# Annual Drinking Water Quality Report for 2015 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 659 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) 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	$0.005^{1}$ $0.001 - 0.007$	mg/l	0	AL-0.015	Corrosion of household plumbing systems; Erosion of natural deposits
1400412 Dist. 1	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
1400418 Dist. 235	Copper	NO	8/2014	0.057 <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	2015	0.52 0.02–1.21	mg/l	N/A	MRDL=4.0	Water additive used to control microbes.
1400413 Dist. 7	Chlorine Residual	NO	2015	0.85 023-1.52	mg/l	N/A	MRDL=4.0	Water additive used to control microbes.
1400418 Dist.235	Chlorine Residual	NO	2015	0.63 0.05-1.39	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	8/20/2015	11.8	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400412 Dist. 1	Total Trihalomethane s <sup>3</sup>	No	8/20/2015	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	8/20/2015	20.7	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400413 Dist. 7	Total Trihalomethane s <sup>3</sup>	No	8/20/2015	68.6	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	8/20/2015	12.0	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
1400418 Dist. 235	Total Trihalomethane s <sup>3</sup>	No	8/20/2015	63.2	ug/l	N/A		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 2014 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:**

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

<u>Action Level (AL)</u>: 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 <a href="https://www.epa.gov/safewater/lead">https://www.epa.gov/safewater/lead</a>.

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

Monitoring/Reporting Violations:

During 2015, 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 2015 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.





#### 2015 ANNUAL WATER QUALITY REPORT SUPPLEMENT



Metals, inorganica, Physical Tests	Violation Yes/No	Sample Oate (or date of highest detected)	MCL	WCFG	Level Detected	Sources In Drinking Water
Barium	No	9/15	2 mg/liter	2 mg/liter	0.020 - 0.020 mg/liter; Average = 0.020	Erosion of natural deposits; drilling and metal wastes
Chloride	No	5/15	250 mg/liter	NE	17 - 29 mg/filer; Average = 21	Naturally occurring in source weter
Chlorins	No	8/15	MRDL = 4.0 mg/liter	NA NA	<0.2 - 2.0 mg/liter; Average = 0.82	Added for disinfection
Copper	No	7/13	1.3 mg/liter (AL)	1.3 mg/fiter (AL)	0.003 - 0.10 mg/liter, 90th percentile 0.04 mg/liter. O of 63 above At.	Home plumbing corrosion; natural erosion
Fluorida'	Na	4/15	2.2 mg/liter	NA NA	<0 2 - 1.19 mg/liter; Average = 0.85	Added to water to prevent looth decay
Lead <sup>2</sup>	Na	7/13	15 ug/liter (AL)	O ug/liter (AL)	ND - 82 ug/liter, 90th percentile 2 ug/liter, 1 of 63 above AL	Home plumbing corrosion, natural erosion
Nitrale	No	6/15	10 mg/liter	10 mg/liter	0.22 - 0.23 mg/kter; Average = 0.22	Runoff from fartilizar use
рH	No	10/15	NR	NE	7.32 - 8.30; Average 7.94 SU	Naturally occurring; adjusted for corresion control
Distribution System Turbidity <sup>3</sup>	No	10/15	TT-5 NTU	NE	0.03 - 0.85; Avarage = 0.20 NTU	Soil runoff
Entry Point Turbidity <sup>3</sup>	No	10/15	TT - 0.3	, NE	0.83 NTU highest detected; Lowest monthly % < 0.30 NTU = 99.5%	Soll runoff

- Our system as one of the many water systems in New York State that provides drinking water with a controlled, low revel of Busides when present in drinking wrates at a property controlled level. To creave that the Suprade supplement in your water provides open described on the monitoring results showed Suprade several founds in maintained at a target level of 0.7 mgf. This level was reduced from 1.0 mgf to 0.7 mgf in June 2015.

  During 2015, monitoring showed flooride levels in your water wester within 0.2 mgf of the target level 0.9.% of the time. Hone of the monitoring results showed Suporide at levels above the 2.2 mgf HCL for Revolds.
- Lead is not present in the dictiving water that is treated and delivered to your home. Lead in divining water is primarily from materials and components associated with service since and home plumbing. If present, intervaled levels of lead can course serious health problems, expectedly for present in the dictiving water and home plumbing. If present, intervaled levels of lead can course serious health problems, expectedly make a service of the service
- Turbidity as an essure of the cloudiness of water. ECMA monitors buildity because it is a good indicator of the effectiveness of our diffusion system. Turbidity has no health effects. However, building can inteller with distribution species an provide a medium for becarding grown.

