

# 2010 DRINKING WATER CONSUMER CONFIDENCE REPORT

For Calendar Year 2009

## Rangeview Metropolitan District

Public Water System Identification (PWSID) # CO0103666

Providing water service to the Ridge View Youth Services Campus and the Arapahoe County Fairgrounds

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

We are pleased to present this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water.

We want our valued customers to be informed about their water utility. Rangeview Metropolitan District uses Pure Cycle Corporation for the day to day operation of the water system. If you have questions about this report or concerning the water that we provide to you, or if you want to learn more about what you can do to help protect your drinking water sources, please contact Scott Lehman or Mark Harding, Pure Cycle Corporation, 500 East 8<sup>th</sup> Avenue, Suite 201, Denver CO 80203-3711; by telephone at 303-292-3456; or by Email at [slehman@purecyclewater.com](mailto:slehman@purecyclewater.com). Alternatively, you may mail any questions to Rangeview Metropolitan District, c/o Special District Management Services, 141 Union Blvd., Suite 150, Lakewood CO 80228-1898 for consideration by the District's board of directors or you may contact us about the location and date for the next scheduled board of directors' meeting at which public comment is welcome.

### 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 or at [www.epa.gov/safewater](http://www.epa.gov/safewater) on the Internet.

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, 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 which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that provide similar protection of public health.

## **OUR WATER SOURCES**

Water for our water system comes from two approximately 1,560-foot deep wells into the Arapahoe aquifer of the Denver Basin groundwater formation. These wells are referred to as #A20 and #A13.

## **TERMS & ABBREVIATIONS**

You might be unfamiliar with several terms and abbreviations used in this report. The following definitions are provided to help you better understand these terms and abbreviations:

- ◆ **Action Level (AL):** The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must follow.
- ◆ **Gross Alpha, Including RA, Excluding RN & U:** The gross alpha particle activity compliance value. It includes radium-226, but excludes radon-222 and uranium.
- ◆ **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 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 Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.
- ◆ **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 using disinfectants to control microbial contaminants.
- ◆ **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 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.
- ◆ **Picocuries per liter (pCi/l):** A measure of radioactivity in water.
- ◆ **Running Annual Average (RAA):** An average of monitoring results for the previous 12 calendar months.
- ◆ **Treatment Technique (TT):** A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

## **DETECTED CONTAMINANTS**

Rangeview Metropolitan District routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show all detections found in the period of January 1 to December 31, 2009 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less frequently 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. Therefore, some of our data, though representative, may be more than one year old. The “Range” column in the tables below will show a single value for those contaminants that were sampled only once. Violations, if any, are reported in the next section of this report.

Note that only contaminants that were detected at concentrations greater than their regulatory detection limit appear in this report.

**Microbiological**

Contaminant	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of December, one presence/absence sample returned as positive for total coliform	For systems like ours that collect fewer than 40 samples per month, no more than one positive monthly sample	0	Naturally present in the environment

**Organics and Inorganics**

Contaminant	Collection Date of Highest Value	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	8/20/2009	0.069	0.069	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	8/20/2009	4.9	4.9	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
FLUORIDE	8/20/2009	1.8	1.8	ppm	4.0	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (as N)	8/20/2009	0.13	0.025 ~ 0.13	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate-Nitrite (as N)	6/19/2008	0.024	0.024	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

**Lead and Copper**

Contaminant	Collection Date	90 <sup>TH</sup> Percentile	Unit	AL	Typical Source
COPPER	8/14/2008	0.20	ppm	1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
LEAD	8/14/2008	5.1	ppb	15	Corrosion of household plumbing systems; Erosion of natural deposits

**Disinfection By-Products**

Contaminant	Sample Dates	Average	Range	Highest RAA	Units	MCL	MCLG	Typical Source
Total Trihalomethanes (TTHM)	2008 ~ 2010	5.85	3.54 ~ 8.15	8	ppb	80	footnote <sup>1</sup>	By-product of drinking water chlorination

**Maximum Disinfectant Residual - 2009**

Contaminant	Annual Average	Maximum Quarterly Average	Units	MCL	MCLG	Violation (Yes or No)	Minimum Sample Frequency
Maximum Chlorine Residual	0.88	1.09	ppm	4.0	n/a	No	Monthly

<sup>1</sup> MCLG established for Bromodichloromethane and Bromoform (zero) and for Dibromochloromethane (6 ppb) RMD CCR 2009

Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply. Although there is no drinking water standard for sodium, we are also required to monitor for sodium.

**Secondary Contaminants/Other Monitoring**

Contaminant	Collection Date	Highest Value	Range During 2009	Unit	Secondary Standard
Fluoride	8/20/2009	1.8	1.8	ppm	2.0
Sodium	8/20/2009	80	80	ppm	N/A

**HEALTH INFORMATION ABOUT WATER QUALITY**

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 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 and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 1(800)426-4791.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Our system does not operate under any variances or exemptions granted by the state or EPA that would permit us to exceed any MCL, MRDL, AL or TT.

There are no additional required health effects notices.

**VIOLATIONS**

We constantly monitor for various constituents in the water supply and otherwise operate and maintain the water system in order to meet all regulatory requirements. There were no violations of the Primary Drinking Water Standards during calendar year 2009.

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Please contact us if you have any questions or concerns about the water we provide you.