

WATER CONSERVATION TIPS

The ECWA encourages water conservation. Although Lake Erie and the Niagara River are an unlimited source of good quality water, it must not be wasted. A few simple steps will preserve the resource for future generations.

- Use low flow shower heads and faucets.
- Repair all leaks in your plumbing system.
- Water your lawn sparingly early morning or late evening.
- Do only full loads of wash and dishes.
- Wash your car with a bucket and hose with a nozzle.
- Don't cut the lawn too short; longer grass saves water.

CRYPTOSPORIDIUM & GIARDIA ANALYSIS

The ECWA's Water Quality Laboratory is recognized as one of the most well equipped labs in North America that is capable of testing for Giardia and Cryptosporidium. In fact, our lab was one of the first labs in the country to gain EPA approval for the analysis of Cryptosporidium and Giardia, and continues to participate in the EPA's Laboratory Quality Assurance Evaluation Program for the analysis of Cryptosporidium. The ECWA also tests for these protozoa for other major public water suppliers throughout the country.

These microscopic protozoa are widely present in the environment and most surface water sources throughout the United States. They can cause intestinal illnesses if ingested. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the illnesses within a couple of weeks. However, both can be serious for people with weak immune systems such as those undergoing chemotherapy, dialysis or transplant patients and people with Crohn's disease or HIV infection.

In 2009, the ECWA analyzed 47 total water samples for Giardia and Cryptosporidium. No positive samples were detected in the ECWA's treated water supply. Giardia was found to be present in our source water. Specific test results are listed in the table below.

The ECWA encourages immune compromised individuals to consult their physicians regarding appropriate precautions to avoid infection. Both protozoa must be ingested to cause disease, and they may spread through other means than drinking water. For additional information on Cryptosporidiosis or Giardiasis, please contact the Erie County Health Department at (716) 858-6089.

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.

2009

Water Quality Report



PUBLIC WATER SYSTEMS IDENTIFICATION NUMBERS ECWA PWS# NY 1400443			
PWS#	NAME	PWS#	NAME
NY1421651	ECWA ALDEN	NY1400515	ECWA HAMBURG (V)
NY1400399	ECWA AMHERST	NY1400421	ECWA LANCASTER
NY1450033	ECWA AURORA	NY1430016	ECWA MARILLA
NY1421897	ECWA BOSTON	NY1422651	ECWA NEWSTEAD
NY1400443	ECWA DIRECT	NY1421762	ECWA ORCHARD PARK
NY1400435	ECWA EDEN	NY1404543	ECWA WEST SENECA
NY1400488	ECWA HAMBURG (T)		

If you would like additional copies of this report, please contact the Public Affairs Office at (716) 849-8406 or e-mail bbray@ecwa.org.



Erie County Water Authority
 Administrative Offices
 295 Main Street, Suite 350
 Buffalo, New York 14203

For 2009, your tap water met all State drinking water standards. Our system did not violate a maximum contaminant level or any other water quality standard.

ABOUT THE ERIE COUNTY WATER AUTHORITY

The ECWA was created in 1949 by a special act of the New York State Legislature to ensure that the people and industry of Erie County would have a safe, plentiful supply of water for the future. Since 1953, the ECWA has produced and reliably delivered water of the highest quality to its customers at an affordable rate.

The ECWA is not an agency of New York State and is totally independent of Erie County government. Rather, it is an independent public-benefit corporation. As a financially self-sustaining public utility, the ECWA pays all operating expenses from revenues generated by the sale of water to its 158,069 customers.

In 2009, the ECWA produced about 24.7 billion gallons of high-quality water for residential, commercial, and industrial use in 35 municipalities throughout Western New York. Some of this water was used for flushing water mains, fighting fires, training firefighters, filter backwashing and plant processes, equipment and hydrant testing and some of this water was lost to leaks. Approximately 17.5 billion gallons were sold to our residential customers.

The ECWA owns and operates two water treatment plants, a nationally recognized water quality lab, 38 pump stations, 40 water storage tanks and maintains 3,383 miles of water mains, 17,177 fire hydrants, over 30,000 valves and numerous appurtenances.

