

**Annual Drinking Water Quality Report for 2014**  
**Town of Aurora, 300 Gleed Avenue, East Aurora, New York 14052**  
**(Public Water Supply ID# 1400412; 1400413; 1400418)**

## INTRODUCTION

To comply with State regulations, the Town of Aurora, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. If you have any questions about this report or concerning your drinking water, please contact the Town Water Department at (716) 652-4050. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings held at 7:00 p.m. on the second and fourth Monday of each month in the auditorium at 300 Gleed Avenue, East Aurora, NY.

## WHERE DOES OUR WATER COME FROM?

In general, 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 from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Our water system serves approximately 1550 people through 658 service connections. Our water source is Lake Erie and the Niagara River. The water is treated by conventional filtration at two Erie County Water Authority (ECWA – [www.ecwa.org](http://www.ecwa.org)) treatment plants prior to distribution. Erie County Water Authority also performs disinfection, pH adjustment and fluoridation on the water it provides us.

## ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for several contaminants. These contaminants include: total coliform, lead and copper and chlorine residual. The Erie County Water Authority tests for turbidity, inorganic compounds, nitrate, nitrite, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological, synthetic organic compounds and cryptosporidium and giardia. The table presented below and the enclosed ECWA supplement depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Erie County Health Department at (716-961-6800).

**Table of Detected Contaminants**

District	Contaminant	Violation Yes/No	Date of Sample	Level Detected (avg/max) (range)	Unit Measure	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
1400412 Dist. 1	Lead	NO	8/2014	0.005 <sup>1</sup> 0.001 – 0.007	mg/l	0	AL-0.015	Corrosion of household plumbing systems; Erosion of natural deposits
1400413 Dist. 7	Copper	NO	8/2014	0.062 <sup>1</sup> ND – 0.069	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits
1400413 Dist. 7	Lead	NO	8/2014	0.005 <sup>1</sup> ND – 0.005	mg/l	0	AL-0.015	Corrosion of household plumbing systems; Erosion of natural deposits
1400413 Dist. 7	Copper	NO	8/2014	0.063 <sup>1</sup> ND – 0.078	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits
1400418 Dist.235	Lead	NO	8/2014	0.003 <sup>1</sup> ND – 0.003	mg/l	0	AL-0.015	Corrosion of household plumbing systems; Erosion of natural deposits
1400413 Dist. 7	Copper	NO	8/2014	0.052 <sup>1</sup> ND – 0.063	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits
1400412 Dist. 1	Chlorine Residual	NO	2014	0.63 0.05-1.30	mg/l	N/A	MRDL=4.0	Water additive used to control microbes.
1400413 Dist. 7	Chlorine Residual	NO	2014	0.99 0.14-1.73	mg/l	N/A	MRDL=4.0	Water additive used to control microbes.
1400418 Dist.235	Chlorine Residual	NO	2014	0.70 0.13-1.48	mg/l	N/A	MRDL=4.0	Water additive used to control microbes.

District	Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
1400412 Dist. 1	Haloacetic <sup>2</sup> Acids	No	8/28/2014	9.5	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400412 Dist. 1	Total Trihalomethanes <sup>3</sup>	No	8/7/2014	62.8	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
1400413 Dist. 7	Haloacetic <sup>2</sup> Acids	No	8/28/2014	8.7	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400413 Dist. 7	Total Trihalomethanes <sup>3</sup>	No	8/7/2014	70.9	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
1400418 Dist. 235	Haloacetic <sup>2</sup> Acids	No	8/28/2014	18.1	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400418 Dist. 235	Total Trihalomethanes <sup>3</sup>	No	8/7/2014	59.2	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

1. The level included in the table represents the average of the two highest levels detected. During 2011 we collected and analyzed 5 samples for lead and copper. The action level for lead and copper was not exceeded at any of the sites tested.

2. Haloacetic acids are byproducts of the water disinfection process required to kill harmful organisms. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. The level detected represents the system's highest single location's running average.

3. Trihalomethanes are byproducts of the water disinfection process that occur when natural organic compounds react with the chlorine required to kill harmful organisms in the water. 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 system, and may have an increased risk of getting cancer. The level detected represents the highest single location's running annual average.

