Annual Drinking Water Quality Report for 2014
Seneca Nation of Indians

INTRODUCTION

To comply with Federal regulations, the Seneca Nation of Indians (SNI), annually issues 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 federal 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 Federal standards.

If you have any questions about this report or concerning your drinking water, please contact Joel Merrill, PE, Civil Engineer or Shannon Seneca, Sanitarian, both at (716) 945-5894.

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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water sources are:

1.) Cattaraugus Territory:
   a. Groundwater Wells: drawn from two drilled wells which are located on Richardson Road. Richardson Road is one of the many systems that adds a low level of fluoride to drinking water in order to provide consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at levels that range from 0.8 to 1.2 mg/l (parts per million). Our fluoride addition facility is designed and operated to meet this optimal range. This source is also disinfected prior to being pumped to two storage tanks and distribution.
   b. Intercommunity Water main: Water is purchased in bulk from Erie County Water Authority (ECWA). The connection is located at Routes 5/20 in Irving. This water is fluoridated and disinfected by ECWA. ECWA's water quality report is attached.

2.) Allegany Territory:
   a. Groundwater Wells: drawn from two drilled wells which are located on Hiller Rd in Jimersontown. This water is disinfected and pumped to an elevated storage tank prior to distribution.
   b. Groundwater Wells: drawn from two drilled wells which are located on North Authority Road in Sullivan Hollow, Killbuck. This water is disinfected and filtered prior to usage.

c. Groundwater Wells: drawn from two drilled wells which are located on South Loop Road in Steamburg. This water is disinfected and pumped to an elevated storage tank prior to distribution.
d. City of Salamanca: Groundwater wells: Salamanca Board of Public Utilities (BPU) report is available at: http://www.salamancabpu.com

During 2014, the Richardson Road wells have been offline undergoing repairs.

Each source has undergone a risk analysis to determine the source water's susceptibility to contamination. Except for farming on the Cattaraugus territory, all sources have a low risk of contamination. Source water assessments are available from SNI Health. Efforts are underway to further protect SNI water sources.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the Federal regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, and radiological compounds. A full list of the contaminants tested follows as table 3. The tables 1 and 2 presented below depict which compounds were detected in your drinking water. The regulations allow 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. See also Erie County Water Authority's water quality monitoring report supplement attached for their detected contaminants

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 SNI Health Department at (716) 945-5894.

WHAT DOES THIS INFORMATION MEAN?

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 EPA.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded 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

The Cattaraugus system is one of the many drinking water systems that provide drinking water with a controlled, low level of fluoride for consumer dental health protection. 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, we monitor 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 100% 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 firefighting 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:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- 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. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

SYSTEM IMPROVEMENTS

In 2014, a capital project is planned to replace the Indian Hill water tank. These improvements are funded by EPA drinking water grants and will provide secure storage of treated water in compliance with federal regulations. In addition other projects are planned to protect aging infrastructure and provide treated water to areas not currently served.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our consumers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

TABLE 1
2014 Water Quality Monitoring Report-Annual Water Quality Report Supplement-CATTARAUGUS TERRITORY

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Barium	No	4/17/2013	825 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	8/23/13	56.2 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	4/17/2013	1.24 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	9/11/2012	52 ug/l[1]	0	AL=1,300	Home plumbing corrosion, natural erosion
Lead	No	9/12/2013	<1 ug/l[1]	0	AL = 15	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	8/27/13	<0.010 mg/l	0.1 mg/l	0.1 mg/l	Erosion of natural deposits
Fluoride	No	8/22/13	0.128 mg/l	2.2 mg/l	202 mg/l	Added to water to prevent tooth decay

Organic Compounds	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Trihalomethanes	No	9/29/2014	0.0565 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	9/29/2014	0.013 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Gross Alpha	No	8/26/2009	2.58 ±2.21 pCi/l	0	MCL=15	Natural sources
Radium 228	No	9/3/13	0.407 +0.381pCi/l	NE	NE	Natural sources
Radium 226	No	9/3/2013	0.449 +0.332pCi/l	NE	NE	Natural sources

Microbiological Parameters[2]	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Total coliform bacteria	N	Various	None	NE	5% of samples positive	Naturally present in the environment

[1] 90th percentile
[2] Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2014.