The cost per thousand gallons of water for residential customers was \$2.86 in 2009. The rate increased 10 cents per thousand gallons on January 1, 2010 and continues to be one of the lowest rates in New York State. In 2010, for the average rate-payer who uses 19,750 gallons of water per quarter, it will cost \$233.84 per year, or about 64 cents per day, to be provided with safe, high quality drinking water.

IMPROVEMENTS TO YOUR WATER SYSTEM

In 2009, the ECWA invested nearly \$30 million in system-wide infrastructure upgrades:

- Upgrades continued at the Sturgeon Point Water Treatment Plant that will result in the continued production of high-quality water at that facility. Work included upgrades to the flash mixers, five coagulation basins, the coagulant chemical feed system, the coagulant-aid polymer feed, coagulant filter-aid feed, and associated electrical and instrumentation. This project began in 2008 and is scheduled to be completed in the spring of 2010.
- Permanent backup power generators have been purchased and installed at ECWA's water treatment plants and two largest pumping stations. Fourteen additional ECWA sites have been upgraded so that portable generators can power those locations. By the end of 2010, the ECWA will have backup power at its most vital locations, which will help ensure that an adequate supply of high-quality water is continually available during emergency situations resulting from power outages.
- Waterline improvements were undertaken in the cities of Tonawanda and Lackawanna, and the towns of Cheektowaga and West Seneca.

Dear Customer,

Thank you for allowing the Erie County Water Authority (ECWA) to supply you with high quality drinking water. We are committed to not only providing you with an excellent product and reliable service, but also with furnishing you with detailed information about the drinking water you consume and use everyday.

It is with great pleasure that we provide you with the ECWA's 2009 Annual Water Quality Report (AWQR). Included are details about where your water comes from, how your water is treated and tested, and how it compares to standards set by regulatory agencies. This report fulfills the United States Environmental Protection Agency's requirement to prepare and deliver a Consumer Confidence Report (CCR) and the New York State Dept. of Health's requirement to prepare and deliver an Annual Water Quality Report.

The ECWA is committed to providing its customers safe, high quality drinking water. That is why we maintain a rigorous quality control program through constant monitoring and testing, and continues to invest substantial financial resources to improve our two treatment facilities, distribution system and nationally recognized water quality lab. Each year ECWA strives to provide its customers with the high quality drinking water that they deserve.

As we enter a new year, the ECWA has positioned itself to continue to achieve its mission of providing a high-quality product and reliable, cost-effective service at an affordable rate to the more than 550,000 consumers that rely on us 24 hours a day, 365 days a year.

Thank you for taking the time to learn about your water supply. Customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

If you have comments and questions about the report, please contact:
Brian C. Bray, Public Affairs Officer, ECWA, 295 Main Street, Room 350, Buffalo, NY 14203, phone 716-849-8406, or e-mail bbray@ecwa.org.

Sincerely,

BOARD OF COMMISSIONERS
Frank E. Swiatek, Chairperson
Kelly M. Vacco, Vice-Chair
Francis G. Warthling, Treasurer

ECWA'S TEST RESULTS FOR 2009

The ECWA's water system operated under "NO VARIANCE OR EXEMPTION" from any federal or state regulatory requirements. To comply with EPA mandated requirements, water quality data tables of detected regulated and unregulated contaminants are detailed in this report. The tables summarize test results for the past year or from the most recent year that tests were conducted in accordance with regulatory requirements. They also list the maximum contaminant levels (MCL). The EPA is responsible for establishing the MCL standards. For your convenience, important terms and abbreviations are defined throughout this document. More information regarding all substances tested for, but not detected, can be obtained by calling the Customer Service Department at 849-8484.

To learn more about the ECWA and water quality, please visit www.ecwa.org.

FREQUENTLY ASKED QUESTIONS

Does the ECWA add fluoride to drinking water?

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. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the Erie County Water Authority monitor fluoride levels on a daily basis. During the addition of fluoride in 2009, monitoring showed fluoride levels in your water were in the optimal range 91% of the time. None of the monitoring results during fluoride addition showed fluoride at levels that approached the 2.2 mg/l maximum contaminant level (MCL) for fluoride.

