Annual Drinking Water Quality Report

NORTHERN ILLINOIS UNIVERSITY-DEKALB

IL0375500

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by

NORTHERN ILLINOIS UNIVERSITY-DEKALB is Purchased Ground Water $\,$

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

Source of Drinking Water

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 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 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.

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 EPAs 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. 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).

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 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 or at http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name		Type of Water	Report Status	Location
CC 07-STADIUM DR	FF IL0370100 TP06	GW		DIST CONNECT STADIUM DR AT RT 38
CC 08-RT 38	FF IL0370100 TP06	GW		DIST CONNECT RT 38 TO PHYS PLANT
CC 09-GLIDDENROAD	FF IL0370100 TP06	GW		AT S.PARKING LT
CC 10-CARROLL AV AT RT 38	FF IL0370100 TP06	GW		
CC 11-NORMAL AV AT RT 38	FF IL0370100 TP06	GW		
CC 12-WNIU RADIO BLD	FF IL0370100 TP06	GW		
CC 13-LUCINDA AV	FF IL0370100 TP06	GW		AT MUSIC BLD
CC 14-LUCINDA AV	FF IL0370100 TP06	GW		AT GARDEN RD
CC 15-GARDEN RD	FF IL0370100 TP06	GW		AT ANDERSON HALL
CC 16-LUCINDA AV	FF IL0370100 TP06	GW		AT NORMAL RD
CC 17-LUCINDA AT RUSSEL RD	FF IL0370100 TP06	GW		AT RUSSELL RD
CC 18-LUCINDA AT GLIDDEN	FF IL0370100 TP06	GW		AT GLIDDEN AV
CC 19-GLIDDEN AT CRANE	FF IL0370100 TP06	GW		AT CRANE DR
CC 20-GLIDDEN AT N PROP LINE	FF IL0370100 TP06	GW		AT N PROP LINE
CC 21-FARADAY BLDG	FF IL0370100 TP06	GW		
CC 22-MONTGOMERY BLDG	FF IL0370100 TP06	GW		

Source Water Assessment

We want our valued customers to be informed about their water quality. 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 NIU Heating Plant or call our water operator at 815-753-1151. 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 Water: DE KALB Based on information obtained in a Well Site Survey published in 1990 by the Illinois EPA, several potential secondary sources are located within 1,000 feet of several of the wells. The Illinois EPA has determined that the De Kalb Community Water Supply's source water is not suspectibile 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 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 De Kalb Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydrogeologic barrier exists which should prevent 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 this determination. Hence, well hydraulics were not evaluated for this system ground water supply.

Lead and Copper

Definitions:

MRDL:

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

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Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2015	1.3	1.3	0.513	0	ppm		Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2015	0	15	0	1*	ppb		Corrosion of household plumbing systems; Erosion of natural deposits.

^{*} During last year's Copper and Lead tests, there was one initial sample that tested above the acceptable level. The source of this sample was investigated and it was discovered that the sample test port was located on a soft water line that supplies a mechanical hot water heating system. Testing from that system gave us a false reading for lead in our drinking water. The sample test port should have been in the city cold water supply line. This mistake was corrected and another sample was drawn from the correct port and sent to our local lab. This test detected less than 2 ppb of lead, which is well below the EPA's action level of 15 ppb for lead in drinking water.

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 The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not goal or MRDLG: reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum residual disinfectant level or 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.

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.

Ava: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. ppm:

Regulated Contaminants - NIU

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2015	1.4	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2015	13	13.4 - 13.4	No goal for the total	60	dqq	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	38	37.9 - 37.9	No goal for the total	80	dqq	N	By-product of drinking water disinfection.

Regulated Contaminants Detected in 2015 - City of DeKalb

Coliform Bacteria																
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level			Highest No. of Positive per month (%)				Fecal Coliform or E.Coli Maximum Contaminant Level			Total No. of Positive E. Coli or Fecal Coliform Samples		Violation		Likely Source of Contamination	
0	5% of monthly samples		amples	1.9%						0		N		Naturally present in the environment		
Lead and Copper										<u> </u>					•	
Date Collected		Lead MCLG	Lea Actic Lev	on el	n Lead 90 l Percenti							er Action Copper 90 th Percentile		#Sites Over Copper AL		
July 2013			0 ppb	15 p)	0	0		1.3 ppm 1.3		ppm	0.435 ppm	0	
Disinfectants & Disinfection	By-Produ	ıcts														
Contaminant			Highes Level Detecte		Range of Levels Detected			Unit of Measurement		G	MCL	Violatio	on? L	Likely Source of Contamination		
Total Trihalomethanes – TTI	HMs 20	015	22.1		7.25 - 22	2.1	ppb		N/A	N/A 80		No	В	y-product of drinkir	ng water chlorination	
Total Haloacetic Acids - HA	A5 20	015	15	15		11 - 15		ppb			60	No	В	y-product of drinkir	f drinking water chlorination	
Chlorine	20	2015 1.2			0.8 – 1.2		ppm	ppm MRDLG=4		LG=4	MRDL=4	No Water		Water additive used to control microbes		
Inorganic Contaminants																
Arsenic	4/	/8/2015	1.51		0 – 1.51		ppb		0		10	No		Erosion of natural deposits; Runoff from orchards; Runoff from electronics production waste		
Barium	4/	/8/2015	0946		0.22 - 0	.946	ppm		2	2		No		Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits		
Fluoride	4/	/8/15	1.15		0.86 - 1.15		ppm		4		4	No		Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge		
Nitrate	2015 04		049	0 - 0.49		ppm 10		10 10		10	No		Runoff from fertilizer, septic tanks, erosion of natural deposits			
Radioactive Contaminants																
Combined Radium 226 & 228	8 20	015	015 4.02 0 – 4.02 pCi/L 0		5		No	Erosion of natural dep		posits						
Gross Alpha (excluding rador uranium)	n & 20	015	12.7		0 – 12.7		pCi/L	pCi/L 0			15	No	Е	Erosion of natural deposits		
Uranium	10	0/28/09	0.10281		0.010281 - 0.010281		pCi/L	pCi/L 0			30	30 No		Erosion of natural deposits		
State Regulated Contaminant	ts		•	•		•			•		•		•			
Iron	4/	/8/2015	0.107		0 - 0.10	7	ppm		N/A		1	No	Е	crosion from naturall	y occurring deposits	
Sodium	4/	4/8/2015 89.1			46.4 – 89.1		ppm	ppm N/A			N/A	No	No Erosion of naturally water softener regen		occurring deposits; used in ration	

2015 Water Quality Data

Definition of Terms:

<u>Maximum Contaminant Level Goal (MCLG):</u> The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<u>Maximum Contaminant Level (MCL):</u> 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.

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

<u>U.S.E.P.A.:</u> "United States Environmental Protection Agency."

EPA: "Environmental Protection Agency."

<u>Parts Per Million (ppm):</u> Indicates the amount of a contaminant measured in parts per million

<u>Picocuries per Liter (pCi/L):</u> picoCuries per liter (measurement of radioactivity).

<u>Parts per Billion (ppb):</u> Indicates the amount of a contaminant measured in parts per billion

N/A: Not Applicable

<u>Maximum Residual Disinfectant Level (MRDL):</u> The highest level of disinfectant allowed in drinking water. <u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> 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

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