

# **PARKVILLE WATER DISTRICT**

## **2010 Drinking Water**

### **Consumer Confidence Report**

*Public Water System ID:* CO0133700

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

Parkville Water District is pleased to present to you with our water quality report for the calendar year 2010. At Parkville, our constant goal is to provide you with a safe and dependable supply of drinking water. If you have any questions about this report, or about any other aspect of our operation, please call our General manager, Greg Teter at 486-1449. You may also visit our web-site at [parkvillewater.org](http://parkvillewater.org) for more information

#### **General Information about all 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

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.
- Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 storm water runoff, and septic systems.

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.



### Explanation of Terms and Abbreviations

<u>Term</u>	<u>Abbreviation</u>	<u>Definition</u>
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.
Treatment Technique	TT	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Action Level	AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
Average of Individual Samples	No Abbreviation	The typical value. Mathematically it is the sum of values divided by the number of samples.
Range of Individual Samples	No Abbreviation	The lowest value to the highest value.
Number of Samples	No Abbreviation	The number or count of values.
Gross Alpha, Including RA, Excluding RN & U	No Abbreviation	This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
Microscopic Particulate Analysis	MPA	An analysis of surface water organisms and indicators in water. This analysis can be used to determine performance of a surface water treatment plant or to determine the existence of surface water influence on a ground water well.
Variance and Exemptions	V/E	Department permission not to meet an MCL or a treatment technique under certain conditions.
Parts per million = Milligrams per liter	ppm = mg/L	One part per million corresponds to one minute in two years or a single penny in \$10,000.
Parts per billion = Micrograms per liter	ppb = ug/L	One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
Parts per trillion = Nanograms per liter	ppt = 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 = Picograms per liter	ppq = 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.
Not Applicable	N/A	Not Applicable
Violation	No Abbreviation	A failure to meet a Colorado Primary Drinking Water Regulation.
Formal Enforcement Action	No Abbreviation	An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

## Our Water Source(s)

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 <http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html>, clicking on **Lake County** and selecting **133700; Parkville Wd** or by contacting **Greg Teter** at **719-486-1449**. For general information about Source Water Assessment please visit <http://www.cdphe.state.co.us/wq/sw/swaphom.html>.

Potential sources of contamination in our source water area could include: Active, inactive and abandoned mines and mine waste, pasture land, road activity and road erosion, permitted wastewater facility discharge, and septic systems.

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 **Greg Teter** at **719-486-1449** to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want customers to be informed about the services we provide and the quality water we deliver to you every day.

<b>Parkville's current Water Sources</b>			
<b>Source</b>	<b>Source Type</b>	<b>Water Type</b>	<b>Location</b>
ARKANSAS WELL NO 1	Well	Groundwater	State Hwy 91
ARKANSAS WELL NO 2	Well	Groundwater	State Hwy 91
ARKANSAS WELL NO 3	Well	Groundwater	State Hwy 91
BIG EVANS RESERVOIR	Intake	Surface Water	East 7th St.
ELKHORN WELL	Well	Groundwater	East 7th Street

## Detected Contaminant(s)

Parkville Wd routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2010 unless otherwise noted. 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. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. Any additional information may be found in the final section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Parkville Wd did not detect any contaminants in the last round of monitoring.

<b>Microbiological Contaminants Sampled in the Distribution System</b>								
Analyte Name	Monitoring Period	Results	Number of Samples	MCL	MCLG	MCL Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the MCL (unless specified as short-term)
COLIFORM (TCR)	06/01/2010 to 06/30/2010	1 Positive Sample(s)	12	No More Than 1 Positive Sample Per Period	0	No	Naturally present in the environment	Not a health threat in itself. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. If Coliforms were found in more samples than allowed then this indicates a warning of potential problems
E. COLI	N/A to N/A	1 Positive Sample(s)	N/A	A Routine Sample and a Repeat Sample are Total Coliform Positive, and One is also Fecal Positive/E. Coli Positive	0	No	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems

**Lead and Copper Sampled in the Distribution System**

**If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). 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 lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.**

Analyte Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	AL or TT Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the Action Level (unless specified as short-term)
COPPER	01/01/2008 to 12/31/2010	0.11	20	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

LEAD	01/01/2008 to 12/31/2010	6	20	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
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**Disinfection By Products (TTHMs, HAA5, and Chlorite) Sampled in the Distribution System**

Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the MCL (unless specified as short-term)
TOTAL HALOACETIC ACIDS (HAA5)	2010	17.275	0 - 37.5	8	ppb	60	N/A	No	By-product of drinking water disinfection.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
TTHM	2010	17.375	0 - 31.2	8	ppb	80	N/A	No	Byproduct of drinking water disinfection.	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 systems, and may have an increased risk of getting cancer.

**Turbidity Sampled at the Entry Point to the Distribution System**

Analyte Name	Sample Date	Level Found	TT Requirement	TT Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the TT Level (unless specified as short-term)
TURBIDITY	Date:	Highest single measurement: 0.30 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
TURBIDITY	Month: December, 2010	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff	See Above

**Regulated Contaminants Sampled at the Entry Point to the Distribution System**

Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the MCL (unless specified as short-term)
ANTIMONY, TOTAL	2010	1.2	1.2 - 1.2	1	ppb	6	6	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

BARIUM	2010	0.081	0.081 - 0.081	1	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
CHROMIUM	2010	4.6	4.6 - 4.6	1	ppb	100	100	No	Discharge from steel and pulp mills; Erosion of natural deposits.	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
NITRATE	2010	0.117	0.091 - 0.13	3	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
NITRATE-NITRITE	2010	0.13	0.13 - 0.13	2	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate-nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

**Radionuclides Sampled at the Entry Point to the Distribution System**

Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the MCL (unless specified as short-term)
COMBINED RADIUM (-226 & -228)	2007	0.875	0.8 - 1.1	4	pCi/L	5	0	No	Erosion of natural deposits.	Some people who drink water containing radium -226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.
COMBINED URANIUM	2007	0.65	0 - 1.4	4	ppb	30	0	No	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
GROSS ALPHA, EXCL. RADON & U	2007	1.25	0.5 - 2.5	4	pCi/L	15	0	No	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Secondary Contaminants\*\***

Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	Secondary Standard
MPA WTP RAW AND FINISHED	2010	N/A	1.8 - 1.8	1	Units	N/A

\*\*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.

**Violation(s) and Formal Enforcement Action(s)**

**Violations**

**No Violations to Report**

**Formal Enforcement Actions**

**No Formal Enforcement Actions to Report**