Who sets and enforces drinking water standards?

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of your drinking water. Under the SDWA, the United States Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. In New York, the State Health Department enforces the EPA's regulations and often makes them even more stringent.

The EPA sets standards for approximately 150 regulated contaminants in drinking water. For each of these contaminants, EPA sets a legal limit, called a maximum contaminant level (MCL). EPA regulations specify strict testing and reporting requirements for each contaminant. Water suppliers may not provide water that doesn't meet these standards. Water that does meet these standards is safe to drink. In Erie County, the Erie County Health Dept. is the agency that administers and enforces these standards. Their phone number is (716) 858-6089.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791.

Where does my water come from?

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 New York State Department of Health (NYSDOH) 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.

Your water comes from two sources. The ECWA's Sturgeon Point Treatment Plant in the Town of Evans draws water from Lake Erie to supply the southern part of Erie County and some communities in Chautauqua and Cattaraugus County. The Van de Water Treatment Plant in Tonawanda draws water from the Niagara River and services municipalities in northern Erie County as well as some in Genesee County and Wyoming County. These two plants serve more than a half-million people in western New York.

How is my water treated?

Both the ECWA treatment facilities use the conventional filtration method. First, raw water flows by gravity through a large intake tunnel to the raw water building. Pumps draw the water through traveling screens to prevent large objects such as driftwood and fish from entering the system. A chemical, polyaluminum chloride, is added to the water, which causes suspended particles in the water to clump together to form floc. Floc particles then settle to the bottom of large sedimentation basins. The water is filtered through layers of anthracite, sand, and gravel, to remove any remaining particles. Chlorine is added for disinfection to kill bacteria. Small amounts of fluoride are added to help prevent tooth decay. Caustic soda is added to stabilize the alkalinity of the water and prevent corrosion in home plumbing. Powdered activated carbon is added in summer months to help remove unpleasant tastes and odors. Water is temporarily stored in clearwells or storage tanks before it is pumped to the public. High service pumps deliver the clean water through more than 3,383 miles of pipeline to homes and businesses. The ECWA closely monitors its 38 pump stations and 40 water storage tanks to assist in the distribution process. On average, the ECWA delivers 67.6 million gallons a day to serve more than a half million people in Western New York.

Are there contaminants in our water? Do I need to take special precautions?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or the Erie County Health Department at 858-6089.

Although our drinking water met or exceeded all 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.

How will I know if my water is not safe to drink?

In the unlikely event that water becomes unsafe to drink, the EPA mandates the ECWA notify its customers. Water is not safe to drink when testing reveals that contaminants in the water exceed national limits for contaminant levels. If the water is not safe to drink, the ECWA will notify the public by newspaper, television and radio announcements that a "boil water order" has been issued.

How can I participate in decisions that affect drinking water quality?

Any member of the public may participate in decisions affecting the quality of water. The ECWA's Board of Commissioners ultimately makes those decisions on behalf of our customers. Board meetings take place every other Thursday in the board meeting room, Erie County Water Authority, 350 Ellicott Square Building, 295 Main Street, Buffalo, New York 14203. Occasionally a board meeting is rescheduled. Call (716) 849-8484 or visit www.ecwa.org for updated board meeting information.

