

2017 Annual Drinking Water Quality Report

For the City of Whitefish Water Utility

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to be informed of the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is surface water collected from the Haskill Basin watershed and from Whitefish Lake. A water filtration plant and Whitefish Lake pumping station were completed in November of 2000 at a total cost of over 6.2 million dollars. Financing for the project was a loan from the State Revolving Fund Program administered by the Montana Department of Environmental Quality and Montana Department of Natural Resources and Conservation.

I'm pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact **Neil DeZort, Utility Operations Supervisor at 406-863-2451**. 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 City Council meetings. They are held on the first and third Monday's of each month at 7:10 PM in the City Council chambers located at Second Street and Baker Avenue.

The City of Whitefish routinely monitors for constituents in your drinking water according to Federal and State laws. The test results table on the back shows the results of **all** contaminants **detected** for the period of January 1st to December 31st, 2017. Some of our data in the tables are more than one year old, since certain chemical contaminants are monitored less than once a year. Sample dates for samples from prior years are noted in the table. Our sampling frequency complies with EPA and State drinking water regulations

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

ppm: Parts per million or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

ppb: Parts per billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

NTU: Nephelometric Turbidity Unit - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L: Picocuries per liter - a curie is a unit of radioactivity equivalent to 3.7×10^{10} disintegrations per second. This is approximately the amount of radioactivity in 1 gram of radium and the prefix "pico" means a trillionth.

AL: Action Level - the concentration of a contaminant that if exceeded, triggers treatment or other requirements that a water system must follow.

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

MCL: 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.

MCLG: 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.

MRDL: Maximum Residual Detection Limit - 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.

MRDLG: Maximum Residual Detection Limit Goal - 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 disinfectants to control microbial contaminants.

Cont.: Continuous monitoring – Instruments that monitor for the listed constituent are on-line and continuously monitor and record results.

TEST RESULTS: Contaminants Detected								
Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range Detected	Unit Measurement	MCLG	MCL	Likely Source of Substance
Microbiological Contaminants								
Turbidity	N	Cont.	0.164	All samples met limits	NTU	N/A	TT	Soil runoff, Bacteria, organic material, suspended particles
TOC (Total Organic Carbon)	N	Monthly	1.56	0.47 – 1.56	ppm	N/A	TT	Naturally present in the environment
Inorganic Contaminants								
Barium	N	Jan. 2015	0.12	-	ppm	2	2	Erosion of natural deposits; discharge of drilling wastes
Copper *	N	Aug. 2016	0.24 90 th Percentile	No Sites Above AL	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits;
Lead *	N	Aug. 2016	5 90 th Percentile	No Sites Above AL	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	N	Jan. 2015	0.02	-	ppm	4	4	Erosion of natural deposits; Discharge from factories.
Nitrate (as Nitrogen)	N	Jan.	0.04	-	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks,.
Chloride	N	Jan.	0.9	-	ppm	250	250	Naturally present in the environment
Magnesium	N	Jan.	4	-	ppm	500	500	Naturally present in the environment
Sodium	N	Jan.	0.9	-	ppm	20	20	Naturally present in the environment
Sulfate	N	Jan.	0.1	-	ppm	250	250	Naturally present in the environment
<i>*Lead and Copper Rule Testing: The 1994 Federal Lead & Copper Rule mandates a household testing program for these substances. According to the rule, 90% of the samples from high-risk homes must have levels less than 15 parts per billion for lead and 1.3 parts per million for copper. See Lead information below.</i>								
Synthetic and Volatile Organic Contaminants								
Chlorine	N	Cont.	1.47	0.15 - 1.47	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic Acids [HAA ₅]	N	Each Quarter	57	15 – 57	ppb	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM]	N	Each Quarter	43	17 - 43	ppb	0	80	By-product of drinking water disinfection
Radionuclide Contaminants								
Gross Alpha Particles	N	Jan.	-0.5 +/- 1.1	-	pCi/L	0	15	Erosion of natural deposits of certain minerals that are radioactive
Rad. 226 + Rad. 228	N	Jan.	1.6 +/- 1.1	-	pCi/L	0	5	Erosion of natural deposits

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 Whitefish 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 at <http://www.epa.gov/safewater/lead>.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

All 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).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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. 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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please feel free to call our office if you have any questions or comments.