



This document serves as an amendment to the 2011 Drinking Water Consumer Confidence Report for Calendar Year 2010, published July 1, 2011. Pursuant to Article 9.1.3(d)(4)(vi) of the *Colorado Primary Drinking Water Regulations* (Regulations), systems with detected levels of copper and lead must show the last round of lead and copper sampling in their Consumer Confidence Report (CCR). The Baca Grande Water and Sanitation District (District) met this requirement in their most recent CCR that reported 2010 water quality data. Article 9.1.3(d)(3) of the Regulations requires results of detected contaminants be derived from data collected during the calendar year. The District collected lead and copper samples earlier in the calendar year (before the last round of lead and copper sampling); however this information was not included in the District’s most recent CCR. In the interest of ensuring proper public notification of drinking water quality, the Colorado Department of Public Health and Environment has requested the District send this amendment to its most recent CCR to all customers displaying the District’s lead and copper 90<sup>th</sup> percentile for both the first and second half of 2010.

Lead and Copper									
Contaminant	AL	ALG	Units	90 <sup>th</sup> Percentile	Number of Sites Sampled	Number of Sites over AL	AL Exceeded (Yes or No)	Sample Date/Year	Likely Source of Contamination
Copper	1.3	1.3	ppm	1.645	20	3	Yes	January 1 – June 30, 2010	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
				0.834	28	0	No	July 1 – December 31, 2010	
Lead	15	0	ppb	7	20	1	No	January 1 – June 30, 2010	Corrosion of household plumbing systems; erosion of natural deposits
				4	28	0	No	July 1 – December 31 2010	

The above table shows our system exceeded the action level for copper during the first half of 2010. No exceedances occurred during the second half of 2010.

Three sites exceeded the action level of 1.3 ppm of copper between January 1, 2010 and June 30, 2010. Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains 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.

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.

The District attributes past variations in Lead and Copper sample results and the copper exceedance in the first half of 2010 to the historical practice of feeding treatment chemicals down the well casing. Such practice likely resulted in inconsistent dosing of the water pumped from the well into the potable water distribution system. Over time, District staff improved upon the chemical feed practices and distribution system monitoring for better control resulting in no additional exceedances. As a result of the water system improvements completed in the summer of 2011, the historical practice of feeding treatment chemicals down the well casing has ceased. The chemicals are now introduced into the water as it is pumped from the well to a tank prior to the treated water being pumped into the potable water distribution system.



As a result of recent discussion between the Water Quality Control Division and the District, the District is re-evaluating its corrosion control treatment through a study in order to establish optimal corrosion control treatment. The study will include an evaluation of all of the following corrosion control treatment options, including:

- Alkalinity and pH adjustment,
- Calcium hardness adjustment, and
- Phosphate or silicate based corrosion inhibitor addition

The findings of the study must be submitted to the Division no later than March 31, 2013.

Terms and Abbreviations		
Term	Abbreviation	Definition
Action Level Goal	ALG	The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. The ALG allows for a margin of safety.
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 & Uranium	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.