ERIE COUNTY WATER AUTHORITY PROVIDING WATER YOU CAN TRUST

ERIE COUNTY WATER AUTHORITY PWSID #1400443

2009 Water Quality Monitoring Report - Annual Water Quality Report Supplement

DETECTED CONTAMINANTS

Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date (or date of highest detection)	MCL	MCLG	Level Detected	Sources in Drinking Water
Asbestos	No	8/06	7 MFL	7 MFL	ND - 0.2 MFL, Average = 0.08	Erosion of natural deposits; decay of asbestos cement water mains
Barium	No	5/09	2 mg/liter	NE	0.02 mg/liter	Erosion of natural deposits; drilling and metal wastes
Chloride	No	3/09	250 mg/liter	NE	17 - 30 mg/liter, Average = 21	Naturally occurring in source water
Chlorine	No	2/09	MRDL = 4.0 mg/liter	MRDLG = 4 mg/liter	<0.20 to 2.2 mg/liter, Average = 0.79	Added for disinfection
Flouride ¹	No	4/09	2.2 mg/liter	2.2 mg/liter	0.50 to 1.21 mg/liter, Average = 0.94	Added to water to prevent tooth decay
Lead ²	No	9/07	15 ug/liter (AL)	0 ug/liter (AL)	ND - 38 ug/liter, 90th percentile 4 ug/liter, 1 of 97 above AL	Home plumbing corrosion; natural erosion
Nitrate	No	11/09	10 mg/liter	10 mg/liter	0.17 to 0.19 mg/liter, Average = 0.18	Runoff from fertilizer use
pH	No	4/09	NR	NE	7.1 - 8.8 SU, Average = 7.9	Naturally occurring; adjusted for corrosion control
Turbidity ³	No	8/09	TT	NE	0.64 NTU highest detected; 99.5% was lowest monthly % < 0.3 NTU	Soil runoff

¹Our 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. For more information about fluoride, please check the Frequently Asked Questions section of this report.

²Lead 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 <http://www.epa.gov/safewater/lead>. The level presented represents the 90th percentile of the 97 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, 97 samples were collected in the water system and the 90th percentile value for lead was the sixth highest value (4 ug/L). The action level for lead was exceeded at only one of the sites tested (38 ug/L). The action level for copper was not exceeded at any of the sites tested.

³Turbidity 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. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and stomach aches. Our highest single turbidity measurement (0.64 NTU) for the year occurred on 8/10/09 when the Sturgeon Point Water Treatment Plant encountered a treatment upset which caused the combined effluent turbidity to exceed 0.3 NTU for a period of time. Corrective actions were taken until the plant turbidities were below the 0.3 NTU MCL. 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. The combined filter turbidities were < 0.3 NTU 99.5% of the time for the month of August 2009. The turbidity levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation. Additional testing was performed to insure that the microbial quality of the water was maintained.

Organic Compounds	Violation Yes/No	Sample Date (or date of highest detection)	MCL (ug/liter)	MCLG (ug/liter)	Level Detected (ug/liter)	Sources in Drinking Water
Total Trihalomethanes ⁴	No	8/09	RAA = 80	NE	12 - 74 ug/liter, RAA = 40 ug/liter	By-product of water disinfection (chlorination)
Total Haloacetic Acids ⁵	No	8/09	RAA = 60	NE	6 - 52 ug/liter, RAA = 18 ug/liter	By-product of water disinfection (chlorination)

⁴Trihalomethanes 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 running annual average of quarterly results. This result (40 ug/L) is below the MCL.

⁵Haloacetic 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 running annual average of quarterly results. This result (18 ug/L) is below the MCL.

Radioactive Parameters	Violation Yes/No	Sample Date (or date of highest detection)	MCL (ug/liter)	MCLG (ug/liter)	Level Detected (ug/liter)	Sources in Drinking Water
Gross Alpha	No	1/05	15.0 pCi/liter	0 pCi/liter	ND - 1.7 pCi/liter	Erosion of natural deposits
Gross Beta	No	9/04	50** pCi/liter	0 pCi/liter	ND - 2.2 pCi/liter	Decay of natural and man-made deposits
Combined Radium 226/Radium 228	No	1/05	5.0 pCi/liter	0 pCi/liter	ND	Erosion of natural deposits
Total Uranium	No	6/04	30 ug/liter	0 ug/liter	ND - 0.48 ug/liter	Erosion of natural deposits

** New York State Department of Health considers 50 pCi/liter to be the level of concern for beta particles.

Microbiological Parameters	Violation Yes/No	Sample Date (or date of highest detection)	MCL	MCLG	Level Detected (ug/liter)	Sources in Drinking Water
Total Coliform Bacteria	No ⁶	8/09 ⁷	>5% of samples positive	NE	0.44% = highest percentage of monthly positives	Naturally present in environment
E. coli Bacteria	No ⁸	8/09 ⁷	Any confirmed positive sample	0	1 sample tested positive in 2009, but did not confirm	Human and animal fecal waste

⁶ A violation occurs when more than 5% of the total coliform samples collected per month are positive. Only 2 samples were total coliform positive out of 458 samples taken during August.

