Hamliton Creek Metropolitan District

Water Quality Report
PWSID #159063

The Hamilton Creek Metropolitan District is pleased to present you with our annual Water Quality Report. Consumer concerns for our environment, the air we breathe and the food we eat also extends to the tap water we drink. Most residents of the District are aware of problems with fluoride in the water system covered later in this report. The District is completing the first phase of the connection to a new water source and water meeting all water quality standards will first be utilized this spring. This report provides information from our monitoring for the period January 1 to December 31, 2002 unless otherwise noted.

The Water Quality Report is designed to inform you about the water and services we deliver to you each day. If you have any questions about your water or the information in this report, please contact Bob Polich, Administrator of the Hamilton Creek Metropolitan District at (970) 668-5500 Extension 12. Information can also be obtained from the District web site www.hamiltoncreek.org. A Board of Directors consisting of five elected residents governs the District. The Board holds public meetings quarterly concerning the operations of the District.

General information regarding water sources and drinking water contaminants

Nationwide the sources of drinking water (both tap water and bottled water) include 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.

Before treatment, source water contaminants may include:

Microbial contaminants such as viruses and bacteria that may come from sewage treatment facilities, septic systems, agricultural livestock operations, recreational activities and wildlife.
Inorganic contaminants such as salts and metals, which can occur naturally or result from urban storm 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, urban stormwater runoff, and residential uses.
Organic chemical contaminants including synthetic and volatile organics which are produced as by-products of industrial processes and petroleum productions, and can also come from gas stations, urban stormwater runoff, and septic systems.
Radioactive contaminants that can occur naturally or as the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which provides the same protection for public health.

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. 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 of infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Esta es informacion importante. Si no la pueden leyer, necesitan que alguin se la traducean.

Source of Hamilton Creek Water

The water source during 2002 was two 700-foot deep wells located near Hamilton Creek at 291 Lakeview Circle. Only one well is in use at a time. The wells are located approximately 50 feet apart. The water quality is similar, but slightly different for each well. The water source from late April 2003 forward will be surface water taken from the Creek. The switch in the water source is to reduce the fluoride in the well source that exceeds water quality standards.

Water treatment

Ground water was the source for the tap water in the District during 2002. In accordance with State regulations, the water is chlorinated as a protection against microbial contaminants. A characteristic of deep wells, as utilized by the District, is minerals in the water. While these minerals are not a concern to health, they are factors in the taste of the water, build up on plumbing fixtures and color of the water. The chlorination helps mitigate some of the taste issues with the water.

The switch to surface water requires changes in the treatment and monitoring equipment. Many of the minerals associated with the existing wells are not present in the surface water. However, there are higher treatment standards when using surface water to protect against contaminants. In addition to chlorination, the surface water that will be used in 2003 will be filtered utilizing bag filtration equipment. The final phase of the water repair project will install microfiltration equipment for treatment.

Fluoride in the Water

The Hamilton Creek Metropolitan District water is in violation of the maximum containment level (MCL) of fluoride. This violation level was first detected in 1993 and the water has exceeded the MCL continually since that date. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth. The State of Colorado issued an Enforcement Order against the District in 1997 regarding the MCL violation of fluoride. The District filed a declaratory judgment action in March 1998 in State District Court to clarify if the MCL applied to the District and if costs to take corrective action should be paid prior to payments to the bondholders. A settlement was made with the State of Colorado allowing the District 18 months (plus a 6 month extension if work has started) for the completion of the court action to install a new source of water in the District. In a court ruling issued June 22, 2000 the State District Court ruled the repair to the water system to eliminate the fluoride violation, while expensive, is an operating expense under the Bankruptcy Plan and funding for the repair may be paid prior to payments to the bondholders. The ruling was appealed by the bondholders and eventually sent back to the District Court for additional consideration in a trial held in January 2003. The Court has not issued a decision at this time. Construction was begun in June 2001 to access water directly from Hamilton Creek. In April 2003, the District is completing the first phase of the water repair utilizing water directly from Hamilton Creek. It is anticipated this water, meeting all water standards, will be in use beginning in the spring of 2003.

Water Quality Data and Definitions

The Hamilton Creek Metropolitan District monitors water quality through testing on a continual basis. Most of this testing is for internal operating purposes. Specialized contract laboratories are used to test for contaminants. These laboratories report their findings to the Colorado Department of Public Health and Environment which is the agency monitoring that you are receiving safe water. This report contains testing that was done in 2002. The State permits monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of this data, though representative, are more than one year old. Any regulated contaminants detected in the water, even at very low levels, are listed here. The presence of contaminants does not necessarily indicate that the water poses a health risk.

The report makes use of the following definitions:

MCL or Maximum Contaminant Level. 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.

MCLG or Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL or Maximum Residual Disinfectant Level. 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 or Maximum Residual Disinfectant Level Goal. 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.

ppm or Parts per million. One part per millon corresponds to one minute in two years or a single penny in $10,000.

ppb or Parts per billon. One part per billion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000.

pCi/L or Picocuries per liter. Picocuries per liter is a measure of the radioactivity in water.

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

Table of Detected Contaminants

The state requires 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, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old.

All data is from January 1, 2001 to December 31, 2002 unless otherwise noted

Inorganic Contaminants	Unit	MCL	MCLG	Detected Level	Sample Date	MCL Violation	Likely Source of Contamination
Fluoride	ppm	4	4	A range of 4.93 to 5.0 depending on the source well.	Dec-02	YES	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminium factories
Barium	ppm	2	2	A range from below detection levels to .082 depending on the source well.	Feb-01	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Lead & Copper							
Copper	ppm	AL=1.3	1.3	0.21	2000	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	AL=15	0	2	2000	NO	Corrosion of household plumbing systems; erosion of natural deposits
Radioactive Contaminants							
Beta/proton emitters	pCi/l	4	0	0	Feb-00	NO	Decay of natural and man-made deposits
Alpha emitters	pCi/l	15	0	A range of 0 to 2.3 depending on the source well.	Feb-00	NO	Erosion of natural deposits
Unregulated Contaminats							
Sodium	ppm	Not regulated		A range of 210 to 240 depending on the source well.	Feb-01		
Sulfate	ppm	Not regulated		2.2	Feb-01		

The state has issued our system waivers (testing not required) for dioxin, glyphosate, nitrite, cyanide, and asbestos.