by contacting Jeff Shaver at [jshaver@stow.oh.us](mailto:jshaver@stow.oh.us) or at 330-689-2911

### **What are the possible sources of contamination to my drinking water?**

The sources of drinking water (both tap water and bottled water) include rivers, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land, or percolates down through the ground, it dissolves naturally occurring minerals, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present include: (A) Microbials, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) Inorganics, such as salts and metals which can be naturally-occurring or the result of industrial or domestic discharges, oil and gas production, storm water run-off, farming, or mining; (C) Pesticides and Herbicides, which come from a variety of sources, including agricultural and urban storm water run-off, and residential uses; (D) Organic Chemicals, these include synthetic and volatile organics, which are by-products of industrial processes and petroleum production, also from gas stations, storm water run-off, and septic systems; (E) Radioactives, which can be naturally-occurring or from oil and gas production and mining activities.

In order to insure the safety of our tap water, the EPA regulates the limits for each contaminant that may be found in public water systems. The FDA regulates contaminant limits in bottled water, which must provide the same protection for the public health.

Drinking water, including bottled water, may be reasonably 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 (EPA) Safe Drinking Water Hotline at (800) 426-4791**.

### **Who needs to take special precautions?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer and undergoing chemo therapy, persons with HIV/AIDS or other immune system disorders, as well as some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The EPA and the Centers for Disease Control (CDC) offer guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants by calling the **Safe Water Drinking Hotline at (800) 426-4791**

## About your drinking water

The EPA requires public water systems to perform routine testing to insure the safety and quality of its drinking water. The City of Stow conducts routine bacteria sampling, at a rate of forty (40) samples per month, from designated, EPA approved, test sites throughout the city. All sampling for the calendar year of 2017 showed negative results for coliform bacteria meeting the EPA standards.

The following tables represent various substances found in your drinking water during the year 2015-2017. Some test results are supplied by the City of Akron, which maintains a state-of-the-art laboratory to monitor drinking water quality. Many other substances are routinely tested for, though not listed below. You may rest assured that those substances not listed were not found in your drinking water.

For a complete list of test results contact the **Akron Public Utilities Bureau** at **(330) 375-2651**. This report is also available on the internet at <http://www.ci.akron.oh.us>

## Table of Detected Contaminants

Definitions of some terms contained within this report.

**MCL or Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible, using the best available treatment technologies.

**MCLG or Maximum Contaminant Level Goal:** 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.

**AL or Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

**Detected Level:** The **average level** detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values, depending on the contaminant. (N.D. means None Detected)

**Range:** The range of values for samples tested for each contaminant.

**MRDL:** Maximum Residual Disinfectant Level

**TT:** Treatment Technique

**ppm:** Parts per million, or milligrams per liter (mg/L)

**ppb:** Parts per billion, or micrograms per liter (ug/L)

**N.D:** Not detected

**NTU:** Nephelometric Turbidity Units

## Results from the City of Stow

Contaminant	Year Tested	Unit	MCL	MCLG	Detected Level	Range	Violation	Major Source
<b>Inorganic</b>								
<b>Copper*</b>	2015 (3 year cycle)	ppm	1.3 Action Level	1.3 Action Level	.132	.005 - .141	NO	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.
<b>Lead*</b>	2015 (3 year cycle)	ppm	.015 Action Level	0	<.005	<.005 - .141	NO	Corrosion of household plumbing, erosion of natural deposits.
<b>Volatile Organic Chemicals</b>								
<b>HAA5</b> Five Haloacetic Acids	2017	ug/L	60	N/A	26.0	2.1 - 38.9	NO	By-product of drinking water disinfection.
<b>TTHM</b> Total Trihalomethanes	2017	ug/L	80	N/A	57.1	15.8 - 87.7**	NO	By-product of drinking water disinfection.