#### Definitions:

**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.

**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 contamination.

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

**Micrograms per liter (ug/L):** corresponds to one part of liquid in one billion parts of liquid (part per billion – ppb).

**Miligrams per liter (mg/l):** corresponds to one part of liquid in one million parts of liquid (parts per million – ppm).

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**N/A:** Not applicable.

#### WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no contaminant violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Aurora in conjunction with the Erie County Water 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

#### IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

##### Monitoring/Reporting Violations:

During 2014, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

##### WAIVERS:

Water District No. 7 is operating under a waiver for asbestos monitoring because there is no asbestos containing pipe in the district.

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

## **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. Fluoride is added to your water by the ECWA before it is delivered to us. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, ECWA monitors fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 1.0 mg/l. During 2014 monitoring showed that fluoride levels in your water were within 0.2 mg/l of the target level for 99% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

## **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Use low flow shower heads and faucets.
- ◆ Repair all leaks in your plumbing system. Just a slow faucet drip can waste 15 to 20 gallons a day.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl.
- ◆ Water your lawn sparingly in early morning or late evening.
- ◆ Do only full loads of laundry and dishes.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call the Town Supervisor's office (716-652-7590) if you have questions.

# 2014 Water Quality Monitoring Report - Annual Water Quality Report Supplement

## DETECTED CONTAMINANTS

Metals, Inorganics, Physical Tests	Whealton Year/No	Sample Date (or date of highest detection)	MCL	MCLG	Level Detected		Sources In Drinking Water
			MCLG (ug/liter)	MCL (ug/liter)	MCLG (ug/liter)	MCL (ug/liter)	
Barium	No	3/14	2 mg/liter*	2 mg/liter	0.024 - 0.027 mg/liter; Average = 0.025	NE	Erosion of natural deposits, drilling and metal wastes
Chloride	No	1/14	250 mg/liter	17 - 31 mg/liter; Average = 21	0.23 - 0.29 mg/liter; Average = 1.50	NE	Naturally occurring in source water
Chloride	No	6/14	MRDL = 0.0 mg/liter	1.3 mg/liter (AL)	0.003 - 0.10 mg/liter; O of 63 above AL	ND - 1.28 mg/liter; Average = 1.0	Harmful plumbing corrosion/natural erosion
Copper	No	7/13	1.3 mg/liter (AL)	0.003 - 0.10 mg/liter; O of 63 above AL	0.003 - 0.10 mg/liter; Average = 1.0	ND - 1.28 mg/liter; Average = 1.0	Added to water to prevent tooth decay
Fluoride*	No	12/14	2.2 mg/liter	2.2 mg/liter	0.003 - 0.02 ug/liter; O of 63 above AL	ND - 0.82 ug/liter; O of 63 above AL	Harmful plumbing corrosion/natural erosion
Lead*	No	7/13	15 ug/liter (AL)	15 ug/liter (AL)	0.003 - 0.02 ug/liter; O of 63 above AL	0.003 - 0.02 ug/liter; O of 63 above AL	Runoff from fertilizer use
Nitrate	No	10/14	10 mg/liter	NR	0.003 - 0.06 mg/liter; Average = 0.034	0.003 - 0.06 mg/liter; Average = 0.034	Naturally occurring, adjusted for corrosion control
pH	No	1/14	7.79 - 8.26	Average = 7.99 SU	7.79 - 8.26; Average = 7.99 SU	7.79 - 8.26; Average = 7.99 SU	Runoff
Turbidity	No	1/14	TT - 0.3 NTU	NE	0.22 NTU highest detected = 0.005	< 0.30 NTU	NTU highest detected = 0.005

\*One of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer health protection. According to the United States Centers for Disease Control, the addition of fluoride is a very effective means of preventing cavities when present in your drinking water. To ensure that the fluoride supplement in your water provides optimal dental protection we monitor fluoride levels on a daily basis. If your water were within 5% of the target level (0.7 mg/liter) of the range (0.65 - 0.75 mg/liter), none of the monitoring results during routine add-on would be affected.

