Annual Drinking Water Quality Report
FAIRBURY
IL1050350

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 FAIRBURY water system to provide safe drinking water. The source of drinking water used by FAIRBURY is Ground Water. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year 2012. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact **Leroy E. McPherson at 815.692.2743**.

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

We are pleased to present to you this year's Annual Quality Water Report. Additional copies can be picked up at City Hall, 201 W. Locust, Fairbury, Illinois 61739. This report is designed to inform you about the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water source is ground water, a glacial till. Our City wells draw from this glacial till located south of the City limits.

We are presently working on a water protection plan, available at our office. We are pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Leroy E. McPherson 815-692-2743, 8:30 AM to 4:00 PM. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled council meetings. They are held on the first and third Wednesday of every month at 6:30 PM at the City Hall Council Chambers, 201 W. Locust, Fairbury, Illinois. If you would like a copy of this information, please stop by City Hall or call our water operator at 815-692-2033. 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.

Source 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 pickup substances resulting from the presence of animals or from human activity.

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 agricultural, 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, can 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.

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 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 about drinking water from their health care providers. EPC/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.

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 cannot control the variety of materials used in 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 or at http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name:
WELL #1 (40040), Type of Water is ground water, Location is south of plant on east side of First.
WELL #3 (40042), Type of Water is ground water, Location is northeast of Plant.
WELL #4 (40043), Type of Water is ground water, Location is northeast of plant 300 ft east of well 3.
WELL #5 (40044), Type of Water is ground water, Location is east of plant, south of lagoon.
WELL #6 (00829), Type of Water is ground water, Location is southeast corner of Fairgrounds Track.
WELL #7 (00830), Type of Water is ground water, Location is first well south on First St.

Source Water Assessment

A Source Water Assessment summary is included below for your convenience.

To determine Fairbury's susceptibility to groundwater contamination, a Well Site Survey, published in 1991 by the Illinois EPA, was reviewed. Based on the information obtained in this document, two potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Fairbury community water supply wells. These include Westview Elementary School and the City of Fairbury. The community's source water is susceptible to VOC and SOC contamination although no detection of any quantifiable levels were detected in the finished water. The basis for this determination is the location of the potential sources within the recharge areas of the city's wells. However, as a result of monitoring conducted at the wells and entry point to the distribution system, the land-use activities and source water protection initiatives by the city (refer to the following section of this report), the Fairbury Community Water Supply's source water has a low susceptibility to IOC contamination. Furthermore, in anticipation of the U.S. EPA's proposed Groundwater Rule, the Illinois EPA has determined that Fairbury's community water supply wells have a low susceptibility to viral contamination. This determination is based upon the completed evaluation of the following criteria used in the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; analysis of 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. However, having stated this, the "[U.S.] EPA is proposing to require States to identify systems in karst, gravel and fractured rock aquifer systems as sensitive and these systems must perform routine source water monitoring". Because the community's wells are open to an unconfined sand and gravel aquifer, the Illinois EPA evaluated the well hydraulics associated with Fairbury's well field. From 29 to 48 feet of overburden overlie the intervals of the wells. This should provide an adequate degree of filtration to prevent the movement of pathogens into the wells.

2012 Regulated Contaminants Detected

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/17/2011	1.3	1.3	0.034	0	ppm	N	Erosion of natural deposits; Leaching from Wood preservatives; Corrosion of household Plumbing systems.

Water Quality Test Results

Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Ppb:	micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water
Na:	not applicable
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples
Ppm:	milligrams per liter or parts per million – or one ounce in 7,350 gallons of water

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2012	1.1	0.85 – 1.35	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids HAA5	08/09/2010	1.3	1.3 – 1.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Total Trihalomethanes (TTHM)	08/09/2010	19	19 – 19	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium		0.0084	0.0084-0.0084	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride		1.08	1.08 – 1.08	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)		0.29	0.29 – 0.29	10	10	ppm	N	Runoff from fertilizer use: Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium		21	21 – 21			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration
Gross alpha excluding radon and uranium		0.583	0.583 – 0.583	0	15	pCi/L	N	Erosion of natural deposits