

## 2021 VILLAGE OF CONCORD ANNUAL WATER QUALITY REPORT

The Village of Concord strives to produce the best quality drinking water possible. The purpose of this report is to provide you with information about your drinking water. The report explains to you where your water comes from. The report also lists all of the contaminants detected in your water and an explanation of any violations in the past year.

Your drinking water comes from four groundwater wells located in the Village of Concord. Well #1 is 107 feet deep; well #3 is 270 feet deep and well #4 is 266 feet deep. Each of these wells draws water from the Upper Grand River watershed. The State performed an assessment of our source water in 2003 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 primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is "high." There are no known potential contamination sources within the Village's standard isolation area for the wells. The Village's water is obtained from an aquifer that is characterized as "unconfined." Unconfined aquifers are characterized geologically as "sensitive." We have completed the Jackson County Wellhead Protection Program and have capped all abandon wells in our aquifer.

In 2020 the Village of Concord started the water main replacement project with a loan/grant obtained through the USDA. The project was completed in December 2021. The project eliminated all the aging and under sized cast iron water main with larger plastic (PVC) water main, by doing so it has eliminated water main breaks and increase water quality. The life expectancy of PVC water main is 100 years.

Since July 27, 2006 we have been disinfecting our water with chlorine, based on the recommendation from the DEQ. To ensure quality drinking water we try to hold a residual of two tenths (0.2) in the distribution system.

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 the water poses a health risk. More information about the contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or the State of Michigan Department of Environmental Quality at 1-517-780-7840.

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 the infection of *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

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. The Village of Concord 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish 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>.

The Village of Concord's water supply comes from groundwater. As water travels through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. These include:

- \* Microbial contaminants, such as viruses and bacterial, which may come from sewage treatment plants, septic systems, livestock and wildlife.
- \* Inorganic contaminants, such as salts and metals, which can be natural or may result from storm runoff,

wastewater discharges, oil and gas production and farming.

- \* Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also originate from gas stations, storm runoff and septic systems.
- \* Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.
- \* Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

## 2021 WATER QUALITY DATA

Each year, the Village is required to sample the drinking water for various contaminants. The table below lists all contaminants that were detected in 2021. The state allows us to monitor for certain contaminants less than annually because the concentrations of these contaminants are not expected to change frequently. The most recent results of these tests are included in the table. All violations are printed in **bold**, and an explanation of any violation is provided.

### Terms and Abbreviations:

- \* **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 possible using the best available treatment technology.
- \* **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is not a known or expected health risk.
- \* **Maximum Residual Disinfection Level (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 contamination.
- \* **Maximum Residual Disinfection 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.
- \* **Action Level (AC):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements, which a water system must follow.
- \* **pCi/L:** picocuries per liter
- \* **N/A:** not applicable
- \* **ND:** not detected
- \* **ppb:** parts per billion or micrograms per liter (*ug/L*)
- \* **ppm:** parts per million or milligrams per liter (*mg/L*)

Contaminant	MCL	MCLG	Concord's Water	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
<b>Inorganic Contaminants</b>							
Arsenic (ppb)*	10	5	0.006	0.0054-0.0068	08/18/21	None	Erosion of natural deposits
Fluoride (ppm)	4	4	0.12	0.12-0.12	08/20/20	None	Erosion of natural deposits
Nitrate (ppm)	10	10	0.6	0.11-0.72	08/18/21	None	Run off from fertilizer use

<b>Unregulated Inorganic Contaminants<sup>1</sup></b>							
Chloride (ppm)	N/A	N/A	26	25-26	08/20/20	None	Natural in ground water
Hardness (ppm)	N/A	N/A	320	294-320	08/20/20	None	Natural in ground water

Iron (ppm)	N/A	N/A	0.77	0.35-0.77	08/20/20	None	Natural in ground water
Sodium (ppm)	N/A	N/A	10	10-10	08/20/20	None	Natural in ground water
Sulfate (ppm)	N/A	N/A	34	16-34	08/20/20	None	Natural in ground water

### Lead and Copper Monitoring at Consumer's Tap<sup>2</sup>

Lead (ppb)	AL=15	0	5	0 out of 10 sites were above the action level	08/20/20	None	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	AL=1.3		0.3	0 out of 10 sites were above the action level	08/20/20	None	Corrosion of household plumbing systems; Erosion of natural deposits
Total Trihalomethane (ppb)	80		2.5	n/a	08/18/21	None	Chlorine byproduct
Haloacetic Acids (ppb)	60		<1.0	n/a	08/18/21	None	Chlorine byproduct
Contaminant	MCL	MCLG	Concord's Water	Range of Detections	Sample Date	Violation	Typical Source of Contaminant

### Microbial Contamination

Total Coliforms	0	0	0 samples showed detections		2021	None	Naturally present in the environment
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\*Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

1. There are no MCL's associated with unregulated contaminants. Monitoring of unregulated contaminants helps the EPA to determine whether there is a need to regulate these contaminants.
2. Lead and Copper results lists the number of samples that exceeded the action level, rather than the range detected.

### The Village of Concord had NO violations in 2021.

The village of Concord water is in compliance with all Federal and State requirements of the Safe Drinking Water Act.

The CCR will not be mailed. A copy can be picked up at the village office.

If you would like more information about your water, please call DPW Director Jason Blossom at the Village Office at 517-524-8534 or by mail at P.O. Box 306 Concord, Michigan 49237 or by e-mail at [office@villageofconcord.com](mailto:office@villageofconcord.com). The Village's website is: [villageofconcord.com](http://villageofconcord.com).

The Village Council of Concord meets at 7:00 PM on the fourth Tuesday of each month, in the Village Office at 110 Hanover Street. Please feel free to come and participate.