

Consumer Confidence Report

Annual Drinking Water Quality Report

STEELEVILLE

IL1570650

Annual Water Quality Report for the period of January 1 to December 31, 2021

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 STEELEVILLE is 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 pick up substances resulting from the presence of animals or from human activity.
Contaminants that may be present in source water include: <ul style="list-style-type: none">- 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
WELL 1 (60207)	CORNER CHARLES AND JAMES	GW	_____	_____
WELL 2 (60269)	GREEN JUST N OF 0.05 MG	GW	_____	_____
WELL 3 (60208)	NW CORNER OF WTP BUILDING	GW	_____	OLD WTP BLDG
WELL 4 (60209)	E SIDE WEST STREET-JUST	GW	_____	_____
WELL 5 (60210)	S SIDE RT 150-INT W/PERCY	GW	_____	_____
WELL 6 (60211)	1000 FT E/MULBERRY-8 BLK	GW	_____	_____
WELL 7 (01106)	CAMPUS DR S OF CREST VIEW	GW	_____	BEHIND HIGH SCHOOL

Source Water Assessment

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) 965-3134. 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: STEELEVILLE To determine Steeleville's susceptibility to groundwater contamination, the Well Site Survey Report, published in 1991, was reviewed as well as the 2007 survey. During the surveys of the source water protection area, Illinois EPA staff recorded potential sources, routes, or possible problem sites within the 200 foot minimum setback zones and 1,000 foot Phase I Wellhead Protection Areas (WHPA). Within the minimum setback zones, two sites are located less than 200 feet from Well #4, an additional fourteen sites are located within the Phase I WHPA of the Community Water Supply (CWS) wells, and fifteen sites are outside the Phase I WHPAs. The Illinois EPA does not consider the source water of this facility to be susceptible to VOC or SOC contamination. This determination is based on a number of criteria including: the land-use activities in the recharge area of the wells, the available hydrogeologic data, monitoring conducted at the wells, and monitoring conducted at the entry point to the distribution system. All public water supplies using groundwater are required to sample their wells monthly for bacterial contaminants. In 2011 two wells had total coliform detections. These samples were taken at a point prior to the water treatment process and distribution. Steeleville received a Non-Compliance Advisory (NCA) in 2011 for the bacteriological detections in Wells #2 and #7. Maintenance at the sample locations served to remedy this issue. While the NCA has been resolved at this time, monthly monitoring data is continually being tracked in regards to all active potable wells at the facility; further deficiencies would result in additional enforcement.

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	10/09/2019	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	10/09/2019	0	15	1.4	0	ppb	N	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.

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

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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 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 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.

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.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Water Quality Test Results

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

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking 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	12/31/2021	0.8	0.4 - 1.1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2021	0.25	0.088 - 0.25	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	1.02	0.383 - 1.02	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2021	0.34	0.08 - 0.34		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2021	1.3	0 - 1.3	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	01/21/2020	0.04	0 - 0.04	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2021	2.7	1.5 - 2.7	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2021	180	67 - 180			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	2021	0.011	0 - 0.011	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2021	5	2.84 - 5.62	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2021	12	0 - 11.5	0	15	pCi/L	N	Erosion of natural deposits.

Violations Table

Combined Radium 226/228			
Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2021	03/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Gross alpha including radon and uranium			
Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2021	03/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Nitrate [measured as Nitrogen]			
Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2021	12/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Uranium			
Some people who drink water containing uranium in excess of the MCL (30 ug/L) over many years may have increased risk of getting cancer and kidney toxicity.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2021	03/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.