



# 2022 Annual Water Quality Report for CITY OF JACKSON-BLACKMAN TOWNSHIP- STATE PRISON OF SOUTHERN MICHIGAN

City of Jackson WSSN: 3470  
Blackman Township WSSN: 0740  
SPSM WSSN: 6370

This report covers the drinking water quality for all City of Jackson customers, including Blackman Township and the State Prison of Southern Michigan, for the 2022 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2022. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and State standards.

Your water comes from 16 groundwater wells, each over 400 feet in depth. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from “very-low” to “very-high” based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is “moderately high”.

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by participating in a county-wide Wellhead Protection Program.

If you would like to know more about this report, please contact the City of Jackson Department of Public Works-Water Division at 517-788-4170 or at [www.city-ofjackson.org](http://www.city-ofjackson.org).

**Contaminants and their presence in 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 U.S. EPA’s Safe Drinking Water Hotline (800-426-4791).

**Vulnerability of sub-populations:** 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 systems 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. U.S. EPA/Center for Disease Control 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).

**Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells.

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Our water comes from 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 stormwater 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 and residential uses.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

**Water quality data:** The table in this report lists all the drinking water contaminants that we detected during the 2022 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done Jan. 1 through Dec. 31, 2022. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some are more than one year old.

- **Maximum Contaminant Level Goal (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 (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 (MRDL):** The highest level of a disinfectant allowed in drinking wa-

ter. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

- **Maximum Residual Disinfectant Level Goal (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.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppm: parts per million or milligrams per liter
- ppb: parts per billion or micrograms per liter
- ppt: parts per trillion or nanograms per liter
- pCi/l: picocuries per liter (a measure of radioactivity)
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Information about lead:** 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. The City of Jackson Water Department is responsible for providing high quality drinking water, but 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 have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. 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>.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Our water supply has 11,004 lead service lines and 848 service lines of unknown material out of a total of 12,042 service lines.

## 2022 Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	City of Jackson		Blackman Twp		State Prison of Southern Mich		Violation yes/no	Major Sources in Drinking Water
					Level Detected	Range of Detection	Level Detected	Range of Detection	Level Detected	Range of Detection		
<b>Inorganic Chemicals – Annual Monitoring at Plant Finished Water Tap</b>												
Fluoride	9/8/22	ppm	4	4	0.77	N/A	N/A	N/A	N/A	N/A	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	9/8/22	ppm	10	10	.15	N/A	N/A	N/A	N/A	N/A	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	9/8/22	ppm	2	2	0.088	.024-.088	N/A	N/A	N/A	N/A	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
cis-1,2-Dichloroethylene	9/8/22	ppb	70	70	3.2	2.0-3.2	N/A	N/A	N/A	N/A	no	Discharge from industrial chemical factories.
Combined Radium	2014	PCi/L	5	0	1.0	N/A	N/A	N/A	N/A	N/A	no	Erosion of natural deposits
Chloride	9/8/22	ppm	N/A	N/A	107	N/A	N/A	N/A	N/A	N/A	no	Running/leaching from natural deposits
Sulfate	9/8/22	ppm	N/A	N/A	100	N/A	N/A	N/A	N/A	N/A	no	Running/leaching from natural deposits; industrial wastes
<b>Disinfectant Residuals and Disinfection By-Products – Monitoring in Distribution System</b>												
Total Trihalomethanes (TTHM)	Feb-Dec 2022	ppb	n/a	80	46	28-58	57	47-78	N/A	N/A	no	By-product of drinking water chlorination.
Haloacetic Acids (HAA5)	Feb-Dec 2022	ppb	n/a	60	7.6	5-9	8.5	6-10	N/A	N/A	no	By-product of drinking water disinfection.
Disinfectant (Total Chlorine Residual)	Jan-Dec 2022	ppm	MRD GL 4	MRDL 4	1.01	.23-2.24	1.38	.51-2.11	1.58	.71-2.10	no	Water additive used to control microbes.

