



PWS # OH8000412

Village of Richwood 2014 Drinking Water Consumer Confidence Report

The Village of Richwood has an unconditional license to operate a water plant.

Introduction

The Village of Richwood 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. Public participation and comments are encouraged at regular Village Council meetings, which meet the second and fourth Mondays of each month at the Administration Building at 153 N. Franklin Street. For more information on your drinking water, contact Monte Asher, Village Administrator at (740) 943-3315 during business hours.

Source Water Information

The Village of Richwood receives its drinking water from two wells located west of the North Union High School on North Franklin Street. Both of these wells are considered ground water sources with required treatment prior to being used for drinking. The water treatment plant currently operates as an iron removal plant and has the capacity to treat 374,000 gallons per day.

What are sources of contamination to drinking water?

The sources of drinking water (both tap water and bottled water) includes 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.



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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 must provide the same 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 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. 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available for the

Safe Drinking Water Hotline (800) 426-4791).

About your drinking water

The EPA requires sampling to ensure drinking water safety. The Village of Richwood Water Department conducted sampling for bacteria, inorganic, radiological, and volatile organic contaminants. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Lead Education Information

"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 Richwood 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 Water Hotline at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.**"



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Drinking Water Source Assessment

This assessment indicates that the Village of Richwood's source drinking water has a high susceptibility to contamination due to:

- a presence of a relatively thin protective layer of clay/shale/other overlying the aquifer,
- shallow depth (less than 30 feet below ground surface) of the aquifer,
- no evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities, and
- presence of significant, potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures.

Listed below is information on those contaminants that were found in the Richwood drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Violations	Sample Year	Typical Source on Contaminants	Health Effects Language
Inorganic Contaminants							
Barium (ppm)	2 mg/l	2 mg/l	0.0628 ppm	0	2013	Discharge from drilling waste; Discharge of metal refineries; Erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Fluoride (ppm)	4 mg/l	4 mg/l	1.23 ppm	0	2013	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	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 known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.



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Other Contaminants	MCLG	MCL	Level Found	Violations	Sample Year	Typical Source on Contaminants	Health Effects Language
Copper (ppm) *	1.3 mg/l	1.3 mg/l	0.213	0	2012	Corrosion of household plumbing; Erosion of natural deposits, Leaching from wood preservatives	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.
Lead (ppb) *	0	15 ug/l	<2.0	0	2012	Corrosion of household plumbing; Erosion of natural deposits.	Infants and children who drink water containing lead in excess of the action level 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.
Radiological							
Alpha, total (pCi/l)	0	15 pCi/l	6.2	0	2010	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined Radium 226 & 228	5 pCi/l	5 pCi/l	1.2	0	2010	Erosion of natural deposits.	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Bacteriological							
Total Coliform (TC)	0	5.0% of Monthly Samples Are positive	Negative (-)	0	2014	Naturally present in the environment	Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Volatile Organic Contaminants							
Total Trihalomethane, TTHMs (µg/L)	N/A	80 ug/l	12.6-29.4	0	2014	By-product of drinking water chlorination.	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.
Haloacetic Acids, HAA (µg/L)	N/A	60 ug/l	<6.0 – 6.9	0	2014	By-product of drinking water disinfection.	Some people who drink water containing haloacetic acids in excess of the MC over many yrs may have an increased risk of getting cancer.



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Appendix (Key)

AL:	Action Level
MCL:	Maximum Contaminant Level
MCLG:	Maximum Contaminant Level Goal
MFL:	million fibers per liter
Mrem/year:	millirems per year (a measure of radiation absorbed by the body)
MRDL:	Maximum Residual Disinfectant Level
MRDLG:	Maximum Residual Disinfectant Level Goal
NTU:	Nephelometric Turbidity Units
pCi/L:	picocuries per liter (a measure of radioactivity)
mg/L:	milligrams per liter; or ppm, parts per million
ug/L:	micrograms per liter; or ppb, parts per billion
ng/L:	nanograms per liter, or ppt, parts per trillion
ppq:	parts per quadrillion; or picograms per liter
TT:	Treatment Technique