TABLE 2
2014 Water Quality Monitoring Report-Annual Water Quality Report Supplement-ALLEGANY TERRITORY

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Barium	No	8/21/2013	261 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	8/21/2013	124 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	8/21/2013	2.12 mg/l (highest of 5 samples.) Avg= 1.20 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	9/25/2013	57 ug/l (highest of 6 samples.) Avg. =30 ug/l	0	AL=1,300	Home plumbing corrosion, natural erosion
Lead	No	9/25/2013	<1 ug/l[1]	0	AL = 15	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	8/21/2013	<0.010 mg/l	0.1 mg/l	0.1 mg/l	Erosion of natural deposits

Organic Compounds	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Trihalomethanes	No	8/20/2014	0.048 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	8/20/2014	<0.006 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Gross Alpha	No	8/21/2013	2.59 ±1.73 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	8/21/2013	0.519 ±1.14 pCi/l	0	MCL=15	Natural sources
Radium 228	No	8/21/2013	0.476 +0.371pCi/l	NE	NE	Natural sources
Radium 226	No	8/21/2013	0.137 +0.552pCi/l	NE	NE	Natural sources

Microbiological Parameters[2]	**Violation Yes/No**	**Sample Date**	**Level Detected**	**MCLG**	**MCL**	**Sources in Drinking Water**
Total coliform bacteria	N	Various	None	NE	5% of samples positive	Naturally present in the environment

[1] 90th percentile
[2]Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria was detected in any samples in 2014.

ABREVIATIONS AND TERMS

AL = Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
CFU/100 ml = Colony Forming Units per 100 milliliters
MCL=Maximum Contaminant Level: the highest level of a contaminant allowed in a drinking water
MCLG= Maximum contaminant level goal: the level of contaminant in a drinking water below which there is no known or expected risk
MFL = Million fibers/liter (Asbestos)
Mg/liter = milligrams per liter (parts per million)
MRDL = Maximum Residential Disinfectant Level: the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants
MRDLG = Maximum Residual Disinfectant Level Goal: 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
Mrem/yr = millirems per yrear
uS/cm= Microseimens per centimeter (a unit of conductivity measurement)
ND= Not detected: absent or present at less than testing method detection limit
Ng/liter= nanograms per liter = parts per trillion
NE= Not Established
NR= not regulated
NTU= Nephelometric turbidity Units
pCi/L= Picocuries per liter
LRAA= Location Running Annual Average
SU = Standard Units (ph measurement)
TT = Treatment Technique: a required process intended to reduce the level of contaminant in drinking water
Ug/liter (ug/L:) = micrograms per liter (parts per billion)
Variances and Exemption = State or EPA permission not to meet an MCL or treatment techniques under certain conditions.
< = less than
≥= less than or equal to

TYPES OF CONTAMINANTS

**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 urban storm water runoff, agricultural and residential uses
**Organic Chemical Contaminants,* including synthetic and volatile organic chemicals, which are by-products of the 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

