

**2010 ANNUAL DRINKING WATER QUALITY REPORT  
CLEARFIELD MUNICIPAL AUTHORITY  
PWS ID 6170008**

**INTRODUCTION**

We are pleased to present our Annual Drinking Water Quality Report for the year 2010. *(Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.)* This report is designed to inform you about the quality of water we deliver every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the quality of your water.

Our primary water sources for 2010 were the Montgomery Run Reservoir and the Moose Creek Reservoir and Well No. 3. These sources are supplemented during drought conditions by three additional wells that draw from the Rockwell sandstone formation.

**MONITORING REQUIREMENTS**

The Clearfield Municipal Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The attached table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2010. This table may contain the most recent results from previous years. **We are pleased to report that our drinking water meets all Federal and State requirements.**

The Federal and State regulatory agencies require that our water does not exceed their Maximum Contaminant Levels (MCL's). These MCL's are set at very stringent levels for health effects. To understand the possible effects described for many regulated constituents, a person would have to drink two 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.

The attached table compares those contaminants found to be present in the system's water with the regulatory limit of that substance. If the contaminant exceeds the limit at any time, a violation is said to occur. As you can see by the table, our system had no violations. We are proud that our drinking water meets all Federal and State requirements. We have learned through our ongoing monitoring and testing that some constituents have been detected, but all are below acceptable levels.

**CONTACT INFORMATION**

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 meetings. They are held on the third Tuesday of every month at 4:00 p.m. at the Clearfield Municipal Authority's office located at 107 East Market Street in Clearfield. **If you have any questions about this report or your water utility, please contact Authority Manager, Jeff Williams, at 814-765-9609.**

## HEALTH INFORMATION

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, which 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, which 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 can also come from gas stations, urban stormwater runoff and septic systems.
- 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these 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 1-800-426-4791 or by referring to the website at <http://www.epa.gov/safewater>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 at 1-800-426-4791.

## 2010 Water Quality Report Clearfield Municipal Authority (PWS ID 6170008)

Contaminant Name	Highest Level Allowed (MCL/MRDL/TT/AL)	Treatment Goal (MCLG/MRDLG)	Highest Level Detected by CMA	Range of Detection by CMA	Sources of Contaminants in Drinking Water	Violations By CMA
<b>Microbiological Contaminants</b>						
Turbidity	TT = 0.3 NTU 95% of monthly samples <= 0.3 NTU	n/a	0.60 NTU Lowest monthly % = 95.7%	0.009 - 0.60 NTU	Naturally present in the environment.	None
Chlorine	MRDL = 4 ppm	4 ppm	Lowest entry point residual = 0.2 ppm Distribution system highest monthly avg. = 0.72 ppm	0.2 - 2.4 ppm 0.36 - 0.72 ppm	Drinking water additive to control microbes.	None
<b>Inorganic Contaminants</b>						
Lead	AL = 15 ppb	0 ppb	90 <sup>th</sup> percentile = 7.5 ppb, 3 AL exceedences	< 5 - 46.0 ppb	Corrosion of household plumbing, erosion of natural deposits.	None
Copper	AL = 1.3 ppm	1.3 ppm	90 <sup>th</sup> percentile = 0.085 ppm, no AL exceedences	< 0.005 - 0.529 ppm	Corrosion of household plumbing, erosion of natural deposits.	None
Barium (2009 data)	2 ppm	2 ppm	0.27 ppm	n/a	Erosion of natural deposits, discharge of drilling wastes.	None
Fluoride	2 ppm	2 ppm	1.60 ppm	0.22 - 1.60 ppm	Erosion of natural deposits.	None
<b>Organic Contaminants</b>						
Total Trihalomethanes (TTHMs)	80 ppb	n/a	Highest Running Annual Avg. = 52.4 ppb	44.0 - 64.0 ppb	By-product of drinking water chlorination.	None
Halogenated Acetic Acids (HAAs)	60 ppb	n/a	Highest Running Annual Avg. = 17.3 ppb	9.96 - 27.7 ppb	By-product of drinking water chlorination.	None
<b>Radionuclides</b>						
Combined Radium (2006 data)	5 pCi/L	0 pCi/L	0.48 pCi/L	n/a	Erosion of natural deposits.	None
Gross Alpha (2006 data)	15 pCi/L	0 pCi/L	2.23 pCi/L	n/a	Erosion of natural deposits.	None
Gross Beta (2006 data)	50 pCi/L*	0 pCi/L	2.65 pCi/L	n/a	Decay of natural and man-made deposits.	None

\* EPA considers 50 pCi/L to be the level of concern for beta particles.

### Definitions:

MCL - Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water.

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

MRDL - Maximum Residual Disinfectant Level - The level of a disinfectant allowed in drinking water.

MRDLG - Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected risk to health.

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

TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

ppm - One part per million. Comparable to one milligram per liter (1 mg/L). Corresponds to one minute in two years or a single penny in \$10,000.

ppb - One part per billion. Comparable to one microgram per liter (1ug/L). Corresponds to one minute in 2000 years or a single penny in \$10,000,000.

pCi/L - Picocuries per liter, a measure of the radioactivity in water.

NTU - Nephelometric turbidity unit is a measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

n/a - Not applicable.

In 2009, we were required to test for Cryptosporidium in the Montgomery and Moose Creek Reservoir raw water sources.

Of the thirteen samples collected, one sample had the presence of one oocyst in the Montgomery Reservoir source and one sample had two oocysts in the Moose Creek source.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-use filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.