



## VILLAGE OF NEW CONCORD 2023 Drinking Water Consumer Confidence Report

### INTRODUCTION

The Village of New Concord has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. This report is required as part of the Safe Drinking Water Act Reauthorization of 1996 and is required to be delivered to the consumers by July of 2024. Included within this report is information regarding general health, water quality, test results, how to participate in decisions concerning your drinking water and water system contacts.

At the present time New Concord water is treated with potassium permanganate, poly-aluminum chloride aluminum sulfate, fluoride, orthophosphates, sodium hypo-chlorite, copper sulfate and powdered activated carbon. The water treatment plant is located at 220 West Main Street. The chemicals used to treat the raw water are food grade and comply with EPA specifications. New Concord employs certified personnel to operate its treatment plant. The water treatment plant was renovated in 1997 in order to comply with EPA requirements.

#### What's the source of New Concord drinking water?

The Village of New Concord's public water system uses surface water from a reservoir that is filled with water drawn from Fox Creek. There is not a sufficient quantity of ground water (wells) available in this area to supply a public water system. Surface water is less consistent than well water and is therefore more difficult and expensive to treat. Seasonal changes, especially when algae are present, can cause tastes and odors in surface water.

For the purposes of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at public drinking water intakes with little warning or time to prepare. The Ohio EPA conducted a revised source water assessment in August of 2022. This document is available at the New Concord Village Hall 2 West Main Street, New Concord, Ohio 43762.

The Village of New Concord public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants.

New Concord's raw water is normally pumped into the treatment plant from the adjacent Lower Reservoir. Raw water is pumped into the 10-million-gallon Lower Reservoir from the 60-million-gallon Upper Reservoir one mile north on Shadyside Drive. The lower reservoir is also filled by gravity from Fox Creek, and operators have the ability to draw water directly from the Upper Reservoir when necessary.

The Village has an emergency connection water lines with Western Guernsey and Muskingum County Water Systems. These connections are normally used for emergencies only. This connection is not meant to be used on a continuous basis and is only available for use if an extraordinary condition would be present. During 2023, New Concord did not use either connection to provide water to residents. This report does not contain information on the water quality received from Western Guernsey or Muskingum County, but a copy of their consumer confidence report can be obtained by visiting websites [westernguernseyregionalwater.com](http://westernguernseyregionalwater.com) and [muskingumcountyoh.gov/Agencies/Utilities/Water/](http://muskingumcountyoh.gov/Agencies/Utilities/Water/) respectively.

#### Sources of contamination to drinking water

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, may even include radioactive material. Raw water may also pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in untreated source water, also called raw water, include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from 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 and transportation, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which may provide protection to public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants found in the environment. 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 infection. 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 (1-800-426-4791).

### About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Village of New Concord conducted sampling for **bacteria, nitrate, and synthetic organic chemicals, volatile organic chemicals, inorganic and cyanotoxins during 2023**. Over this period of time, samples were collected for many different contaminants most of which were not detected in the Village of New Concord's water supply. The Ohio EPA requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some data, though accurate, is more than one year old.

### What is Turbidity?

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. The Village of New Concord's water system highest recorded result for 2023 was 0.29 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%. The Village monitors turbidity continuously and reports levels for every 15-minute period.

### Algae Toxins in Drinking Water

Microcystin toxin is the most common blue green algae toxin. We tested for trace levels of algal toxins starting 2015 through 2023. During 2023 there were no algal toxin levels in our raw water source from our reservoirs. However, all of our entry point samples were non-detect. The New Concord Water Treatment process has been effective in removing algal toxins from our reservoir water.

### Lead In Drinking Water

The water pumped from the plant does not contain lead, as it tests below the detection level for lead. In 2023 and our 90th percentile was < 5 ug/L, below the federal action level of 15 ug/L (parts per Billion). It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. 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 New Concord Water Plant 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 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### PFAS in Drinking Water

In 2020, our PWS was sampled as a part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit [pfas.ohio.gov](http://pfas.ohio.gov)

### How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the Council of the Village of New Concord which meets the second Monday of each month at 6:30 p.m. at Village Hall. A meeting schedule is available by calling (740) 826-7671.

### For More Information

If you have any questions regarding this report, or any other matter regarding New Concord's drinking water, you may contact Dalton Flinn, Plant Superintendent, at (740) 826-7671.

### License to Operate



# CERTIFIED

In 2023, the Village of New Concord Public Water Supply had an unconditional license to operate our public water system.

**TABLE OF DETECTED CONTAMINANTS**

2023

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Disinfectant and Disinfectant By-Products</b>							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.67	0.94-1.76	No	2023	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	N/A	60	37.9	11.4-49.2	No	2023	By-product of drinking water disinfection
Total Trihalomethanes (THM) (ppb)	N/A	80	55.9	28-63.94	No	2023	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>							
Fluoride (ppm)	4	4	1.1	1.05	No	2023	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	1	0-0.92	No	2023	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
Barium (ppm)	2	2	0.035	0.035-.035	No	2023	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Microbiological</b>							
Turbidity (NTU)	<0.10	0.3	0.29	0.07-0.29	No	2023	Soil runoff; sediment from reservoir bottom.
Turbidity (% meeting standard)	TT	N/A	100%	100%	No	2023	
Total Organic Carbon	TT	N/A	2.3	1.4-3.3	No	2023	Naturally present in the environment.
<b>Lead and Copper</b>							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	0	0	No	2023	Corrosion of household plumbing systems; erosion of natural deposits	
0 samples out of ten collected were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3 ppm	0	0.071	No	2023	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing	
0 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.							

## Definition Table

AL = Action Level	MRDL= Maximum Residual Disinfectant Level	Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking
MCL = Maximum Contaminant Level	ND = Non-detect	
NTU = Nephelometric Turbidity Units	ppm = parts per million, or milligrams per liter (mg/L)	
MCLG = Maximum Contaminant Level Goal	ppb = parts per billion, or micrograms per liter (ug/L)	
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 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 residual disinfectant level allowed.		
Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.		
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.		
Nitrate: 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.		
Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones.		
Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also know as dental fluorosis, may include brown staining and/or pitting of the teeth, occurs only in developing teeth before they erupt from the gums.		

## Definition Table

Lead: Infants and children who drink water containing lead in excess of the action level of 15.5 ppb could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink water over many years could develop kidneys problems or high blood pressure.	
Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level of 1350 ppb 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.	
Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	
Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, New Concord's highest recorded turbidity result for 2023 was 0.29 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.	
Total Organic Carbon (TOC): TOC has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products including trihalomethanes (THM) and haloacetic acids (HAA's). Drinking water containing these byproducts in the excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous systems effects and may lead to an increased risk of getting cancer.	
THMs (Total Trihalomethanes): Some people who drink water containing trihalomethane 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.	
Haloacetic Acids (HAA): Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.	