2017 Water Quality Report for the City of Bridgman

This report covers the drinking water quality for the City of Bridgman for the calendar year 2017. This information is a snapshot of the quality of the water that we provided to you in 2017. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from Lake Michigan. The State has completed an assessment of our source water and has determined it to be moderately susceptible to contaminants. A copy of this assessment is available at City Hall for your viewing.

- **Contaminants and their presence in water:** 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 **EPA's Safe Drinking Water Hotline (800-426-4791)**.

- **Vulnerability of sub-populations:** 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 systems disorders, some elderly, and infants can be particularly at risk from infections. 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 (800-426-4791).

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from Lake Michigan. 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:
- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
- **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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 provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2017. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- 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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- N/A: Not applicable ND: not detectable at testing limit ppb: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter pCi/l: picocuries per liter (a measure of radioactivity). T.T.: TREATMENT TECHNIQUE
- Action Level: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
- MRDL OR MAXIMUM RESIDUAL DISINFECTION LEVEL: means 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 contaminates.
- MRDLG OR MAXIMUM RESIDUAL DISINFECTION LEVEL GOAL: MEANS THE LEVEL OF A DRINKING WATER DISINFECTANT BELOW WHICH THERE IS NO KNOWN OR EXPECTED HEALTH RISK.

Regulated Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Yes / No	Typical Source of Contaminant
Barium (ppm)	2	2	.02	3/26/12	NO	Erosion of natural deposits
Fluoride (ppm)	4	4	.53	5/30/17	NO	Additive to prevent tooth decay
TURBIDITY	**T.T.=** 1NTU **– T.T** =% <0.5		.10	**% OF SAMPLES THAT MET LIMITS** 100%	NO	SOIL RUN-OFF
NITRATE(ppm)	**10**	10	0.5	2/10/16	NO	Erosion of natural deposits
		RUNNING ANNUAL AVERAGE	**RANGE**			
TOTAL(ppb) TRIHALOMETHANES	100	48	33-58 PPB	2017	NO	BY-PRODUCT OF DRINKING WATER DISINFECTION
HALOACETIC ACIDS(ppb)	60	17	15-21 PPB	2017	NO	BY-PRODUCT OF DRINKING WATER DISINFECTION
	MRDL	MRDLG				
CHLORINE (ppm)	4	4	1.7	1.3-2.1	MONTHLY	NO	Water additive used to control microbes
Total Organic Carbon	Treatment Technique Removal Ratio >1.0 or =1.0		5.66 See footnote 1	QUARTERLY	NO	Naturally present in the environment
Radioactive Contaminant	MCL	Detection Limit	Result			
Combined radium (pCi/L)	5	.68 at 95% confidence level	.57	8/7/12	NO	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant ***			**Level Detected**	**Sample Date**	**Typical Source of Contaminant**	
Sodium (ppm)			1.1	5/30/17	Erosion of natural deposits	
Contaminant Subject to AL	**Action Level**		**90% of Samples ≤ This Level**	**Sample Date**	**Number of Samples Above AL**	**Typical Source of Contaminant**
Lead (ppb)	15		1	9/15/15	0	Corrosion of household plumbing systems See footnote #2
Copper (ppb)	1300		470	9/15/15	0	Corrosion of household plumbing systems

1 "The Total Organic Carbon (TOC) was measured quarterly and because the level was low, there is no requirement for TOC removal."

2 "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 Bridgman 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 or at http://www.epa.gov/safewater/lead."

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at City Hall. We invite public participation in decisions that affect drinking water quality. City Council meetings are the first and third Monday's of the month at 6:30 p.m. For more information about your water, or the contents of this report, contact Tim Kading, City of Bridgman Water Supt. at 269-465-5407. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.