

2005 Annual Drinking Water Quality Report For Dillon Valley District, a Metropolitan District

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Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. For billing information, administrative assistance, permits, tap fees and to attend scheduled public meetings please call Dillon Valley District at 970-468-1848. For water quality information, operations and emergencies please contact Water Solutions, Inc. at 970-262-0217.

General Information About Drinking Water

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. 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 of infections. These people should seek advice about drinking water from their health care providers. For 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.

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. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that 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** that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our Water Sources are:

Lasky Gulch: Surface Water
Straight Creek: Surface Water

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply, you may obtain a copy of the report by visiting www.cdphe.state.co.us/wq/sw/swaphom.html or by contacting Water Solutions, Inc. at 970-262-0217.

Potential sources of contamination in our source water area come from activities at the Eisenhower Tunnel and the Interstate 70 corridor.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It does not mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact Water Solutions, Inc. at 970-262-0217 to learn more about what you can do to help protect your drinking

water sources, any questions about the annual drinking water quality report or to learn more about our system. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Terms and Abbreviations

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- **Parts per million (ppm) or Milligrams per liter (mg/L)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter (µg/L)**- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Parts per quadrillion (ppq) or Picograms per liter (picograms/L)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

- **Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level Goal (MCLG)** - The “Goal” 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.
- **Maximum Contaminant Level (MCL)**- The “Maximum Allowed” 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.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** 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.
- **Maximum Residual Disinfectant Level (MRDL):** 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.
- **Running Annual Average (RAA):** An average of monitoring results for the previous 12 calendar months.



Water Quality Data

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The State of Colorado 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.

This table shows the results of our monitoring for the period of January 1 to December 31, 2005 unless otherwise noted.

Turbidity					
	TT Requirement	Level Found	Violation (Yes or No)	Sample Date	Likely Source of Contamination
Turbidity	Maximum 1.49 NTU for any single measurement	Highest single measurement: 0.24 NTU	No	Date: 5/23/2006	Soil Runoff
	In any month, at least 95% of samples must be less than 0.349 NTU	Lowest monthly percentage of samples meeting TT standard for our technology: 100%	No	Month: N/A	

Lead and Copper

Contaminant	AL	ALG	Units	90 th Percentile	Range	Violation (Yes or No)	Sampling Year	Likely Source of Contamination
Copper	1.3	1.3	ppm	0.7	0.044 to 0.70	No	2005	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	14	BDL to 30	No	2005	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectants

	MCL/MRDL	MCLG/MRDLG	Units	Level Detected & Range	Violation (Yes or No)	Sample Date	Source
Chlorine	4	4	ppm	0.74 to 1.19	No	3 per month	Water additive used to control microbes

Disinfection Byproducts

Contaminant	MCL	MCLG	Units	Average	Range	Highest RAA	Violation (Yes or No)	Sample Date	Likely Source of Contamination
Haloacetic Acids (HAA)	80	0	ppb	15	11.1 to 20.9	15	No	2005	By-product of drinking water disinfection
Total trihalomethanes (TTHM)	60	0	ppb	12	7.4 to 14.9	12	No	2005	By-product of drinking water disinfection

Total Organic Carbon

	Compliance Factor (measurements should not be lower than this factor)	Lowest Running Annual Average (compliance factor)	Running Annual Average Range for the Year (compliance factor)	Violation (Yes or No)	Date/Year	Likely Source of Contamination
Total Organic Carbon (TOC)	1.0	1.0	1.0	No	2005	Naturally present in the environment

Inorganic Contaminants

Contaminant	MCL	MCLG	Units	Level Detected/Range	Violation (Yes or No)	Sample Date	Likely Source of Contamination
Barium	2	2	ppm	0.017	No	9/20/2005	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	4	4	ppm	1.2	No	9/20/2005	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	10	10	ppm	0.1	No	9/20/2005	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate+Nitrite (as Nitrogen)	10	10	ppm	0.1	No	9/20/2006	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ppb	2	No	9/20/2005	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Secondary Contaminants

Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects or aesthetic effects in drinking water. EPA recommends these standards but does not require water systems to comply.

Contaminant	Secondary Standard	MCLG	Units	Level Detected/Range	Violation (Yes or No)	Sample Date	Secondary Standard
Sodium	N/A	N/A	ppm	8	N/A	9/20/2005	10000
Sulfate	250	N/A	ppm	10	N/A	8/30/2001	250

Health Effects Information About the Preceding Tables

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods-of-time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to **lead** in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.



Violations

Dillon Valley District, a Metropolitan District had two violations in the calendar year 2005. The District is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the first quarter of 2005, the District did not monitor or test for total trihalomethanes (TTHM) or haloacetic acids (HAA5), and therefore cannot be sure of the quality of your drinking water during that time. The District samples quarterly for HAA5's and TTHM's and has never received a test result above the MCL but because the District failed to sample it is impossible to determine compliance with the MCL. Possible health effects of some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Possible health effects of some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Currently no alternative water source should be used and no actions by the customers should be taken. The District is following a written monitoring schedule to prevent this from happening in the future. The District is currently not in violation for either analyte and you can contact Water Solutions, Inc. at 970-262-0217 for a more information.