

Annual Drinking Water Quality Report

ILLINOIS STATE UNIVERSITY-NORMAL

IL1135510

Annual Water Quality Report
For the period of January 1 to December 31, 2005

This report is intended to provide you with important information about your drinking water and the efforts made by ILLINOIS STATE UNIVERSITY water system to provide safe drinking water. The source of drinking water used by ILLINOIS STATE UNIVERSITY is purchased from the Town of Normal.

For more information regarding this report, contact: Greg Fears 438-3137, Colleen Lucht at 438-8325 or the Normal Water Department at 454-9563.

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

Source Water Assessment

Source Water Assessment summary is included below for your convenience.

To determine Normal's susceptibility to contamination, the following document was reviewed: a Well Site Survey, published in 1991 by the Illinois EPA. Based on the information obtained in this document there are 51 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Normal's community water supply wells. These potential sources include 16 underground fuel storage tanks, 2 printers, 4 above-ground fuel storage tanks, 2 furniture refinishers, 1 retail store, 3 construction contractors, 2 autobodies, 1 electrical generator substation, 1 manufacturer, 3 auto repair shops, 2 warehouses, 1 cement company, 2 gravel pits, 1 commercial fertilizer application company, 6 machine shops, 2 lumberyards, 1 above or below ground fuel storage tank, and 1 grain elevator. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern. [Note: Based upon information supplied to the Illinois EPA in November 2002, a remediation is ongoing at a former underground petroleum storage facility located near wells #9, #10 and #11 (Illinois EPA # 45039, 45040 and 45041, respectively).] Based upon this information, the

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.

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.

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, may come from a 70 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.

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. 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).

Illinois EPA has determined that the Normal Community Water Supply's source water for wells #5, #6, #7, #8, #9, #10, #11, #13, and #14 is susceptible to contamination. The source water for wells #4, #100, #101, #102, and #103 is not susceptible to contamination. The land use within the recharge areas of the wells was analyzed as part of this susceptibility determination. This land use includes residential, commercial, and agricultural properties. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Wells #4, #100, #101, #102, and #103 and 400 feet for Wells #5, #6, #7, #8, #9, #10, #11, #13, and #14. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to the source water, a maximum protection zone has been established for the wells, which is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional source prohibitions up to 1,000 feet from their wells. To further minimize the risk to the town's groundwater supply, the Illinois EPA recommends that the following additional activities be considered. First, the water supply staff may want to develop a contingency plan. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without water. Second, the water supply staff is encouraged to review their cross connection control ordinance to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives. Finally, the Illinois EPA recommends that the town investigate additional source water management options to address the land use within the recharge areas of wells #5, #6, #7, #8, #9, #10, #11, #13, and #14. Specifically, these management options should address potential impacts from non-point sources related to agricultural land uses. To further reduce the risk to source water, Normal may wish to implement a wellhead protection program which includes the proper abandonment of any potential routes of groundwater contamination within the recharge area and correction of sanitary defects at the water treatment facility, should any exist. This effort may result in the community water supply receiving a special exception permit from the Illinois EPA, which allows a reduction in monitoring and laboratory analysis costs.

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2005 Regulated Contaminants Detected

Lead and Copper: Date Sampled; 12/31/2005

Definitions: Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination	
0	15 ppb	<5 ppb	1	1.3 ppm	1.3 ppm	<0.100 ppm	1	Corrosion of household plumbing systems; Erosion of natural deposits	Edit

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology. Maximum Contaminant Level Goal (MCLG): 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. mg/l: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water. ug/l: micrograms per litre 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. Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
TTHMs [Total Trihalomethanes]	8/20/2003	6.9	Not Applicable	N/A	80	ppb	No	By-product of drinking water chlorination	Edit
Total Haloacetic Acids (HAA5)	8/20/2003	7.5	Not Applicable	N/A	60	ppb	No	By-product of drinking water chlorination	Edit

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

*MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppb and 60 ppb respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs will become effective 01/01/2004 for all groundwater supplies and surface supplies serving less than 10,000 people. Until 01/01/2004, surface water

supplies serving less than 10,000 people, any size water supply that purchase from a surface water source , and groundwater supplies serving more than 10,000 people must meet a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

MCL (Maximum Contaminant Level): 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. MCLG (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. AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.
 ppm: parts per million ppb: parts per billion ppt: parts per trillion pCi/l: picoCuries per liter (measurement of radioactivity)

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Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant			
Barium	8/18/2004	0.012	Not Applicable	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Edit		
Chromium	8/18/2004	9	Not Applicable	100	100	ppb	No	Discharge from steel and pulp mills; Erosion of natural deposits	Edit		
Fluoride	8/18/2004	0.79	Not Applicable	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge	Edit		
Nitrate (As N)	2/23/2005	0.043	Not Applicable	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Edit		
Selenium	8/18/2004	4	Not Applicable	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits	Edit		
State Regulated Contaminants			Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Sodium There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.			8/18/2004	70	Not Applicable	N/A	N/A	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration	Edit

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