



**Northwestern Water &
Sewer District**

2014 Water Quality Report

Otterbein Portage Valley

Otterbein Portage Valley and Northwestern Water and Sewer District have prepared the following report to provide information to you, the consumer, on the quality of our drinking water.

The District will notify you immediately if there is any reason for concern about the water.

We have a current, unconditional license to operate our water system.

Source of Otterbein's Water

Our Otterbein Portage Valley is supplied drinking water as ground water from two, 8-in wells, located on the property. These wells are located approximately 1630 feet south of our north boundary, State Route 582. The east well is approximately 300 feet west of Pemberville Road and the west well is approximately 800 feet west of Pemberville Road. Both are 300 feet from our Water Treatment Plant, northeast and northwest respectively. Each well is approximately 180 feet deep, and the water is pumped from a depth of 47 feet.

All of our water flows through our Water Softening System, treated by our chlorinator and stored in a 25,000-gallon fiberglass tank. From there, it is alternatively pumped by two high-speed pumps into two 528-gallon steel

pneumatic tanks. From there it is pressurized & maintained between 45-62 psi as it is delivered into the distribution system for your use.

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 **Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791**.

The source of drinking water and bottled water includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive materials, and can pick up substances from the presence of animals or human activity.

Contaminants

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. At risk individuals 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 microbiological contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.

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 chemicals contaminants*, including synthetic and volatile organic chemicals, which are byproducts 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.

Nitrates in drinking water at levels above 10 ppm are a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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.

[Lead in Drinking Water](#)

“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 City of Bowling Green 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 levels in your home’s water, you may wish to have your water tested.

Although there is no detectable lead in our drinking water as it leaves the treatment plant, by the time it reaches your tap, lead levels may increase as a result of materials used in your home’s plumbing. Infants and young children are typically more vulnerable to lead in drinking water than the general population. Additional information is available from the **Safe Drinking Water Hotline (1-800-426-4791** or at <http://epa.ohio.gov/ddagw/dwbasics.aspx>

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. It's important to remember that the presence of certain contaminants does not necessarily indicate that the water poses a health risk.

From the Ohio EPA

We received a Drinking Water Assessment Report for Otterbein-Portage Valley, which provided a map of the protection area of our source water, aquifer and wells; the potential contaminant sources within the area and how susceptible our drinking water is to contamination. This report is based on available information and the on-site potential contaminant source inventory that the Ohio EPA staff had conducted at our facility. This report may be posted on Ohio EPA's Source Water Protection website and may be available for viewing if you pass the security test at <http://www.epa.state.oh.us/ddagw/pdu/swap.html>, which will take a few days. We do have our copy of the report including maps, which we could have available for you to view, from the Environmental Services Office, as listed below.

From the Assessment Report it has been determined that the aquifer that supplies the drinking water to Otterbein-Portage Valley has a high susceptibility to contamination because:

The wells are located in a sensitive Karst area;

The wells are open between approximately 50 and 180 feet in the fractured limestone and the depth of the water is less than 25 feet below the ground surface;

Potential contaminant sources exist within the protected area.

This does not mean that the aquifer will become contaminated, only that under certain conditions ground water could become impacted by potential contaminant sources.

Ohio's potential karst regions are carbonate aquifers that are covered by less than 25 feet of glacial material and typically exhibit surficial karst features, such as sinkholes.

Future contamination may be avoided as we implement and continue with protective measures, some of which are mentioned in the Protective Strategies Checklist we received with the report. More information is available by contacting Mike Coyle (Environmental Services Director) you may call 419-833-7000.

Public Participation

Public participation and comment are encouraged at the regular monthly Resident Council Meetings of Otterbein Portage Valley. Questions about the water system may be addressed at those times. In 2014, meetings are scheduled to be held on the 1st Tuesday of every month at 12:30pm.

MIKE COYLE
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The EPA requires regular sampling to ensure drinking water safety. Otterbein Portage Valley conducts sampling for these contaminants: Hardness, Sodium, Bacteria (Total Coliform & E Coli), Inorganic Chemicals, Nitrate, Radiologicals (RA-226, RA-228, Alpha), Lead & Copper, Synthetic Organic Chemicals, Total Chlorine, Haloacetic Acids (HAA5), and Total Trihalomethanes (TTHM); as scheduled by EPA. 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, is from our last scheduled test and may be more than one year old, as indicated.

Through constant research and development, of the use and treatment of our water, more is required of us to protect the sources we have, and additional testing becomes necessary. The Ohio EPA requires these samples to be taken, some at varying times, daily, weekly, monthly, annually and/or every 3 or more years, from the treatment plant and/or distribution system, monitoring the treatment of our drinking water. Otterbein Portage Valley may take some of these samples more often than required to more accurately monitor the treatment of our drinking water. Some of these samples include hardness, sodium, total and free chlorine residuals and total coliform bacteria.

Listed below is information on those contaminants, which were detected, in Otterbein Portage Valley drinking water, during 2014, or as of the last scheduled test.

2014 Water Quality Data							
NORTHWESTERN WATER & SEWER DISTRICT DATA							
OTTERBEIN PORTAGE VALLEY RETIREMENT CENTER							
Lead and Copper							
Contaminant (Units)	Collection Date	90th Percentile	Action Level	# of Samples Over AL	MCLG	Violation	Likely Source of Contamination
Copper (ppm)	6/12/2013	0.289	1.3	0 sites over action level	1.3	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead (ppb)	6/12/2013	13	15	0 sites over action level	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Inorganic Contaminants							
Contaminant (Units)	Collection Date	Highest Level Detected	MCLG	MCL	Range of Levels Detected	Violation	Likely Source of Contamination
Barium (ppm)	6/3/2013	0.027	2	2	.027 - .027	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	6/3/2013	0.76	4	4	.76 - .76	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Disinfectants and Disinfection By-Products							
Contaminant (Units)	Violation Y/N	Sample Year	MCL	Highest Level Detected	Range of Levels Detected	MCLG	Likely Source of Contamination
Total Trihalomethanes - TTHM (ppb)	No	2014	80	15	15.3 - 15.3	No goal for the total	By-product of drinking water Disinfection.
Haloacetic Acids (HAA5) (ppb)	No	2014	60	5	5.3 - 5.3	No goal for the total	
Total Chlorine (ppm)	No	2014	MRDL 4.0	1.3	1.2 - 1.3	MRDLG 4.0	Water additive used to control microbes

Data presented in this table is from the most recent monitoring done in compliance with regulations.	
Key To Table	
AL=Action Level	ppm = parts per million, or milligrams per liter
MCL= Maximum Contaminant Level	ppb = parts per billion, or micrograms per liter
MCLG= Maximum Contaminant Level Goal	TT = Treatment Technique
MRDL=Maximum Residual Disinfectant Level	NTU = Nephelometric Turbidity Units
MRDLG=Maximum Residual Disinfectant Level Goal	NR = Not regulated
< = A symbol that means less than.	NA = Not Available

Definitions

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

Action Level Goal (ALG): The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Maximum Contaminant Level: The “Maximum Allowed” (MCL) is 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.

Maximum Contaminant Level Goal: The “Goal” (MCLG) is 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 disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

NTU: A unit of measure to determine the concentration of particles in the water that affect clarity.

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

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

Treatment Technique (TT): A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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