

# VILLAGE OF NEW CONCORD

## 2017 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 2017. 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. **The Village of New Concord has an Ohio EPA unconditional license to operate our water system.**

### 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 is 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 February of 2015. 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 line with Western Guernsey Water System. During 2017, New Concord did not use this connection to provide water to residents. This connection is normally used for emergencies only. This report does not contain information on the water quality received from Western Guernsey, but a copy of their consumer confidence report can be obtained by contacting them at (740) 432-7298.

### What are 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 amount 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 radiological**. Over this period of time, samples were collected for a total of 59 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.

### **Source Water Information**

The Village of New Concord's public water system uses surface water from a reservoir that is filled with water drawn from Fox Creek. 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 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. The Village of New Concord has a backup emergency connection with the Western Guernsey. 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. This connection was not used during the 2016 calendar year.

### **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 5 NTU at any time. The Village of New Concord's water system highest recorded result for 2017 was 0.19 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 95.5%. The Village monitors turbidity continuously and reports levels for every 15 minute period.

### **Algae Toxins in Drinking Water**

In 2016 our laboratory met the requirements of the Ohio EPA for Total Microcystin analysis on drinking water samples by Ohio EPA Total (Extracellular and Intracellular) Microcystins- ADDA by ELISA Analytical Methodology. Microcystin toxin is the most common blue green algae toxin. With the help of the Ohio EPA, we tested for trace levels of algal toxins in 2015, 2016 & 2017. The newest Ohio EPA regulations on algal toxins levels for drinking water and in 2017 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. Low 90th percentile results over more than a decade have qualified us for reduced testing. In 2016 our 90th percentile was 12 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>.

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

Public participation and comment is 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 drinking water, you may contact Charlotte A. Colley, Village Administrator, at (740) 826-7671.

### **BACKFLOW**

Backflow can affect our most important resource-our drinking water! Backflow is the abnormal backward flow of water from your water line back into other fixtures in your building and quite possibly back into the water main. Under normal conditions, the village water mains are pressurized and backflow will not occur. However, during a period of high demand, such as a main break or fire, it is possible for backflow to take place, as the village pressure at that time is greatly reduced. The reason this is a matter of concern is that in many businesses and industries, and even in people's own homes, there are connections made to the village water lines that feed service sinks, irrigation systems, and pools, systems filled with chemicals, and many others. If the chemicals/contaminants from these systems do backflow, it is possible for this water that now contains bacteria, chemicals, or even sewage, to reach another fixture in your home or even possibly affect your neighbors' water supply. Drinking, cooking, washing, and bathing, using the contaminated water has caused chemical burns, corrosion of pipes, illness, and even, in the worst cases, death, depending on the substance that has been pulled back into the village main. It is the property owner's responsibility to make sure that these potentially harmful connections to village water are either removed or that the proper backflow device be installed. Once installed, it must be tested every 12 months by a plumber who is certified to test backflow devices, and the results of this test are sent to the Health and Water Departments.

**Here are some simple things you can do to help us protect your water:**

- Never leave a hose end in a swimming pool, sink, bucket, or sump crock, or any area of standing water, where soapy or chemically contaminated water could be siphoned back through the hose into the water supply.
- Never use spray attachments for fertilizer or pesticides that directly connect to a hose unless protected by a backflow device.
- Make sure to install hose bib vacuum breakers on outdoor spigots (available at your local hardware store!)
- Install an approved backflow device on all irrigation systems to prevent the entrance of lawn chemicals and other undesirable substances through the submerged irrigation heads.

**Homeowners:**

Please call the water department if any of the following hazards are present on your property:

- A swimming pool/hot tub with automatic fill from Village pressure
- An underground irrigation system that is connected to your Village water service
- An additional source of water, such as
  - A private well for drinking, irrigation or other purposes
  - Pond water for irrigation or watering

**Business & Industry:**

- Are there any connections of Village water to equipment or piping which could contain non-potable water? They should either be removed or properly protected with a backflow device approved by the Water Department.
- Is the Village water connected to a system containing pumps that could possibly overcome Village pressure and cause backflow?

If you feel you may have a hazard present on your property, or would like more information on backflow, please call the Water Department at 740-826-7617. We can schedule an appointment with you for a field survey on your property. During the survey, we can determine what measures need to be taken, if any, against the hazards present. Together, we can help ensure that you and your neighbors are properly protected from a backflow incident.

OH6001711		NEW CONCORD PWS						
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2017	2.4	1.1 - 2.4	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2017	32.6	6 – 45.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	64.5	21.8 – 98.1	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
Fluoride	2017	1.2	0.797 – 1.2	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	1.42	0.41 – 1.42	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lead and Copper	Collection Date	90th Percentile	# of Samples Over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contamination
Copper	2016	0.164	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	12	1	0	15	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Turbidity (NTU)								
Turbidity %	2017	0.19	0.02 – 0.19	NA	TT	NTU	N	Soil Runoff

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 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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

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.

TT: Treatment technique: A required process intended to reduce the level of a contaminant in drinking water