†Lead is not detectable at levels that approached the 2.2 mg/liter (AL) fluoride.

‡Turbidity is a measure of the cloudiness of water that is treated and delivered to your home. Lead in drinking water may come from natural sources like rocks and minerals or from human activities such as mining and smelting. If present, elevated levels of lead can cause serious health problems, especially in young children, and lead in drinking water may contribute to a higher risk of lead in blood. If you are concerned about high levels of lead in your drinking water, you can take some simple steps to reduce your risk of lead exposure by following EPA's Safe Drinking Water Advisory (SDWA) for drinking water (800-426-4791) or at <http://www.epa.gov/sdwa/lead>. The level presented in the SDWA represents the 90th percentile of lead in drinking water. A percentile is a percent of 100 that indicates a portion of the population has a value for lead that exceeded in only one of the samples tested in the water system. In this case, 63 samples were collected in the water system and the 90th percentile value for lead was the seventh highest value (2 ug/l). The action level for lead was the seventh highest value (2 ug/l). Turbidity can interfere with disinfection and provide a medium for bacterial growth. State regulations require that the combined turbidity must always be below 1 NTU in the combined turbidity samples. Turbidity has no health effects. Turbidity also reflects the quality of the MCL over many years. We have measured turbidity values below 1 NTU in the combined turbidity samples. State regulations also require that 95% of the turbidity samples cannot exceed measurements below 0.3 NTU.

\*\*Turbidity is a measure of the cloudiness of water that is treated and delivered to your home. Lead in drinking water may come from natural sources like rocks and minerals or from human activities such as mining and smelting. If present, elevated levels of lead can cause serious health problems, especially in young children, and lead in drinking water may contribute to a higher risk of lead in blood. If you are concerned about high levels of lead in your drinking water, you can take some simple steps to reduce your risk of lead exposure by following EPA's Safe Drinking Water Advisory (SDWA) for drinking water (800-426-4791) or at <http://www.epa.gov/sdwa/lead>. The level presented in the SDWA represents the 90th percentile of lead in drinking water. A percentile is a percent of 100 that indicates a portion of the population has a value for lead that exceeded in only one of the samples tested in the water system. In this case, 63 samples were collected in the water system and the 90th percentile value for lead was the seventh highest value (2 ug/l). The action level for lead was the seventh highest value (2 ug/l). Turbidity can interfere with disinfection and provide a medium for bacterial growth. State regulations require that the combined turbidity must always be below 1 NTU in the combined turbidity samples. Turbidity has no health effects. Turbidity also reflects the quality of the MCL over many years. We have measured turbidity values below 1 NTU in the combined turbidity samples. State regulations also require that 95% of the turbidity samples cannot exceed measurements below 0.3 NTU.