\*One of 30 samples was found to have lead and copper in excess of the Action Level of .015 for Lead and 1.3 for Copper

\*\*The maximum Range of Detections is not a violation because individual samples are averaged with other samples before being compared with the maximum contaminant

## Results from Akron

Contaminant	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Bacteriological Contaminants</b>							
Turbidity (NTU)	N/A	TT	0.14	0.03 - 0.12	NO	2017	Soil Runoff
Turbidity (% meeting standard)	N/A	TT	100%	100% - 100%	NO	2017	
Total Organic Carbon (compliance ratio)	N/A	TT	1.51	1.24 - 1.76	NO	2017	Naturally present in the environment
<b>Radioactive Contaminants</b>							
Alpha emitters (picocuries per liter)	0	15	3.6	NA	NO	2017	Erosion of natural deposits
Combined Radium-226/228 (picocuries per liter)	0	5 combined	2.0	NA	NO	2017	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.033	NA	NO	2017	Discharge of drilling waste; Erosion of natural deposits
Fluoride (ppm)	4	4	1.04	0.75 - 1.18	NO	2017	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum
Nitrate (ppm)	10	10	0.46	0.02 - 0.46	NO	2017	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	.99	0.64 - 1.27	NO	2017	Water additive used to control microbes
Chlorine Dioxide (ppb)	MRDLG = 800	MRDL = 800	200	20 - 200	NO	2017	Water additive used to control microbes

Lead and Copper	Action Level	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical Source of Contaminants
Contaminants (units) Copper (ppm), customers taps	1.3 ppm*	0.188	NA	NO	2015	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.
	Zero out of 50 samples were found to have copper levels in excess of the copper Action Level of 1.3ppm.					
Lead (ppb), routine compliance, at consumers' taps Lead (ppb), routine compliance, at consumers' taps	15 ppb**	27.7, 87.3	9.8	NO	2015	Corrosion of household plumbing, erosion of natural deposits.
	2 out of 50 samples were found to have lead levels in excess of the lead Action Level of 15 ppb***					

\*ppm: corresponds to one second in a little over 11.5 days

\*\*ppb: corresponds to one second in 31.7 years

\*\*\*All homes with initial results above the lead Action Level were properly retested and confirmed to be less than the lead Action Level of 15 ppb.

## Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the City of Akron's highest recorded turbidity result for 2017 was .12 NTU and lowest monthly percentage of samples meeting the turbidity limits was .03

## Unregulated Contaminant Monitoring Rule 3

Contaminant (units)	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled
Chlorate (ppb) plant tap	NA	NA	318	250 – 517	NO	2013-2014
Chlorate (ppb), distribution system	NA	NA	537	420 – 854	NO	2013-2014
Chromium (total) (ppm), plant tap	NA	NA	.24	0.20 – 0.29	NO	2013-2014
Chromium (total) (ppm), distribution system	NA	NA	.29	0.20 – 0.35	NO	2013-2014
Chromium-6 (ppb), plant tap	NA	NA	.046	0.034 – 0.056	NO	2013-2014
Chromium-6 (ppb), distribution system	NA	NA	.088	0.056 – 0.13	NO	2013-2014
Strontium (ppb), plant tap	NA	NA	80.8	70.0 – 96.3	NO	2013-2014
Strontium (ppb), distribution system	NA	NA	80.9	66.4 – 99.4	NO	2013-2014
Vanadium (ppb), plant tap	NA	NA	0.88	0.250 – 1.6	NO	2013-2014
Vanadium (ppb), distribution system	NA	NA	0.88	0.20 – 1.8	NO	2013-2014

## Not Under Ohio EPA Regulation but of General Interest

	Average Detected Level	Range
Alkalinity	77 mg/L	38-105 mg/L
Hardness ( English units)	6 grains per gallon	3-9 grams per gallon
pH	7.3 units	7.0- 7.7 units
Total Organic Carbon	2.72 mg/L	2.10 – 3.39 mg/L

## Lead Educational Information

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 Stow Public Water system 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 800-426-4791** or on the internet at <http://www.epa.gov/safewater/lead>

## **License to Operate (LTO) Status Information**

In 2017 the City of Stow had an unconditioned license to operate our public water system.

## **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of Stow City Council which meets the second and fourth Thursdays of each month. For more information on your drinking water contact Jeff Shaver at 330-689-2911.