### Michigan Bessemer

Water Quality Report **2017** 

### City of Bessemer's Water Usage

Summer Usage (May to October): 29 million gallons

Winer Usage: (November to April): 26 million gallons

### Is My Water Safe?

Last year, as in years in the past, our water met all federal and state drinking water health standards. This report is designed to provide you with a snapshot of where your water comes from, what is in it, and how it compares to standards from the state and federal government. We are committed to serving high quality, safe water to our water users.



This Water tank used to be at Bluff Valley Park. It was decommissioned in 1940 when the reservoir carved into the Bluff was finished.

### From Where Does My Water Originate?

The supply comes from ground water wells at the Black River well field located north of town between Stone Road and the Black River. This well field consists of three (3) drilled wells. In its effort to supply you with the safest and

### Tell Me More About Our Water Supply

The City of Bessemer has two water tanks. One is carved inside the Bluff at Bluff Valley Park and the other is on the top of Tilden Hill.

A Wellhead Protection Plan for this well field has been approved by the Michigan Department of Environmental Quality.



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### Water Quality Data

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.

The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. 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.

### 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.
- Maximum Residual Disinfectant Level (MRDL): 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 contaminants.
- Maximum Residual Disinfectant Goal (MRDG): means the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contaminants
- 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/I: picocuries per liter (a measure of radioactivity).

Action level: The concentration of a contaminant which, if exceeded, triggers other requirements that a water system must follow.

Regulated	MCL	MCGL	Level	Sample	Violation	Typical Source of Contaminant					
Contaminant			Detected	Date	Yes/No						
Fluoride (ppm)	4	4	0.13	8/17	No	Erosion of natural deposits					
Cyanide(ppm)	200	200	12	8-17	NO	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.					
Arsenic (ppb)	10	0	ND	8/14	No	Erosion of natural deposits					
Barium (ppb)	2000	2000	110	8/14	No	Erosion of natural deposits					
Chlorine	MRDL	MRDLG	0.47 AVG.		Νο	Water treatment additive for					
(ppm)	4	4	(.36)	Daily		control of microbial contaminants					
Disinfection By-Products – Monitoring in Distribution System Stage 2 Disinfection Byproducts											
TTHMs (ppb) total Trihalomethanes	80	N/A	2.6	8/17	No	By-product of drinking water disinfection					



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### Water Quality Data Cont.

Radioactive	MCL	MCLG						
Contaminant								
Alpha emitters	15		1	11	9/13	No	Erosion of natural deposits	
(pCi/L)	15			.44				
Combined	5			18	11/02	No	Erosion of natural deposits	
Ra226/228	5			. 10	11/02	NO		
Special Monitoring and			Level		Sample	Туріс	Typical Source of Contaminant	
Unregulated Contaminant*		Detected		Date				
Sodium (ppm)			9.1		8/17	Erosion of natural deposits		
Contaminant			90% of			Number of		
Subject to an	Action Level		Samples		Sample	Samples	Typical Source of Contaminant	
Action Level	<		< Thi	is Level	Date	Above AL		
Copper (ppb)	1300		360		9/15	0	Corrosion of household plumbing	
Lead (ppb)	15		<1.0		9/15	0	Corrosion of household plumbing	
Microbial	MCL		MCOL	Number	Violation	Typical Source of Contaminant		
Contaminants				WICGL	Detected	Yes/No		
Total Coliform	1 positive monthly sample						Naturally present in the	
Bacteria	(Positive in > 5% of samples		0	1**	No	environment		

\* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

\*\* Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliform were found in 1 sample, in October. Subsequent testing has shown the system is clear of coliform bacteria.

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Picture from our current Water and Sewer Project. When the project is completed we will have replaced over 16,000 linear feet of water main and 40 hydrants.

### Why Are There Contaminants in My 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 the potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over 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 animals or 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 storm water 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 storm water runoff, and septic systems.

### Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. 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).



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### More Information on Lead

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 Bessemer 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 1-800-426-4791or at http://water.epa.gov/drink/info/lead/index.cfm.



### 2017 through 2019 Water and Sewer Project

This Water Main was replaced during this current Water and Sewer Project. As you can tell from the photo, Water and Sewer Mains are very important infrastructure to keep maintaining and replacing as needed, although we tend not to think about it since we don't see it every day. This Water and Sewer project will be wrapped up in 2019 and covers many parts of the city. Contact City Hall for more information.

If you are near construction, please put your garbage out as normal and the workers will see that it's addressed.

#### **Did You Know**

An American home can waste, on average, more than 11,000 gallons of water every year due to running toilets, dripping faucets, and other household leaks? Nationwide, more than 1 trillion gallons of water leak from U.S. homes each year.

### Where Can I Find More Information?

This report will not be automatically mailed to individual utility customers of the City of Bessemer; however, a copy of this report may be obtained at City Hall, 411 S. Sophie St., Bessemer, MI 49911, or web site cityofbessemer.org

For more information contact Neal Nelson at the Dept. of Public Works garage (667-0453).

For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.