Annual Drinking Water Quality Report

Mt. Vernon

IL0810300

Annual Water Quality Report for the period of January 1 to December 31, 2014

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

The source of drinking water used by the CITY OF MT. VERNON is purchased Surface Water from the Rend Lake Inter-City Water System. For more information regarding this report contact:

Name: Steve McCoy

Phone: <u>618-242-6850</u>

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 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 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 may 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, USEPA 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. USEPA/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 Assessment

The city of Mt. Vernon's Residents, along with its satellite operations, uses tap water purchased from the Rend Lake Inter-City Water Treatment Plant. The surface water is processed at the treatment plant located on Rend Lake and distributed through a 36" Cast iron main to the Mt. Vernon entry point located at the Northeast corner of County Highway 36 (Woodland Drive) and the railroad tracks. 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 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 city hall or call our water operator at 618-242-6850. 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. Illinois EPA considers all surface water sources of public water supply to susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

2014 Regulated Contaminants Detected

Lead and Copper

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.

Monitored by Rend Lake. Date Sampled: 08/27/12

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	Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile			Likely Source of Contamination						
	0	15 ppb	0	0	1.3 ppm	1.3 ppm	0	0	Corrosion of household plumbing systems; Erosion of natural deposits			

Monitored by the City of Mt. Vernon

Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	2014	0	15	0	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

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. ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. 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 MCL's are based on running annual average of monthly samples. Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. Maximum Residual Disinfectant to control microbial contaminants.

**There is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation sections.

Note: The state requires monitoring of certain contaminants less than once per year; therefore, some of this data may be more than one year old.

Regulated Contaminants

Contaminants

Atrazine

Date

2014

Detected

.41

Regulated Contaminants													
Disinfectants & Disinfection Collection By-Products Date		Highest Level Detected			LG MCL		nits Vi	Violation		Likely Source Of Contaminant			
*Contaminant with asterisk monitored by the Mt. Vernon Water Department.													
*Total Haloacetic Acids (HAA5)	2014	20	12.8-26.4	N/A	60		ppb	No	By-product of drinking water disinfection				
*TTHMs [Total Trihalomethanes]	2014	36	21.2-53.3	N/A	80 pr		ppb	No	By-product of drinking water disinfection				
Chlorite	2014	.52	.2452	.8	1	ı	ppm No		By-product of drinking water chlorination				
*Chloramines	12-31-2014	2.7	2.0 - 3.0	MRDLG=4	MRDL:	=4 p	ppm No		Water additive used to control microbes				
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Viola	tion	Likely Source Of Contaminant		kely Source Of Contaminant		
Barium	2014	0.0135	.01350135	2	2	ppm	No			scharge of drilling wastes; Discharge from metal refineries; Erosion of tural deposits			
Arsenic	2014	1	1.12-1.12	0	10	ppb	No			Erosion of natural deposits; Runoff from orchards; Runoff from electronics production wastes			
Fluoride	2014	0.9	.876876	4	4	ppm	No			Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge			
Nitrate (measured as Nitrogen)	2014	.113	0.113-0.113	10	10	Ppm	N			Runoff from fertilizer uses: Leaching from septic tanks, sewage: Erosion of natural deposits.			
Sodium 2014		21	20.6-20.6			ppm	No)	Erosion from naturally occurring deposits:				
Radioactive Contamina	Collection Da	on Date Highest Leve Detected		Range of Levels Detected		MCLG	MCL	Units	Violation	Likely Source Of Contaminant			
Combined Radium 226/228	2014	.26		.2626		0	5	pCi/L	No	Erosion of naturally occurring deposits;			
Synthetic Organic Colle	ection	Highest Level	Range of	Levels	МС	i e i	MCL U	nits \	Violat	ion	Likely Source Of Contaminant		

Detected

0-0.41

MCLG MCL Units Violation

Ppb

Ν

3

Likely Source Of Contaminant

Runoff from fertilizer used on row crops

Turbidity Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Lowest Monthly % meeting limit	Limit (Treatment Technique)	Violation	Source	
99.19%	0.3 NTU	No	Soil Runoff	
Highest Single Measurement	Limit (Treatment Technique)	Violation	Source	
0.40	1 NTU	No	Soil Runoff	

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation sections.

VIOLATIONS: There were no violations this reporting period.