TABLE 3

COMPOUNDS TESTED FOR BUT NOT DETECTED		
2-Chlorotoluene	Bromochloromethane	Manganese
4-Chlorotoluene	Bromoomethane	Mercury
2,4-D	Butachlor	Methomyl
1,2-Dichlorobenzene	n-Butylbenzene	Methoxychlor
1,3- Dichlorobenzene	sec-Butylbenzene	Meth t-butyl ether (MTBE)
1,4-Dichlorobenzene	t-Butylbenzene	Methylene Chloride
1,1-Dichloroethane	Cadmium	Metolachor
1,2-Dichloroethane	Carbaryl	Metribuzin
1,1-Dichloroethylene	Carbofuran	Nickel
cis-1,2-Dichloroethylene	Carbon Tetrachloride	N-nitroso-diethylamine (NDEA)
trans-1,2-Dichlorethylene	Chlordane	N-nitroso-dimethylamine(NDMA)
1,2-Dichloropropane	Chlorobenzene	N-nitroso-di-n-butylamine(NDBA)
1,3-Dichloropropane	Chloroethane	N-nitroso-di-n-propylamine(NDPA)
2,2-Dichloropropane	Chloromethane	N-nitroso-methylethylamine (NMEA)
1,1-Dichloropropene	Chromium	N-nitroso-pyrrolidine (NPYR)
cis-1,3-Dichloropropene	Cyanide	Oxamyl (Vydate)
trans-1,3-Dichloropropene	Dalapon	PCB 1016
3-Hydroxycarbofuran	Di(2-ethylhexyl)adipate	PCB 1221
2,3,7,8-TCDD (Dioxin)	Di(2-ethylhexyl)phthalate	PCB 1232
2,4,5-TP (Silvex)	Dibromochloropropane	PCB 1242
1,1,1,2-Tetrachloroethane	Dibromomethane	PCB 1248
1,1,2,2-Tetrachloroethane	Dicamba	PCB 1254
1,2,3-Trichlorobenzene	Dichlorodifluoromethane	PCB 1260
1,2,4-Trichlorobenzene	Dieldrin	Pentachlorophenol
1,1,1-Trichloroethane	Dinoseb	Pichloram
1,1,2-Trichloroethane	Diquat	Propachlor
1,2,3-Trichloropropane	Endothall	n-Propylbenzene
1,2,4-Trimethylbenzene	Endrin	Radium 226
1,3,5-Trimethylbenzene	Ethylbenzene	Selenium
Alachlor	Ethylene Dibromide (EDB)	Simazine
Aldicarb	Glyphosate	Styrene
Aldicarb sulfone	Gross Apha Particles	Tetrachloroethylene
Aldicarb Sulfoxide	Gross Beta Particles	Thallium
Aldrin	Heptachlor	Toluene
Aluminum	Heptachlor Epoxide	Toxaphene
Antimony	Hexachlorobenzene	Trichlorofluoromethane
Arsenic	Hexachlorobutadiene	Vinyl Chloride
Atrazine	Hexachlorocyclopentadiene	Xylenes
Benzene	Iron	
Benzo(a)pyrene	Isopropylbenzene	
Beryllium	p-Isopropyltoluene	
Bromobenzene	Lindane	

ERIE COUNTY WATER AUTHORITY

2014 WATER QUALITY MONITORING REPORT - ANNUAL WATER QUALITY REPORT SUPPLEMENT

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	**Violation Yes/No**	**Sample Date (or date of highest detected)**	**MCL**	**MCLG**	**Level Detected**	**Sources in Drinking Water**
Barium	No	3/14	2 mg/liter	2 mg/liter	0.024 - 0.027 mg/liter ; Average = 0.025	Erosion of natural deposits; drilling and metal wastes
Chloride	No	1/14	250 mg/liter	NE	17 - 31 mg/liter ; Average = 21	Naturally occurring in source water
Chlorine	No	6/14	MRDL = 4.0 mg/liter	NA	0.23 - 2.19 mg/liter; Average = 1.50	Added for disinfection
Copper	No	7/13	1.3 mg/liter (AL)	1.3 mg/liter (AL)	0.003 - 0.10 mg/liter, 90th percentile 0.04 mg/liter, 0 of 63 above AL	Home plumbing corrosion; natural erosion
Fluoride[1]	No	12/14	2.2 mg/liter	NA	ND - 1.28 mg/liter; Average = 1.0, 99.6% in optimum range 0.8 - 1.2	Added to water to prevent tooth decay
Lead[2]	No	7/13	15 ug/liter (AL)	0 ug/liter (AL)	ND - 82 ug/liter, 90th percentile 2 ug/liter, 1 of 63 above AL	Home plumbing corrosion; natural erosion
Nickel	No	3/14	NR	NE	0.00074 -0.00079 mg/liter; Average = 0.00076	Erosion of natural deposits; drilling and metal wastes
Nitrate	No	10/14	10 mg/liter	10 mg/liter	0.093 - 0.094 mg/liter; Average = 0.094	Runoff from fertilizer use
pH	No	1/14	NR	NE	7.79 - 8.26; Average 7.99 SU	Naturally occurring; adjusted for corrosion control
Turbidity[3]	No	11/14	TT - 0.3	NE	0.23 NTU highest detected; 100% lowest monthly % < 0.30 NTU	Soil runoff

[1] Our system is one of the many water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, the addition of fluoride is a 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, we monitor 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 fluoride levels in your water were within 0.2 mg/l of the target level 99.6% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

[2] Lead is not present in the drinking water that is treated and delivered to your home. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 (800-426-4791) or at *www.epa.gov/safewater/lead*.
The level presented represents the 90th percentile of the 63 sites tested. A percentile is a value on a scale of 100 that indicates a percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead or copper values detected in the water system.
In this case, 63 samples were collected in the water system and the 90th percentile value for lead was the eigth highest value (2 ug/L). The action level for lead was not exceeded in any of the samples tested. The action level for copper also was not exceeded in any of the samples tested.

