

### Annual Water Quality Report

for the period of January 1 to December 31, 2012

This report is intended to provide you with important information about your drinking water and the efforts made by the Batavia water system to provide safe drinking water. Included are drinking water facts, information on violations (if applicable), and contaminants detected in the drinking water supply during calendar year 2012. This report is updated each year. If you need help understanding this report or have questions, please contact John Dillon at 630-454-2453 or [jdillon@cityofbatavia.net](mailto:jdillon@cityofbatavia.net).

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

### PLEASE REMEMBER TO USE WATER WISELY

- Know your day and time for watering:  
Odd number house addresses can water on odd calendar days  
Even number house addresses can water on even calendar days  
6:00 – 9:00 a.m. and 6:00 – 9:00 p.m. only
- Water your lawn only when it needs it. A good way to see if your lawn needs watering is to step on the grass; if it springs back up, it doesn't need water and if it stays flat, it does need water.
- Avoid watering on windy days. Wind will carry water away from the intended area.
- Deep-soak your lawn when you do water to get down to the roots.
- Position sprinklers so water lands on the lawn, not on paved areas.
- The lawn will retain more moisture if it is allowed to grow a little longer. Mow to a height of about 1.5 to 2.0 inches.
- Put a layer of mulch around trees and plants. Mulch will slow the evaporation of moisture and discourage weed growth.
- Wash the car using a bucket of water, using the hose only to rinse and wash less frequently during dry, hot weather.
- Use a broom, rather than a hose, to clean driveways and sidewalks.
- Check for leaks in outdoor faucets, pipes and hoses.
- If you have a newly sodded or newly seeded lawn you must obtain a watering permit. Permits are available at City Hall, 100 N. Island Ave.

*Thank you for doing your part to conserve water.*

**Sources of Drinking Water** - The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 activity.

Batavia's drinking water is a combination of shallow well water and deep well water. All water is pumped to the City's water treatment plant where the shallow well water is filtered for the removal of iron, manganese and hydrogen sulfide and is then chlorinated, fluoridated and treated with a corrosion inhibitor before being blended in the ground storage reservoir. The deep well water is processed at the treatment plant utilizing an HMO adsorption process for the removal of the radium. All water customers receive the same blended water supply.

Contaminants that may be present in source water 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 agriculture, urban storm water runoff, 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.

### Other Facts about Drinking Water

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 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 at (800) 426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons with organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## Source Water Assessments

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The meeting schedule can be found on the City's web site; [www.cityofbatavia.net](http://www.cityofbatavia.net). The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by the City's Public Works Building, 200 N. Raddant Rd. or call our water operator at 630-454-2450. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Based on information obtained in a Well Site Survey published in 1990 by the Illinois EPA, sixteen potential sources or possible problem sites were identified within the survey area of Batavia's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediations which may be of concern. The Illinois EPA has determined that the Batavia Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Batavia Community Water Supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply.



## 2012 Regulated Contaminants Detected

The following tables summarize contaminants detected in your drinking water supply for the year 2012.

<b>MCL</b>	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.	
<b>MCLG</b>	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.	
<b>MRDL</b>	Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.	
<b>AVG</b>	Regulatory compliance with some MCLs are based on running annual average of monthly samples.	
<b>MRDLG</b>	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.	
<b>N/A</b>	Not Applicable	<b>pCi/L</b> picocuries per liter ( a measure of radioactivity)
<b>ppb</b>	parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.	<b>ppm</b> parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.

## Lead and Copper

### Definitions:

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in drinking 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 Hot line or at <http://www.epa.gov/safewater/lead>.

**Action Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin or safety.

## 2012 Regulated Contaminants Detected

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/09/2011	1.3	1.3	1.174	3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/09/2011	0	15	6.18	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	12/31/2012	0.3	0.2533 - 0.32	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids HAA5	6/22/12	3	2.73 - 2.73	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	6/22/12	20	19.56 - 19.56	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	02/08/2011	0.474	0.0517 - 0.474	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	02/08/2011	1.25	0.896 - 1.25	4	4.0	ppm	N	Erosion of natural deposits. Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	02/08/2011	0.455	0 - 0.455		1.0	ppm	N	This contaminant is not currently regulated by the the USEPA. However, the state regulates Erosion of natural deposits.
Nitrate [measured as Nitrogen]	4/8/12	0.27	0.27 - 0.27	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	02/08/2011	33	33-38			ppm	N	Erosion from naturally occurring eposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	7/18/12	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.