

VILLAGE OF BRADNER

DRINKING WATER REPORT

2016

The Village of Bradner 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. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of our water is the best that it can possibly be. The Village of Bradner will be applying for grants in 2016 and 2018 for water upgrades. Some examples of future projects:

North Main St. Phase 4 Waterline Upgrade Estimated \$170,000

South East St. Phase 1, Water Line Upgrade, Estimated \$125,000

If you have any questions about this report or concerning your water quality, please contact John Linkey at 419-288-2773 between 7:30 a.m. – 4:00 p.m. Monday through Friday. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Mondays of each month at 7:00 p.m. at the Village of Bradner town hall located at 130 N. Main St. The following is a list of Board of Public Affairs members:

President, James B. Smith

Member, Matthew Ruble

Member, Rhonda Conley

Source Water Information

The Village of Bradner receives its drinking water from five wells that have been designated as a ground water source. Wells two and three are located at the municipal building (better known as the 'Light Plant'). These wells were abandoned and plugged in June of 2016. Wells four, five, six, seven and eight are located behind the water tower at 236 Caldwell. Well one is also located at the Light Plant, however this well has been abandoned and plugged as well.

The Village of Bradner has received the Drinking Water Source Assessment Report completed by Ohio EPA. The Ohio EPA has determined that the aquifer that supplies drinking water to the Village of Bradner lies in a potential karst region. Ohio's potential karst regions are carbonate aquifers that are covered by less than 25 feet of glacial material and can exhibit surficial karst features such as sinkholes. The aquifer at the Bradner well field is covered by approximately 4 to 10 feet of medium-permeability material, which provides minimal protection from contamination. Depth to water in this aquifer is approximately 2 – 15 feet below the ground surface. This assessment indicates that the Village of Bradner's source of drinking water has a **high susceptibility to contamination**, because of:

- Presence of a relatively thin protective layer of soil overlying the aquifer
- Shallow depth (approximately 4-10 feet below ground surface) of the aquifer
- Presence of significant potential contaminate sources near the protection area.
- And the historical presence of manmade contaminants in the treated water.

This high susceptibility is also due to the sensitive nature of the aquifer in which the drinking water wells are located and the existing potential contaminant sources identified. Future contamination may be avoided by implementing protective measures. If you are interested in your water quality and would like to help develop a management plan, please call (419) 288-2773, leave your name and telephone number.

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.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations, which limit the amounts 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 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 Bradner conducted sampling for bacteria, inorganic (2016), radiological (2016), volatile organic chemicals (2016), synthetic organic chemicals (2016), nitrate (2016), nitrite (2013), lead (2016) and copper (2016) contaminant sampling. Samples were collected and tested for a total of 84 different contaminants most of which were not detected in the Village of Bradner water supply. 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 more than one year old.

Listed below is information on those contaminants that were found in the Village of Bradner drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
INORGANIC CONTAMINANTS							
FLUORIDE (ppm)	4	4	0.126	N/A	NO	2016	EROSION OF NATURAL DEPOSITS
BARIUM (ppm)	2	2	0.060	N/A	NO	2016	DISCHARGE OF DRILLING WASTES, EROSION OF NATURAL DEPOSITS
NITRATES (ppm)	10	10	1.80		NO	2016	RUNOFF FROM FERTILIZER USE, EROSION OF NATURAL DEPOSITS
NICKEL (ppb)	0	NR	13	N/A	NO	2016	UNREGULATED CONTAMINANT
LEAD (ppb)	0	15	< 2.0	N/A	NO	2016	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS, EROSION OF NATURAL DEPOSITS
	ZERO OUT OF TEN SAMPLES WERE FOUND TO HAVE LEAD LEVELS IN EXCESS OF THE ACTION LEVEL OF 15 ppb.						
COPPER (ppm)	1.3	1.3	0.210	N/A	NO	2016	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS, EROSION OF NATURAL DEPOSITS, LEACHING FROM WOOD PRESERVATIVES
	ZERO OUT OF TEN SAMPLES WERE FOUND TO HAVE COPPER LEVELS IN EXCESS OF THE ACTION LEVEL OF 1.3 ppm.						
RADIOLOGICAL CONTAMINANTS							
ALPHA, GROSS (pCi/L)	0	15	4.57	N/A	No	2016	EROSION OF NATUARAL DEPOSITS

Contaminant (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Sources of Contaminants
Volatile Organic Contaminants							
XYLENES (ppb)	10,000	10,000	0.514	<0.5-1.5	NO	2016	DISCHARGE FROM CHEMICAL FACTORIES; DISCHARGE FROM PETROLEUM FACTORIES
BROMODICHLOROMETHANE (ppb)	0	NR	3.48	<0.5-8.2	NO	2016	BY-PRODUCT OF DRINKING WATER CHLORINATION
BROMOFORM (ppb)	0	NR	0.815	<0.5-1.5	NO	2016	BY-PRODUCT OF DRINKING WATER CHLORINATION
CHLOROFORM (ppb)	0	NR	3.35	<0.5-9.9	NO	2016	BY-PRODUCT OF DRINKING WATER CHLORINATION
DIBROMOCHLOROMETHANE (ppb)	0	NR	3.20	<0.5-5.9	NO	2016	BY-PRODUCT OF DRINKING WATER CHLORINATION
Contaminant (Units)	MRDL G	MRDL	Level Found	Range of Detections	Violation	Sample Year	Typical Sources of Contaminants
Disinfectants and Disinfection By-Products							
TOTAL TRIHALOMETHANES TTHMs (ppb)	0	80	21.8	17.7-21.8	NO	2016	BYPRODUCT OF DRINKING WATER CHLORINATION
HALOACETIC ACIDS HAA5 (ppb)	0	60	< 6.0	N/A	NO	2016	BY-PRODUCT OF DRINKING WATER CHLORINATION
TOTAL CHLORINE (ppm)	4	4	0.96	0.81-1.34	NO	2016	WATER ADDITIVE USED TO CONTROL MICROBES

Nitrate in drinking water at levels above 10 mg/l is a health risk for infants 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 heavy rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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 Bradner Water Department 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 (1-800-426-4791) or <http://www.epa.gov/safewater/lead>.

In 2016, the Village of Bradner had a current, unconditioned license to operate our water system.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of the Village of Bradner Board of Public Affairs, which meets the first and third Monday of each month, at 7:00 p.m., at the Village of Bradner town hall, located at 130 N. Main St.

For more information on your drinking water or to report any problems, contact John Linkey at (419) 288-2773, Monday through Friday, between 7:30a.m. - 4:00 p.m.

A reminder to check your sewer clean out lid, please repair broken or damaged lids. Inflow from broken lids can lead to higher operating costs for the Sanitary Sewer System.

Sump pumps are not permitted to pump into the Sanitary Sewer System. Sump pumps are to be pumped to storm tiles only. If you have any questions please call 419-288-2773.

Village of Bradner
130 N. Main St. Box 599
Bradner, OH 43406

Definitions of some terms contained within this report.

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 level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

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. Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Volatile Organic Compounds (VOCs) are compounds composed primarily of carbon and hydrogen. VOCs also contain chlorine, fluorine, and or bromine. They are predominantly used as solvents, degreasers, cleaning solutions, dry cleaning fluids, and components of pesticides and plastics.

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

The “<” 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.

Picocuries per Liter (pCi/L): A common measurement of radioactivity

NR: not regulated