⁷ During August, one distribution system sample tested positive for total coliform only, and one entry point sample at the Sturgeon Point plant tested positive for both total coliform and E.coli. For both cases, follow-up sampling, testing and analysis were performed as required by regulation, but the results were negative for both total coliform and E.coli in each case.

⁸ A violation occurs when a total coliform positive sample is positive for E. coli, and a repeat total coliform sample is positive or when a total coliform positive sample is negative for E. coli but a repeat total coliform sample is positive and the sample is also positive for E.coli.

Giardia and Cryptosporidium	Violation Yes/No	Sample Date (or date of highest detection)	Number of Samples Testing Positive	Number of Samples Tested
Source Water	No	10/09	7	0
Treated Drinking Water	No	NA	0	0

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 2009.

Giardia is a microbial pathogen present in varying concentrations in many surface waters. In 2009, Giardia was detected in 7 of 23 raw source water samples but not detected in any treated drinking water samples. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection alone.

UNREGULATED SUBSTANCES				
Parameter	MCL	MCLG	Average Level Detected (mg/liter)	Range (mg/liter)
Alkalinity	NR	NE	92	55-133
Calcium Hardness	NR	NE	93	73-140
Conductivity	NR	NE	286 uS/cm	184 -329 uS/cm
MIB and Geosmin	NR	NE	1.1 ng/liter	ND - 5.2 ng/liter
Total Dissolved Solids	NR	NE	157	148 -162
Total Organic Carbon	NR	NE	2.1	1.2 - 3.4

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.



The seal of the Partnership for Safewater as seen on this document indicates that we are part of a select group of water systems nationwide who have voluntarily committed themselves toward a proactive approach to strengthen the safety of drinking water for our customers above and beyond the current regulatory requirements. For additional information on the Partnership for Safewater visit www.awwa.org/science/partnership.

New York State Department of Health Source Water Assessment

The New York State Department of Health completed a draft Source Water Assessment of the supply's raw water sources under the state's Source Water Assessment Program (SWAP). The purpose of this program is to compile, organize, and evaluate information regarding possible and actual threats to the quality of public water supply (PWS) sources. It is important to note that source water assessment reports estimate the potential for untreated drinking water sources to be impacted by contamination. These reports do not address the safety or quality of treated finished potable tap water. The Great Lakes watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies, which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels - intake clogging and taste and odor problems). The SWAP is based on the analysis of the contaminant inventory compiled for the drainage areas deemed most likely to impact drinking water quality at this public water supply's raw water intakes. Separate assessments were completed for the Lake Erie source and the Niagara River source. The assessment found a moderate susceptibility to contamination for the Lake Erie source. The amount of agricultural land in the assessment area results in elevated potential of disinfection byproduct precursors and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There is also noteworthy contamination susceptibility associated with discrete contaminant sources, and these facility types include: landfills. The assessment found an elevated susceptibility to contamination for the Niagara River source. The amount of agricultural (and to a lesser extent residential) lands in the assessment area results in elevated potential for microbial, disinfection byproduct precursors, and pesticides contamination. There is also a high density of sanitary wastewater discharges, which results in elevated susceptibility for all contaminant categories. Non-sanitary wastewater discharges may also contribute to contamination. There is also considerable contamination susceptibility associated with other discrete contaminant sources, and these facility types include: chemical bulk storage, inactive hazardous waste sites, landfills, Resource Conservation and Recovery Act facilities and Toxics Release Inventory facilities.

If you have any questions about New York State's Source Water Assessment Program, please contact Ms. Dolores Funke, P.E., Senior Public Health Engineer, Erie County Health Department at 858-6966.

Results are from 2009 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 by calling (716) 885-8570 or on the Internet at www.ecwa.org.

