

# Consumer Confidence Report

## Annual Drinking Water Quality Report

SOUTH HIGHWAY PWD

IL0775400

Annual Water Quality Report for the period of January 1 to December 31, 2024

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 SOUTH HIGHWAY PWD is Purchased Surface Water

For more information regarding this report contact:

Name Carl Sisk, Field Operations Manager

Phone 618-529-5313

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	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.
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.	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.
Contaminants that may be present in source water include: <ul style="list-style-type: none"><li>- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</li><li>- 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.</li><li>- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li><li>- 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.</li><li>- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</li></ul>	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).  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. The drinking water supplier is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standard Institute accredited certifier

to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact Carl Sisk at 618-529-5313

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC01 - SOUTH HIGHWAY MASTER METER FF IL0770150 TP05 - FROM	SW	Active	Just southwest of the Old Carbondale WTP on Wall Street.
CC02 - SOUTH HIGHWAY MASTER METER FF IL0770150 TP 05 FROM	SW	Active	On McLafferty Road on the west side of the new Carbondale WTP
CC03 - SOUTH HIGHWAY MASTER METER FF0770150 TP05 WATER FROM	SW	Active	Northwest corner of Apartment Complex

## 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 the office or call our water operator at 618-529-5313. 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: CARBONDALE 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.

**Lead and Copper**

Definitions:  
 Action Level: 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. ALGs allow for a margin of safety.

Copper Range: 0 \_\_\_\_\_ to 0.046 ppm \_\_\_\_\_  
 Lead Range: 0 \_\_\_\_\_ to 1.4 ppb \_\_\_\_\_

To obtain a copy of the system's lead tap sampling data: the lead sampling data is available on Illinois EPA's Drinking Water Watch <https://water.epa.state.il.us/dww/index.jsp>

Our Community Water Supply has developed a service line material inventory.  
 To obtain a copy of the system's service line inventory: Carl Sisk at 618-529-5313

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/29/2023	1.3	1.3	0.046	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	09/29/2023	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.

## Water Quality Test Results

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.

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
Chloramines	2024	3.1	3 - 3.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	30	23 - 31.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	46	37.8 - 53	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Total Organic Carbon			
Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health			
Violation Type	Violation Begin	Violation End	Violation Explanation
INADEQUATE DBP PRECURSOR REMOVAL	04/01/2024	06/30/2024	Our treatment plant failed to adequately reduce the total organic carbon content of our source water which is needed to properly minimize the amount of disinfection byproducts in our drinking water. Corrective action: working with Carbondale to assess possible reduction in TOC removal requirements based on source water quality in recent years. Carbondale has since returned to compliance.
INADEQUATE DBP PRECURSOR REMOVAL	07/01/2024	09/30/2024	Our treatment plant failed to adequately reduce the total organic carbon content of our source water which is needed to properly minimize the amount of disinfection byproducts in our drinking water. <b>Corrective action: working with Carbondale to assess possible reduction in TOC removal requirements based on source water quality in recent years. Carbondale has since returned to compliance.</b>

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	07/01/2024	09/30/2024	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. <b>Corrective action: Due to lab error, our system resampled drinking water but samples failed to be tested in required time frame. Resamples were in compliance.</b>



**Regulated Contaminants CARBONDALE**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	2024	2.8	2 - 3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	34	21.8 - 36.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	63	38.3 - 87.6	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	Likely Source of Contamination
Barium	2024	0.0093	0.0093 - 0.0093	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.7	0.668 - 0.668	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	2024	2	1.8 - 1.8	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]	2024	0.22	0.22 - 0.22	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2024	2	2.1 - 2.1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2024	16	16 - 16			ppb	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	01/13/2020	0.672	0.672 - 0.672	0	5	pCi/L	N	Erosion of natural deposits.

<b>Turbidity</b>	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.2 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

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.

**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 violations section.

In addition to the required water quality template provided, we are also providing results for the National Secondary Drinking Water Standards. In the City of Carbondale Water Quality Report, we add a section to our personalized template that lists any detection of Secondary/State Regulated Contaminants that were not already listed in the required water quality template.

Below is a list of the secondary contaminants we will be including in our water quality report. If you have any questions about the secondary contaminants or including the secondary contaminants in your water quality report, please direct those questions to the Illinois Environmental Protection Agency.

Secondary / State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Typical Source
Aluminum <sup>7</sup>	10/23/2024	0.035	0.035 – 0.035	0.2	0.2	ppm	No	Erosion of naturally occurring deposits
Chloride <sup>7</sup>	10/23/2024	9.1	9.1 – 9.1	250	250	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration
Sulfate <sup>7</sup>	10/23/2024	23	23 – 23	250	250	ppm	No	Erosion of naturally occurring deposits; Water treatment

<sup>1</sup> Fluoride is added to the water supply to help promote oral health as required by the Illinois Department of Public Health.

<sup>2</sup> Trihalomethanes and Haloacetic Acids, also known as Disinfection by-products (DBPs) are formed by the reaction of chlorine disinfectant with naturally occurring organics found in the source water. Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

<sup>3</sup> Chlorine and Chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases. Most water systems in Illinois are required by law to add either chlorine or chloramines.

<sup>4</sup> Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. If coliforms are found in more samples than allowed then it could be indication of potential problems.

<sup>5</sup> Compliance with the Lead and Copper Rule is met if the 90<sup>th</sup> percentile of all samples taken does not exceed the action levels for lead or copper. The 90<sup>th</sup> percentile sample is the "amount detected" in the table. Lead and copper is required by the state to be sampled on a triennial basis and is included in the report for the current year showing the date of sampling and the detection levels.

<sup>6</sup> There is no 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.

<sup>7</sup> This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

<sup>8</sup> Turbidity is a measure of the cloudiness of the water caused by suspended particles. We measure it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

<sup>9</sup> Unregulated contaminants are those for which USEPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

<sup>10</sup> 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.