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	n/a	n/a	72	Erosion of natural deposits

### 2022 Turbidity – monitored every 4 hours at Plant Finished Water Tap

Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation yes/no	Major Sources in Drinking Water
0.67 NTU	99.46%	no	Soil Runoff

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

### 2022 Lead and Copper Monitoring | City of Jackson

### Blackman Twp

### State Prison of South Michigan

Contaminant	Test Date	Health Goal MCLG	Action Level	90 <sup>th</sup> Percentile Value*	Number of Samples Over AL	Range of Detection	90 <sup>th</sup> Percentile Value*	Number of Samples Over AL	Range of detection	90 <sup>th</sup> Percentile Value*	Number of Samples Over AL	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Lead (ppb)	2022	0	15	2	0/30	ND-.0610	0	3/20	ND-.028	0	0/20	ND-.011	no	Corrosion of household plumbing system; Erosion of natural deposits.
Copper (ppb)	2022	1.3	1.3	0.0	0/30	ND-.12	0.1	0/20	.0010-.30	0	0/20	ND-.09	no	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.

\*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

**Monitoring and reporting to the Department of Environment, Great Lakes, and Energy (EGLE) requirements:** The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We did not meet all the monitoring and reporting requirements for 2022.



**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

***Monitoring Requirements Not Met for the City of Jackson***

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During June 1, 2022, and June 30, 2022, the samples we collected for trihalomethanes (TTHM) and volatile organic chemicals (VOCs) had pH issues and were not able to be used for compliance purposes. Therefore, we cannot be sure of the quality of your drinking water during that time.

**What should I do?** There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time. Even though this is not an emergency, as our customers, you have a right to know what happened and what we are doing to correct the situation.

The table below lists the contaminants we did not properly test for, how often we are supposed to sample for these contaminants, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the dates we will collect follow-up samples.

<b>Contaminant</b>	<b>Required sampling frequency</b>	<b>Number of samples taken</b>	<b>When all samples should have been collected</b>	<b>Date additional samples will be collected</b>
TTHM	4 sample every three months	0	June 1, 2022 – June 30, 2022	September 1, 2022 – September 30, 2022
VOC	2 samples every three months	0	April 1, 2022 – June 30, 2022	July 1, 2022 – September 30, 2022

**What happened? What is being done?** A sample was not collected within this required sampling period. We are making every effort to assure this does not happen again. We will be collecting follow-up samples.

For more information, please contact Daniel Stewart, Assistant Water Plant Supervisor at 517-788-4170.

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by the City of Jackson.

CERTIFICATION:

WSSN: 03470

I certify that this water supply has fully complied with the public notification regulations in the Michigan Safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules.

Signature:  Title: Assistant Water Plant Supervisor Date Distributed: 5-31-23

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

## City of Jackson Did Not Meet Total Organic Carbon Monitoring Requirements

Our water system recently violated a drinking water standard. Although this was not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did (are doing) to correct this situation.

We routinely monitor your water for natural organic material, referred to as total organic carbon or TOC. This tells us whether we are effectively removing TOC, which can combine with disinfectants to form disinfection byproducts.

### What should I do?

There is nothing you need to do unless you have a severely compromised immune system, have an infant, or are elderly. These people may be at increased risk and should seek advice about drinking water from their health care providers.

You do not need to boil your water or take other actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

### What does this mean?

This is not an emergency. If it had been an emergency, you would have been notified within 24 hours.

*TOC 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 maximum contaminant level (MCL) may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.*

### What happened? What was done?

We inadvertently collected TOC samples during the 1<sup>st</sup> quarter monitoring period on separate days. The requirement is that they be sampled on the same day. To return to compliance we will collect a paired sample by June 30, 2022.

For more information, please contact Daniel Stewart, Assistant Water Plant Supervisor at 517-788-4170.

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Signature

Assistant Water Plant Supervisor

Title

5-31-23

Date Distributed

## 2022 Annual Water Quality Report



[www.cityofjackson.org](http://www.cityofjackson.org)

We will update this report annually and will keep you informed of any problems that may occur throughout the year as they happen. Copies are available at 161 W. Michigan Ave. Jackson, MI 49201. A digital copy of this report is available on the City's website by visiting [www.cityofjackson.org](http://www.cityofjackson.org).

We invite public participation in decisions that affect drinking water quality. The Jackson City Council generally meets on the second and fourth Tuesday of every month at 6:30 p.m. Residents may watch live broadcasts on Comcast Cable Channel 21, the City website, and the City YouTube page. Recordings of meetings are available on the City website following meetings.

For more information about your water, or the contents of this report, contact the City of Jackson Department of Public Works-Water Division at 517-788-4170. For more information about safe drinking water, visit the U.S. EPA at <http://www.epa.gov/safewater>.