  State regulations require that the defivered water turbidity must stways be better 1 NTU in the combined filter efficient. The regulations species that SSN of the turbidity examples collected from that point have measurements below 0.3 NTU. The medimum allowed in the distribution system is SNTU.

Organic Compounds	Violation Yes/No	Sample Date (or date of highest detected)	MCL (eg/liter)	MCLG (ug/liter)	Lavel Delacted (ug/liter)	Sources in Drinking Water
Total Trihalomelhanes*	No	6/15	LRAA = 80	NE.	12 - 85 ug/liter, LRAA = 53	By-product of water distrifection (chlodnation)
Total Haloscetic Acids <sup>5</sup>	No	6/15	LRAA = 60	NE	7 - 58 ug/Mer, LRAA = \$1	By-product of water dislinfection (chlorination)

- Tithalismethanas are hyproducts of the water disnifection process that occus when natural organic compounds react with the chlorine required to kill hamiful organisms to the water. Some people who drink water containing it hadions thence in excess of the MCL over many ye with their laver, kidneys, or central nervous system, and may have an increased risk of getting pancer. The lovels detected represent the highest single location's running sanual average (53 upt.).
- Haloacebo solds are byproducts of the water distriction process required to Nil hermful organisms. Some people who drink water containing haloacebo adds in excess of the MCL over many years may have an increased into 6 gailing cancer. The level defected reprirunning annual average (51 ug/L)

Rediological Parameters	Violation Yes/No	Sample Date (or date of highest detected)	MCL (pCl/liter)	MCLG (pCV(iter)	Level Detacled (pGilliter)	Sources in Orinking Water
Redium 228	No	4/13	NE	NE	0.99 - 1.10 pCVIller, Average = 1.05	Erosion of Natural Deposits
Combined Radium 226/228	No	4/13	5.0	0		Erosion of Natural Deposits

Microbiological Parameters	Violation Yes/No	Sample Dain (or date of highest delected)	MCL	MCLG	Lovel Delected	Sources in Orinking Water
Total Collorn Bacteria	No	5/15 and 10/15 <sup>7</sup>	5% of samples positive	0	0.44% = highest percentage of monthly positives	Nehrely extent in scommont

- A violation occurs when more than 6% of the local collector samples callected per more three positives. No IACL violation occurred.

  During June and October 2016, one sample in the distribution system tested positive for local collector but negative for Ecol. Fellow-up sampling, lessing and reporting were performed as resulted by regulation, and remain were negative for both local collisions and Ecol.

CRYPTOSPOREDIUM AND	Violation	Semple Date for date of highest	Number of Samples Testing Positive   Number of Samples Tested   Chyptosporidhum   Number of Samples Tested		Dr. mber of Bernales To-bal
GIARDIA	Yes/No	detected)			•
Source Water	No	МD	a	0	18

Cypinapondum is a indeveceptic pathogon found in muface waters throughout the United Blates, as a result of admit weate uncell. It can exuse adminate laid Our Blatford process articles/stranspers Cypinapondum. No Cypinapondum was defected in any acrepisa labes to 2016. Gendra is a microbial pathogon present in versign connectivates the inverse varies workers. Gendra is a microproducedurable through a combination of lifetion, and

tations in many surface waters. Glarda is removed/nactivated it/sough a combination of litration and disinfection or by disinfection alone

	DETECT	EO UNREGULATED CONT	Alenants	
Parameter	MCL	WCFG	Average Lavel Detected (ug/liter)	Range (ug/l)
Chlorale	NR	NE.	43	ND - 180
Chromkim*®	NR	NE	0,13	ND - 0.13
Molybdenum	NR	NE	5.1	1.1 - 1.2
Strenikum	NR	NE	159	150 - 190

MRDLG = Maximum Residual Disinfectant Level Goal: the level of a clinking waiter disinfectant below which there is no known or expected risk to health, MRDLGs on not reflect the benefits of the use of disinfectants to control microbial contamination

LRAA= Locational Running Annual Average

ND = Not Defected: absent or present at less then testing method defection limit.