Parameter	MCL	MCLG	Level Detected (ug/liter)		Sources In Drinking Water	Sources In Drinking Water	Sources In Drinking Water	Compounds Tested For But Not Detected	
			MCL (ug/liter)	MCLG (ug/liter)				Level Detected (ug/liter)	MCL (ug/liter)
Total Trihalomethanes*	No	9/14	1.84 - 8.0	0	NE	15 - 94 ug/liter; LRAW = 55	By-product of water disinfection (chlorination)	Di(2-ethylhexyl) phthalate	Alachlor
Total Trihaloacids*	No	2/13	LRAW = 60	NE	NE	3 - 56 ug/liter; LRAW = 41	By-product of water disinfection (chlorination)	Diclorodifluoromethane	Methylchloroform
Vanadium	Yes/No	Sample Date (or date of highest detection)	MCL (ug/liter)	MCLG (ug/liter)	Level Detected (ug/liter)	MCL (ug/liter)	Level Detected (ug/liter)	1,2-Dibromoethane	Oxamyl (Pyrethroid)
Radiological Parameters	No	4/13	ND	ND	0.99 - 1.10 pg/liter; Average = 1.05	NE	0.99 - 1.10 pg/liter; Average = 1.05	1,2-Ethylidene-1,1-difluoroethane	PCB 1232
Radium 228	No	7/14	1.34 and B/24*	0	5.0	0	1.15 - 1.26 pg/liter; Average = 1.2	1,2-Ethylidene-1,1-difluoroethane	PCB 1248
Combined Radon and C-222	No	4/13	ND	ND	0	0	0	1,2-Ethylidene-1,1-difluoroethane	PCB 1254
Microbiological Parameters	Validation Yes/No	Sample Date (or date of highest detection)	MCL	MCLG	Level Detected (ug/liter)	MCL	Level Detected (ug/liter)	1,2-Ethylidene-1,1-difluoroethane	Pentachlorophenol
Total Coliform Bacteria	No	7/14 and B/24*	5% of samples positive	0	0	0	0	1,2-Ethylidene-1,1-difluoroethane	Pentachlorotoluene and Perfluorobutane sulfone acid
During July and August 2014, one sample in the distribution system tested positive for total coliform, but negative for E. coli. One total coliform sample was collected in Lake Erie.	No	7/14 and B/24*	5% of samples positive	0	0	0	0	1,3-Butanediol	Perfluorobutane sulfone acid
Treated Drinking Water	No	1/14 and B/24*	5% of samples positive	0	0	0	0	1,3-Butanediol	Perfluorobutane sulfone acid
Source Water	No	ND	ND	ND	ND	ND	ND	1,3-Butanediol	Perfluorobutane sulfone acid
Glauberite and Cryptosporidium	Validation Yes/No	Sample Date (or date of highest detection)	MCL	MCLG	Number of Samples Testing Positive	Number of Samples Testing Positive	Number of Samples Testing Positive	1,4-Dioxane	Radium 226
Contaminants	No	7/14 and B/24*	5% of samples positive	0	2	0	6	1,4-Dioxane	Selenium
During July and August 2014, one sample in the distribution system tested positive for total coliform, but negative for E. coli. One total coliform sample was collected in Lake Erie.	No	7/14 and B/24*	5% of samples positive	0	0	0	5	1,4-Dioxane	Syringe
Treated Drinking Water	No	1/14	ND	ND	ND	ND	ND	1,4-Dioxane	Tetrachloroethylene
Chloride	NR	NE	ND - 0.50	ND - 0.2	ND	ND	ND	1,4-Dioxane	Thallium
Chromium*	NR	NE	ND - 0.2	ND - 1.2	ND	ND	ND	1,4-Dioxane	Toluene
Molybdenum	NR	NE	ND - 1.2	ND - 1.2	ND	ND	ND	1,4-Dioxane	Manganese
Siliconium	NR	NE	1.60 - 1.70	1.60 - 1.70	ND	ND	ND	1,4-Dioxane	Mercury
Vanadium	NR	NE	ND - 0.3	ND - 0.3	ND	ND	ND	1,4-Dioxane	Trichloroethylene
Raw Surface Water Samples	No	ND	ND	ND	ND	ND	ND	1,4-Dioxane	Trifluoromethane
Glauberite	No	ND	ND	ND	ND	ND	ND	1,4-Dioxane	Vanillin
As you can see by the tables, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the state, and these facility types include: chemical bulk storage, inactive hazardous waste sites, landfills, Resource Conservation and Recovery Act facilities and Toxics Release Inventory facilities.	No	ND	ND	ND	ND	ND	ND	1,4-Dioxane	Metaphylene Chloride

If you have any questions about New York State's Source Water Assessment Program, please contact Ms. Dolores Fiume, P.E., Director of Environmental Health, Erie County Health Department at (716) 962-6800.

Results presented here are from 2014 analyses or from the most recent year that tests were conducted in accordance with regulatory requirements. Some tests are not required to be performed on an annual basis. Information can be obtained upon request from the ECWA Water Quality Laboratory at (716) 857-8570 or on the Internet at [www.ecwa.org](http://www.ecwa.org).

For a large-print copy of ECWA's 2014 Water Quality Report Supplement, please visit [www.ecwa.org](http://www.ecwa.org) or email your request to [questions@ecwa.org](mailto:questions@ecwa.org)