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.
CFU/100 ml = Colony Forming Units per 100 milliliters
MCL = Maximum Contaminant Level; the highest level of a contaminant allowed in drinking water.
MCLG = Maximum Contaminant Level Goal: the level of a contaminant in 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 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.
mren/yr = millirems per year
uS/cm = Microsiemens 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/liter = picocuries per liter
RAA = Running Annual Average
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.
< = Denotes Less Than
S = Denotes 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 be naturally-occurring or result from urban storm water runoff, industrial domestic waste water 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.

COMPOUNDS OR ELEMENTS TESTED FOR BUT NOT DETECTED

2-Chlorotoluene	2,2,4,4,5,5-hexabromodiphenyl ether (BDE-153)	Copper	Naphthalene
4-Chlorotoluene	2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-100)	Cyanide	Nickel
2,4-D	1,1,2-Trichloroethane	DCPA Diacid degradate	Nitrite
4,4'-DDE	1,2,3-Trichloropropane	DCPA Monoacid degradate	Nitrobenzene
	1,1,2-Trichlorotrifluoroethane	Dalapon	N-nitroso-diethylamine (NDEA)
	1,2-Dibromo-3-Chloropropane	1,2,4-Trimethylbenzene	N-nitroso-dimethylamine (NDMA)
	DCPA monoacid degradate	1,3,5-Trimethylbenzene	Di(2-ethylhexyl) phthalate
	1,2-Dimethoxyethane	Acetochlor	Dibromomethane
	1,2-Dichlorobenzene	Acetochlor ethane sulfonic acid (ESA)	DCamba
	1,3-Dichlorobenzene	Acetochlor oxalic acid (OA)	Dichlorodifluoromethane
	1,4-Dichlorobenzene	Alachlor	Dieldrin
	1,1-Dichloroethane	Alachlor ethane sulfonic acid (ESA)	Dinoseb
	1,2-Dichloroethane	Alachlor oxalic acid (OA)	Diquat
	1,1-Dichloroethylene	Aldicarb	EPTC
	cis-1,2-Dichloroethylene	Aldicarb Sulfone	Endothal
	trans-1,2-Dichloroethylene	Aldicarb Sulfoxide	Endrin
	1,2-Dichloropropane	Aldrin	Ethylbenzene
	1,3-Dichloropropane	Antimony	Glyphosate
	2,2-Dichloropropane	Arsenic	Heptachlor
	1,1-Dichloropropene	Atrazine	Heptachlor Epoxide
	cis-1,3-Dichloropropene	Benzene	Hexachlorobenzene
	trans-1,3-Dichloropropene	Benz(a)pyrene	Hexachlorobutadiene
	1,3-dinitrobenzene	Beryllium	Hexachlorocyclopentadiene
	2,4-Dinitrotoluene	Bromobenzene	Heptachlor-1,3,5-trinitro-1,3,5-triazine
	2,6-Dinitrotoluene	Bromochloromethane	Isopropylbenzene
	3-Hydroxycarbofuran	Bromomethane	p-Isopropyltoluene
	1-Naphthol	Butachlor	Lindane
	2,3,7,8-TCDD (Dioxin)	n-Butylbenzene	Manganese
	2,4,5-TP (Silvex)	sec-Butylbenzene	Mercury
	1,1,1,2-Tetrachloroethane	t-Butylbenzene	Methiocarb
	1,1,2,2-Tetrachloroethane	Cadmium	Methoxyflor
	1,2,3-Trichlorobenzene	Carbaryl	Methoxychlor
	1,2,4-Trichlorobenzene	Carbofuran	Methyl t-butyl ether (MTBE)
	1,1,1-Trichloroethane	Carbon Tetrachloride	Methylene Chloride
	1,1,2-Trichloroethane	Chlordane	Metalochlor
	2,4,6-trinitrotoluene (TNT)	Chlorobenzene	Metalochlor ethane sulfonic acid (ESA)
	2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	Chloroethane	Metalochlor oxalic acid (OA)
	2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-99)	Chloromethane	Metolachlor
	2,2',4,4',5,5'-hexabromobiphenyl (HBB)	Chromium	Molinate

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