RE = Not Established

NR = Not Regulated

NICL = Madmum Contaminant Level: the highest level of a contaminant that is estowed in drinking water. MCL's are set as close to MCLG's as feasible.

moLCI = Meximum Confirminant Level Goal
the lavel of a centerinant in drinking water
TT = Treatment Technique is required process
below which there is no known or expected risk timeded to reduce the lavel of a centaminant in drinking
to health, MCLCS allow for a margin of safety.

water
MRL = Million its auxiliar (Abbellos)
mgGiller = millionese = \*\*\*

mgi∐ler≃ milligrams perlikteror pada per million

MRDL - Maximum Residual Disinfactant Level Variances and Exemptions = State or EPA permission in the highest level of a disinfectant allowed in a distinguishment of the distinguishment of distinguishment

The presence of contaminants does not necessarily indicate that the water poses a health risk. Water, including bottled water, may reasonably be

Regults presented here are from 2015 analyses or from the most recent year that tests were conducted in accordance with regulatory requirements. Some tests are not excelled to be performed on an annual basis. Information can be obtained upon request from the ECWA Water Quality Laboratory 719, 855-8590 or on the Internet at work-coviziony.

#### TYPES OF CONTAMINANTS Contaminants that may be present in source water hefore we treat it include

Observable Contaminants, such as visuses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Planganic 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 urban storm water runoff, agricultural and esidential usea

Organic Chemical Contambants, 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 nmoff, and septic systems.

Radioactive Contan

	COMPOUNDS T	ESTED FOR BUT NOT DETEC	TED
4-Androstena-3,17-clone	1,3,5-Trimethy/benzens	Di(2-ethylhexyl) adipate	Methylene Chleride
2-Chiorololuene	Alachior	Di(2-ethylhexyl) phthelate	Melalachior
4-Chlorotoluene	Aldicarb	Dibremochlorogropana	Meinbuzin
17beta-Estradiol	Aidicarb Sulfona	Dibromomelhane	Oxemyl (Vydate)
17elpha-Ethynyl estraciol	Aidicarb Sulfoude	Dicemba	PCB 1016
2,4·D	Aidrin	Dichlorodifluoromethane	PCB 1221
1,3 Butadiene	Aluminum	Dieldrin	PGB 1232
1,2-Dichlorobenzane	Anteriony	Dinoseb	PCB 1242
1,3-Dichlorobenzene	Arsenic	Diquat	PCB 1248
4.4-Dichlorobanzene	Atrazine	Endothall	PCB 1254
1,1-Dichloroethane	Benzene	Endrin	PGB 1260
f,2-Dichlorosthane	Benzo(a)pyrena	Equillin	Penlachlorophenol
1,1-Dichloroethylene	Berylkum	Estriol	Perfluorobutanesulfonio acid
cis-1,2-Dichloroethylane	Вготпобелаеля	Estions	Perflueroheptanoic acid
rans-1,2-Dichleroethylane	8romochloromethan a	Elhvibenzane	Perflucrohexenesul/anic soid
1,2-Dichloropropane	Bromomathane	Ethylene Dibromide (ECB)	Perfluoronanoic acid
1,3-Dichioropropane	Butachlor	Glyphosale	Perfluoronciane sulfonate
2,2-Dichioropropane	n-Butyforazene	Gross Ainha Particles	Perfluoropotanole acid
1,1-Dichloropropene	sec-Bulybenzene	Gross Beta Particles	Pichloram
cis-1.3-Oichloropropane	t-Butythenzene	Heptachlor	Propachior
rans-1,3-Dichloropropage	Cadmium	Heptachlor Eposide	n-Propylbenzene
1,4-Dloxana	Carbaryl	Hexachlorobenzene	Radium 226
3-Нублохусальовигая	Carbofuran	Hexachlorobutadiane	Salanium
2,3,7,8-TCOD (Diaxin)	Carbon Tetrachloride	Havachlorocyclopentaciene	Simazine
2,4,5-TP (Silvex)	Chlordane	lico	Styrene
1,1,1,2-Tetrachloroethana	Chlorobenzene	Isopropylbanzena	Tetrachloroethylene
1,1,2,2-Tetrachioroethane	Chlorodifluoromathane	p-isopropyltoluene	Thatfirm
1,2,3-Trichlompenzene	Chlorosthane	Lindane	Tolyene
1,2,4-Trichlombenzene	Chloromethane	Managerese	Toxaphene
1.1.1-Trichloreelhane	Chromium	Misroury	Trichlorgethylens
1.1.2-Trichlorosthe.ne	Cobalt	Methomyl	Trichlorofluoromathece
1,2,3-Trichloropropane	Cyanide	Methoxychlor	Vinyl Chloride
1,2,4-Trimelhybenzene	Dalagon	Methyl t-butyl other (MTBE)	Xvienes