

# CITY OF NELSONVILLE

## DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2015

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The Nelsonville Public Water Supply has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

### SOURCE WATER INFORMATION

The Nelsonville Public Water Supply obtains its source water from three wells that are located near the Hocking River north of the water treatment plant. These wells draw water from the Hocking River Aquifer.

The approximate average daily production for this reporting period was 734,000 gallons per day. The design flow of the plant is 1,410,000 gallons per day which places production at 52% of the water plants maximum capacity.

This water system serves approximately 9,850 residents in Nelsonville and the Village of Buchtel.

Ohio EPA conducted a study of Nelsonville's source water supply of well water to identify potential contaminant sources and provide guidance on how to protect the drinking water source. According to this study, the aquifer (water rich zone) that supplies water to the Nelsonville water system has a high susceptibility to contamination. This determination is based on the following:

- the lack of a protective layer of clay or shale overlying the aquifer,
- a shallow depth (less than 10 feet below ground surface) of the aquifer,
- the presence of significant potential contaminant sources in the protection area,
- the presence of manmade contaminants in treated water.

This susceptibility rating means that under currently existing conditions, the likelihood that the aquifer may become contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures such as the recycling of used oil and proper disposal of pesticides, herbicides, paints, and other hazardous materials. Reporting of hazardous material spills should be made to your water department or Ohio EPA. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling 753-1314.

### WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

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.

Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- B. 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;
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- D. 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;
- E. 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, the U.S. Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish similar limits for contaminants in bottled water which must provide the same level of protection for public health.

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 contaminants and potential health effects can be obtained by calling the EPA's 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 Nelsonville water system 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 1-800-426-4791 or online at <http://www.epa.gov/safewater/lead>.

### **WHO NEEDS TO TAKE SPECIAL PRECAUTIONS?**

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 infection. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency / Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### **ABOUT YOUR DRINKING WATER**

The Environmental Protection Agency requires regular sampling to ensure drinking water safety. The Nelsonville public water supply conducted sampling for bacteria, inorganic, volatile organic, nitrate, disinfection, and disinfection byproduct contaminants during this report period. The Ohio Environmental Protection Agency requires monitoring for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

The table within this report shows information on those contaminants found in the Nelsonville water supply.

The Nelsonville water supply had a MCL violation for Trihalomethanes (TTHM's) during the fourth quarter (October, November and December) of 2015. 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. The Nelsonville water supply took the following steps to correct this violation and prevent future violations from occurring: A written public notice was distributed to all consumers of the Nelsonville water supply to inform you of the violation. The amount of disinfectant applied to the water was reduced. Management of finished water storage tank levels was modified to increase the turnover rate and reduce the age of the water in storage. Flushing of dead end water mains was initiated.

The Nelsonville water supply returned to compliance with the TTHM MCL in the first quarter (January, February, and March) of monitoring in 2016.

We have a current, unconditional Ohio EPA license to operate our public water system. This means that the appropriate Ohio EPA fees have been paid and that there are no ongoing violations or conditions that need to be met by our water system.

### **HOW DO I PARTICIPATE IN DECISIONS CONCERNING MY DRINKING WATER?**

Public participation and comment are encouraged at regular meetings of the Nelsonville City Council. Meetings are on the second and fourth Monday of each month in the City Council room located at 211 Lake Hope Drive in Nelsonville.

For more information on your drinking water contact Ron Riley, Sr. at (740) 753-1314.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Bacteriological</b>							
Total Coliform Bacteria (TC)	0	1	1	0 - 1	NO	2012	Naturally present in the environment
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.06	NA	NO	2011	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.94	0.32 - 1.09	NO	2015	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.49	NA	NA	2015	Runoff from fertilizer use; Leaching from septic tanks; Sewage: Erosion of natural deposits
Lead (ppb)	0	AL = 15	< 5.00	NA	NO	2015	Corrosion of household plumbing; Erosion of natural deposits Zero out of 20 samples was found to have lead levels in excess of the lead action level of 15 ppb
Copper (ppm)	1.3	AL = 1.3	0.35	NA	NO	2015	Corrosion of household plumbing; Erosion of natural deposits Zero out of 20 samples was found to have copper levels in excess of the copper action level of 1.3 mg/l
Selenium (ppb)	50	50	8.2	NA	NO	2011	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDL= 4	MRDL= 4	1.19	0.82 - 0.94	NO	2015	Water additive used to control microbes
<b>Volatile Organic Contaminants</b>							
Haloacetic Acids (HAA5) (ppb)	NA	60	15.3	6.7 - 22.6	NO	2015	By-product of drinking water chlorination
TTHMs (ppb)	NA	80	83.3	24.3 - 122.0	YES	2015	By-product of drinking water chlorination

#### Definitions of Terms Contained Within This Report

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

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 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 Residual Disinfectant Level Goal (MRDLG): The level of 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.

Maximum Residual Disinfectant 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 contaminants.

NA: Not applicable.

Parts per Billion (ppb) or Micrograms per Liter (ug/l): This is a unit of measure for a contaminant. A part per billion corresponds to one second in 31.7 years.

Parts per Million (PPM) or Milligrams per Liter (mg/l): This is a unit of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

TTHM's: Total Trihalomethanes

"<" Symbol: A symbol which means less than. A result of < 5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.