[3] Turbidity is a measure of the cloudiness of water. ECWA monitors turbidity because it is a good indicator of the effectiveness of our filtration system. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for bacterial growth.
State regulations require that the delivered water turbidity must always be below 1 NTU in the combined filter effluent. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

Organic Compounds	**Violation Yes/No**	**Sample Date (or date of highest detected)**	**MCL (ug/liter)**	**MCLG (ug/liter)**	**Level Detected (ug/liter)**	**Sources in Drinking Water**
Total Trihalomethanes[4]	No	8/14	LRAA = 80	NE	15 - 91 ug/liter; LRAA = 56	By-product of water disinfection (chlorination)
Total Haloacetic Acids[5]	No	2/14	LRAA = 60	NE	3 - 56 ug/liter; LRAA = 41	By-product of water disinfection (chlorination)

[4] 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 levels detected represent the highest single location's running annual average (56 ug/L).

[5] 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 highest single location's running annual average (41 ug/L).

Radiological Parameters	**Violation Yes/No**	**Sample Date (or date of highest**	**MCL (ug/liter)**	**MCLG (ug/liter)**	**Level Detected (ug/liter)**	**Sources in Drinking Water**
Radium 228	No	4/13	NE	NE	0.99 - 1.10 pCi/liter, Average = 1.05	Erosion of Natural Deposits
Combined Radium 226/228	No	4/13	5.0	0	1.15 - 1.25 pCi/liter, Average = 1.2	Erosion of Natural Deposits

Microbiological Parameters	Violation Yes/No	Sample Date (or date of highest detected)	MCL	MCLG	Level Detected	Sources in Drinking Water
Total Coliform Bacteria	No[6]	7/14 and 8/14[7]	5% of samples positive	0	0.45% = highest percentage of monthly positives	Naturally present in environment

[6] A violation occurs when more than 5% of the total coliform samples collected per month are positive. No MCL violation occurred.

[7] During July and August 2014, one sample in the distribution system tested positive for total coliform but negative for E.coli. Follow-up sampling, testing and reporting were performed as required by regulation, and results were negative for both total coliform and E.coli.

CRYPTOSPORIDIUM AND GIARDIA	Violation Yes/No	Sample Date (or date of highest detected)	Number of Samples Testing Positive		Number of Samples Tested
			Giardia	Cryptosporidium	
Source Water	No	1/14	2	0	6
Treated Drinking Water	No	ND	0	0	5

Cryptosporidium is a microscopic pathogen found in surface waters throughout the United States, as a result of animal waste runoff. It can cause abdominal infection, diarrhea, nausea, and abdominal cramps if ingested. Our filtration process effectively removes *Cryptosporidium*. No *Cryptosporidium* was detected in any samples taken in 2014.

Giardia is a microbial pathogen present in varying concentrations in many surface waters. In 2014, *Giardia* was detected in 2 of 6 raw source water samples. Giardia was not detected in any treated drinking water samples. *Giardia* is removed/inactivated through a combination of filtration and disinfection or by disinfection alone.

DETECTED UNREGULATED CONTAMINANTS				
Parameter	MCL	MCLG	Average Level Detected (ug/liter)	Range (ug/l)
Chlorate	NR	NE	163	ND - 650
Chromium^{+6}	NR	NE	0.1	ND - 0.2
Molybdenum	NR	NE	1.2	ND - 1.2
Strontium	NR	NE	163	160 - 170
Vanadium	NR	NE	0.1	ND - 0.3

ABBREVIATIONS AND TERMS

AL = Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

LRAA= Locational Running Annual Average

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

MCLG = Maximum Contaminant Level Goal: the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MFL = Million fibers/liter (Asbestos)

mg/liter = milligrams per liter or parts per million

MRDL = Maximum Residual Disinfectant Level : 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.

