

The Colstrip Water Treatment Plant

1998 Report to Consumers on Water Quality

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Colstrip Water Treatment Plant is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

The Colstrip Water Treatment Plant's drinking water meets or surpasses all federal and state drinking-water standards.

Call us for information about the next opportunity for public participation in decisions about our drinking water. More information is available on the World Wide Web at <http://www.waterdata.com>.

Overview

In 1998 we delivered 329.274 million gallons to our customers for an average daily flow of .902 million gallons.

Water Source

The Montana Power Company draws surface water from the Yellowstone River six miles west of Forsyth, and pipes it to Castle Rock Lake. Our system draws water from Castle Rock Lake and is then treated at The Colstrip Water Treatment Plant.

During 1996, a source-water assessment was completed for The Colstrip Water Treatment Plant. Copies are available from [Montana DEQ, P.O. Box 200901 Helena, MT 59620-0901], or by telephone at [406-444-2544].

An Explanation of the Water-Quality Data Table

This report is based upon tests conducted in the year 1998 by The Colstrip Water Treatment Plant. Terms used in the Water-Quality Table and in other parts of this report are defined here.

Maximum Contaminant Level or 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 Contaminant Level Goal or 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.

The data presented in this report is from the most recent testing done in accordance with regulations.

Key To Table

AL = Action Level MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter

NTU = Nephelometric Turbidity Units mrem/year = millirems per year (a measure of radiation absorbed by the body)

pci/l = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)

ppt = parts per trillion, or nanograms per liter ppb = parts per billion, or micrograms per liter (µg/l)

ppq = parts per quadrillion, or picograms per liter

TT = Treatment Technique

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Inorganic Contaminants								
1 Lead	9/09/97	ppb	AL=15	0	6.00	0 - 6	Corrosion of household plumbing systems; Erosion of natural deposits	NO
2 Nitrate	12/23/98	ppm	10	10	0.13	0 - 0.13	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
3 Nitrite	12/23/98	ppm	1	1	0.13	0 - 0.13	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
4 Copper	9/09/97	ppm	AL=1.3	AL=1.3	0.38	0.02 - 0.38	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	NO

Fluoride	12/23/98	ppm	4	4	1.18	0.32 - 1.18	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	NO
Sulfate	12/23/98	ppm	9,999	9,999	170.00	0 - 170		NO
5 Sodium	11/13/97	ppm	9,999	9,999	47.00	0 - 47		NO
6 Total Dissolved Solids	11/13/97	ppm	Second	9,999	332.00	0 - 332		NO
7 Calcium Carbonate	11/13/97	ppm	9,999	9,999	43.00	0 - 43		NO
Microbiological Contaminants								
Turbidity	12/23/98	NTU	0.5	0	0.41		Soil runoff	NO

Water-Quality Table Footnotes

- 1 This result was obtained in 1997. These samples were taken from 10 different homes in Colstrip. Lead was detected at only 2 of these sites.
- 2 Nitrate was combined with Nitrite a Total Nitrogen
- 3 Nitrate was combined with Nitrite a Total Nitrogen
- 4 This result was obtained in 1997. These samples were taken from 10 different homes in Colstrip.
- 5 This result was obtained in 1997.
- 6 This result was obtained in 1997.
- 7 This result was obtained in 1997.

Although we ran many tests, only the listed substances were found. They are all below the MCL required.

Explanation of Violations

Duration:
Health Effects:
Action Taken:

Although we ran many tests, only the listed substances were found. They are all below the MCL required.

Unregulated Contaminants

The Colstrip Water Treatment Plant did not test for Cryptosporidium.
The Colstrip Water Treatment Plant did not test for Radon

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled 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 potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

(E) Radioactive contaminants, which 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, 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 must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is 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* are available from the Safe Drinking Water Hotline (800-426-4791).

National Primary Drinking Water Regulation Compliance

This report was prepared by Bryan Swan using CCRbuilder and technical assistance provided by the American Water Works Association. For more information, call The Colstrip Water Treatment Plant at 748-5045. Water Quality Data for community water systems throughout the United States is available at www.waterdata.com.

