

# ***2005 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 currently meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact **Greg Acton, Utility Supervisor at 406-863-2460**. 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 80 or more 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 1<sup>st</sup> to December 31<sup>st</sup>, 2005. Except as noted below our sampling frequency complies with the EPA and State of Montana 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.

***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
<b>Microbiological Contaminants</b>								
Turbidity	N	Cont.	0.058	All samples met limits	NTU	N/A	TT	Soil runoff, Bacteria, organic material, suspended particles
<b>Inorganic Contaminants</b>								
Barium	N	2005	0.1	-	ppm	2	2	Discharge of drilling wastes; erosion of natural deposits
Copper	N	Aug. 2004	0.25 90 <sup>th</sup> Percentile	No Sites Above AL	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits;
Lead	N	Aug. 2004	8 90 <sup>th</sup> Percentile	1 of 20 Sites Above AL	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	N	2005	0.02	-	ppm	4	4	Erosion of natural deposits; Discharge from aluminum factories
Nitrate (as Nitrogen)	N	2005	0.02	-	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, erosion of natural deposits
<i><b>*Lead and Copper Rule Testing:</b> The 1994 Federal Lead &amp; 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 0.015 milligrams per liter for lead and 1.3 milligrams per liter for copper</i>								
<b>Volatile Organic Contaminants</b>								
Chlorine	N	Cont.	1.22	0.61-1.22	ppm	MRDLG = 4	MRDL= 4	Water additive used to control microbes
Haloacetic Acids [HAA <sub>5</sub> ]	N*	2005	37	27 - 37	ppb	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM]	N	2005	38	8 - 38	ppb	0	80	By-product of drinking water disinfection

**\* Failure to Monitor 1<sup>st</sup> Qtr. & 2<sup>nd</sup> Qtr. 2005 – Disinfection Byproducts, Haloacetic Acids [HAA<sub>5</sub>]** – Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customer, you have the right to know what happened and what we did to correct the situation. This does not pose a threat to the quality of our water supply.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the period Jan. 1, 2005 to June 30, 2005 we did not perform quarterly sampling for HAA<sub>5</sub>'s and therefore cannot be sure of the level of this contaminant in our drinking water at that time. Some people who drink water that contains haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. We have been monitoring annually and/or semi-annually for HAA<sub>5</sub>'s since 2001 and have never detected levels above the MCL's for this contaminant. The regulations have changed requiring quarterly analysis for HAA<sub>5</sub>'s and we have increased our analysis frequency accordingly.

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 (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 (800-426-4791).

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.