

Consumer Confidence Report

Annual Drinking Water Quality Report

MITCHELLSVILLE PWD

IL1655200

Annual Water Quality Report for the period of January 1 to December 31, 2023

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 MITCHELLSVILLE PWD is Purchased Ground Water

For more information regarding this report contact:

Name

Sanders Enviro Lori Sanders

Phone

(618) 534.1879

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

V

Board Meetings - 4:15 pm
Location - 125 Triple S. Rd

Jan. 16, 2024 - Tues
April 16, 2024 - Tues
July 16, 2024 - Tues
Oct. 15, 2024 - Tues

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:

- 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 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. 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

CCC-MITCHELLSVILLE PWR MASTER
CCC2 MITCHELLSVILLE PWR MASTER

FP IL1515050 TP04

FP 1655300 TP01

Type of Water

GW
GW

Report Status

Location

West Side of 4-gway 145 South at County Line (Fope and Saline)
Intersection of Route 13 and Shawnee Hills Road

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 618-244-1979. To view a summary version of the completed Source Water Assessment, including the 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/evap/fact-sheets.pl>.

Source of Water: MILLSTONE PWDTo determine Millstone PWD's susceptibility to groundwater contamination, a Well Site Survey, published in 1994 by the Illinois EPA, was reviewed. Based on information obtained in this document, one potential source of groundwater contamination is present that could pose a hazard to the groundwater pumped by the Millstone PWD community water supply wells. This site is a lime sludge lagoon located 50 feet from Well #5. Based on the information provided by Millstone PWD's water supply officials, this lime sludge lagoon has changed its status (sludge removed) and the four wells listed in the above site data table have been properly abandoned. The community's source water is susceptible to SOC contamination from non-point sources related to agricultural land use. Also, as a result of monitoring conducted at the wells and entry point to the distribution system, the land-use activities, and a source water protection initiatives by the facility, the Millstone PWD's source water is not susceptible to VOC and IOC contamination. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Millstone PWD's wells are not vulnerable to viral contamination. This determination is based on the evaluation of the following criteria considered during the Vulnerability Waiver Process: the community's source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary defects have been mitigated such that the 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 the Millstone PWD's well field. The amount of overburden should provide an adequate degree of filtration to prevent the movement of pathogens into the wells. Source of Water: SALINE VALLEY CONSERVANCY DISTRICTTo determine Saline Valley's susceptibility to contamination, a Well Site Survey, published by the Illinois EPA in 1989, was reviewed. Based upon this survey, there are 7 potential sources of groundwater contamination, a Well Site Survey, published by the Illinois EPA in 1989, was reviewed. Based upon this survey, 1 above ground fuel storage tank, 1 below ground fuel storage tank, 1 warehouse, 1 waste disposal, and 1 grain elevator. The Peabody Coal Company (PCC) operated Eagle No. 2, an underground mine with a coal processing plant and refuse disposal areas on the surface. The refuse disposal areas are located east of Saline Valley wells. There is extensive groundwater contamination in the vicinity of the refuse disposal areas. Concentrations of chloride, iron, manganese, sulfate and total dissolved solids (TDS) exceed the 35 Illinois Administrative Code Part 620.410 Class I Potable Resource Groundwater concentrations. PCC will be required to implement an adequate corrective action at the site to remediate groundwater contamination. Based upon this information, the Illinois EPA has determined that the Saline Valley community water supply's source water is susceptible to contamination. As such, the Illinois EPA has provided 5-year recharge area calculations for the wells. The land use within the recharge area of the wells was analyzed as part of this susceptibility determination. This land use includes agricultural properties.

2023 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	08/24/2022	1.3	1.3	0.211	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Water Quality Test Results

Definitions:

Avg: The following tables contain scientific terms and measures, some of which may require explanation.
 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.
 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.
 The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
 not applicable.

Maximum Residual Disinfectant Level goal or MRDLG:

millirems per year (a measure of radiation absorbed by the body)
 micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
 milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
 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	2023	1.6	1.4 - 1.7	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Halacetic Acids (HAA5)	2023	16	9.7 - 20	No goal for the total	60	ppb	N	By product of drinking water disinfection.
Total Trihalomethanes (THM)	2023	57	35 - 79	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR REPORT	07/01/2023	07/21/2023	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

The Mitchellsville Water District failed to provide our customers a copy of the Consumer Confidence Report by the Illinois E.P.A. deadline. By doing so, we did not inform you of the quality of our drinking water by the required due date. We will take the necessary measures to assure that we meet all necessary and required notification procedures and deadlines from now on to maintain compliance with E.P.A. and to keep our customers informed and up to date.

2023

Regulated Contaminants Detected

Millstone PWD

Lead and Copper

Definitions:

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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	2023	1.3	1.3	0.126	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	6.84	0	ppb	N	Corrosion of household plumbing systems, Erosion of natural deposits.

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Maximum Contaminant Level or MCL: 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 Goal or MCLG: 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 or MRDL: 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 goal or MRDLG: 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.

na: 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.

ppb: not applicable.

ppm: milligrams per liter (a measure of radiation absorbed by the body)

Regulated Contaminants - *Millsboro PWD*

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	WCLG	MCL	Units	Violation	Primary Source of Contamination
Chlorine	2023	1.9	1.4 - 2	WCLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Halacetic Acids (HAA5)	2023	15	8.3 - 16	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (THM)	2023	66	33.6 - 81	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Primary Source of Contamination
<p>Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.</p>	07/19/2021	5.98	5.98 - 5.98	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	07/19/2021	0.0197	0.0197 - 0.0197	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	07/19/2021	0.44	0.44 - 0.44	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	07/19/2021	23100	23100 - 23100			ppb	N	Erosion from naturally occurring deposits; Used in water softener regeneration.

Coliform Bacteria

- SALINE VALLEY CONSERVANCY DISTRICT -

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. coli Maximum Contaminant Level	Total No. of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

Lead and Copper

Definitions:

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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
Copper	2023	1.3	1.3	0.17	0	ppm	N

Erosion of natural deposits; Leaching wood preservatives; Corrosion of house plumbing systems.

Water Quality Test Results

Definitions:

Avg:

Level 1 Assessment:

Level 2 Assessment:

Maximum Contaminant Level or MCL:

Maximum Contaminant Level Goal or MCLG:

Maximum residual disinfectant level or MRDL:

Maximum residual disinfectant level

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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 level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not

SALINE VALLEY CONSERVANCY DISTRICT

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	2	1.5 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbe
Halacetic Acids (HAA5)	2023	7	6.6 - 6.6	No goal for the total	60	ppb	N	By-product of drinking water disinfect
Total Trihalomethanes (TTHM)	2023	47	46.9 - 46.9	No goal for the total	80	ppb	N	By-product of drinking water disinfect
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2023	0.00509	0.00509 - 0.00509	2	2	ppm	N	Discharge of drilling wastes; Discharge metal refineries; Erosion of natural de
Fluoride	2023	0.63	0.63 - 0.63	4	4.0	ppm	N	Erosion of natural deposits; Water addi; which promotes strong teeth; Discharge ; fertilizer and aluminum factories.
Sodium	2023	13500	13500 - 13500			ppm	N	Erosion from naturally occurring deposits Used in water softener regeneration.