MRDLG = Maximum Residual Disinfectant Level Goal: 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

ND = Not Detected: absent or present at less than testing method detection limit.
NE = Not Established
NR = Not Regulated

NTU = Nephelometric Turbidity Units
pCi/liter = picocuries per liter

SU = Standard Units (pH measurement)
TT = Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water.

ug/liter (ug/L) = micrograms per liter = parts per billion

Variances and Exemptions = State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
< = Less Than
≤ = Less Than or Equal To

TYPES OF CONTAMINANTS

Contaminants that may be present in source water before we treat it 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 urban storm water runoff, agricultural 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.

The presence of contaminants does not necessarily indicate that the water poses a health risk. Water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

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 (716) 685-8580 or on the Internet at *www.ecwa.org*.

COMPOUNDS TESTED FOR BUT NOT DETECTED			
4-Androstene-3,17-dione	Alachlor	Di(2-ethylhexyl) phthalate	Metolachlor
2-Chlorotoluene	Aldicarb	Dibromochloropropane	Metribuzin
4-Chlorotoluene	Aldicarb Sulfone	Dibromomethane	Oxamyl (Vydate)
17beta-Estradiol	Aldicarb Sulfoxide	Dicamba	PCB 1016
17alpha-Ethynyl estradiol	Aldrin	Dichlorodifluoromethane	PCB 1221
2,4-D	Aluminum	Dieldrin	PCB 1232
1,3 Butadiene	Antimony	Dinoseb	PCB 1242
1,2-Dichlorobenzene	Arsenic	Diquat	PCB 1248
1,3-Dichlorobenzene	Atrazine	Endothall	PCB 1254
1,4-Dichlorobenzene	Benzene	Endrin	PCB 1260
1,1-Dichloroethane	Benzo(a)pyrene	Equillin	Pentachlorophenol
1,1-Dichloroethylene	Beryllium	Estriol	Perfluorobutanesulfonic acid
cis-1,2-Dichloroethylene	Bromobenzene	Estrone	Perfluoroheptanoic acid
trans-1,2-Dichloroethylene	Bromochloromethane	Ethylbenzene	Perfluorohexanesulfonic acid
1,2-Dichloropropane	Bromomethane	Ethylene Dibromide (EDB)	Perfluorononanoic acid
1,3-Dichloropropane	Butachlor	Glyphosate	Perfluorooctane sulfonate
2,2-Dichloropropane	n-Butylbenzene	Gross Alpha Particles	Perfluorooctanoic acid
1,1-Dichloropropene	sec-Butylbenzene	Gross Beta Particles	Pichloram
cis-1,3-Dichloropropene	t-Butylbenzene	Heptachlor	Propachlor
trans-1,3-Dichloropropene	Cadmium	Heptachlor Epoxide	n-Propylbenzene
1,4-Dioxane	Carbaryl	Hexachlorobenzene	Radium 226
3-Hydroxycarbofuran	Carbofuran	Hexachlorobutadiene	Selenium
2,3,7,8-TCDD (Dioxin)	Carbon Tetrachloride	Hexachlorocyclopentadiene	Simazine
2,4,5-TP (Silvex)	Chlordane	Iron	Styrene
1,1,1,2-Tetrachloroethane	Chlorobenzene	Isopropylbenzene	Tetrachloroethylene
1,1,2,2-Tetrachloroethane	Chlorodifluoromethane	p-Isopropyltoluene	Thallium
1,2,3-Trichlorobenzene	Chloroethane	Lindane	Toluene
1,2,4-Trichlorobenzene	Chloromethane	Manganese	Toxaphene
1,1,1-Trichloroethane	Chromium	Mercury	Trichloroethylene
1,1,2-Trichloroethane	Cobalt	Methomyl	Trichlorofluoromethane
1,2,3-Trichloropropane	Cyanide	Methoxychlor	Vinyl Chloride
1,2,4-Trimethylbenzene	Dalapon	Methyl t-butyl ether (MTBE)	Xylenes
1,3,5-Trimethylbenzene	Di(2-ethylhexyl) adipate	Methylene Chloride	