

# Las Campanas, New Mexico'

## 2010 Water Quality Report

### **Your water meets all state and federal regulations**

Last year the city of Santa Fe water division and Las Campanas conducted more than 500 tests for over 80 drinking water contaminants. This brochure is a snapshot of the quality of the water we provided in 2010. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) standards. We are committed to providing you with the information because we want you to be informed. For more information about your water call 505-629-1133 and ask for Kyle Medders.

### **Special population advisory**

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 from infections. These people should seek advice about drinking water from their health care providers. EPA/Center For Disease Control guidelines on how to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

### **Drinking water sources**

Your water comes from the Buckman Wells, City wells, and the Canyon Road WTP. Source water assessment information may be obtained from the City of Santa Fe. Please contact Michael Gonzalez at 505 955-4201

In 2003 the New Mexico Environment Department (NMED) completed the Source Water Assessment for the City of Santa Fe. This assessment includes a determination of source water protection areas and an inventory of pollution sources within the areas of concern. NMED concluded: "The Susceptibility Analysis of the City of Santa Fe water utility reveals that the utility is well maintained and operated, and the sources of drinking water are generally protected from potential sources of contamination based on an evaluation of the available information. The susceptibility rank of the entire water system is **moderately low**." A copy of the Assessment is available by contacting NMED at 827-7536. The Santa Fe City Council built upon the recommendations in the Source Water Assessment and in early 2005 adopted the "Safe Drinking Water and Source Water Protection" and the "Stormwater Illicit Discharge Control" ordinances which provide additional controls and protections for the City's ground and surface water supplies.

### **Public participation opportunities**

Our Board meets at a time and date to be announced. Please feel free to participate in these meetings. Please call 505-820-2669 for additional information.

### **Contaminants in 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 EPA'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 can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it 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 & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.

### **Water quality monitoring**

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

*Este informe contiene información muy importante sobre el agua potable. Tradúzcalo ó hable con alguien que lo entienda bien*

### **Water quality data**

The table in this report lists all the drinking water contaminants we detected during the 2010 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2010. The state 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. Some of the data, though representative of the water quality, is more than one year old.

## Terms & Abbreviations

- **AL:** Action Level - the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **MCLG:** Maximum Contaminant Level Goal - 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.
- **MCL:** Maximum Contaminant Level - 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.
- **N/A:** Not applicable
- **nd:** Not detectable at testing limit
- **NTU:** Nephelometric Turbidity Units
- **pCi/L:** Picocuries per liter (a measure of radioactivity)
- **ppm:** Parts per million or milligrams per liter – (corresponds to one minute in two years)
- **ppb:** Parts per billion or micrograms per liter – (corresponds to one minute in 2,000 years)
- **TT:** Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water
- **MNR:** Monitoring not required

## Results of voluntary monitoring

In cooperation with Los Alamos National Laboratory (LANL) and the New Mexico Environment Department, the City monitors Buckman Wells 1, 6 and 8 for LANL derived contamination. Samples are analyzed for radiologicals, general inorganics, metals, high explosives and organics. The results indicate detectable levels of radionuclides associated with natural sources. No Laboratory-derived radionuclides were detected in 2008. Repeat sampling since 2001 indicates Laboratory-derived radionuclides are not present in the Buckman Wells 1, 6 and 8. These wells are part of the 13 wells that make-up the Buckman Wellfield. Water from these wells is delivered to the Buckman Tank prior to distribution into the system.

**Educational Statement for Arsenic:** the City of Santa Fe's Drinking water meets the current drinking water standard for arsenic of 50 µg/l. Sampling conducted in 2008 indicated arsenic levels in City of Santa Fe drinking water below the new standard of 10µg/l. While our drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's new standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Uranium:** In 2004 the City detected uranium at the new drinking water standard of 30 µg/l in a single sample. The new standard went into effect on December 8, 2003. This level did not result in a violation of the drinking water standard. A source in the Buckman wellfield contains elevated levels of uranium in sufficient amounts to have caused this result. The City continues to properly manage the well to ensure continued compliance with the new standard. Some people who drink water containing uranium in excess of the MCL (30 ug/L) over many years may have increased risk of getting cancer and kidney toxicity.

**Nitrates:** City of Santa Fe drinking water meets the federal drinking water standard of 10 ppm for nitrates. The City is in compliance with the nitrate standard. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

**Total Trihalomethanes (TTHMs):** TTHMs samples are collected on a yearly basis throughout the distribution system. The formation of TTHM is the result of the reaction of chlorine with organic matter. Las Campanas will be required to monitor this parameter starting in 2012 per the small systems waiver that was granted in 2007.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from material and components associated with service lines and home plumbing. Las Campanas Water Cooperative is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Date	Contaminants	MCLG or MRDLG	MCL, TT or MRDL	Your water	Range Low	Range High	Violation	Source of Contaminant
<b>Disinfectant and disinfectant by-products</b>								
2010	Chlorine (as Cl <sub>2</sub> ) ppm	4	4	0.47	.35	1.10	No	Water additive used to control microbes
2010	TTHMs [Total trihalomethane] (ppb)	80	N/A	0.96	0.3	2.1	NO	By-product of drinking water chlorination
2010	Haloacetic Acids HAA5s (ppb)	60	N/A	0.71	0.3	1.3	NO	By-product of drinking water chlorination
<b>Inorganic contaminants</b>								
2010	Nitrate (measured as nitrogen) ppm	10	10	6.7	1.4	6.7	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2005	Arsenic ppb	0	10	8	ND	8	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
2007	Barium ppb	2	2	0.7	ND	0.7	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2010	Chromium [Total] (ppb)	100	100	7	ND	7	No	Discharge from steel and pulp mills; erosion of natural deposits
2010	Fluoride (ppm)	4	4	0.51	0.18	0.51	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2010	Copper (ppm)	1.3 (AL)	1.3	0.26	0.03 to	0.34	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
2010	Lead (ppb)	15 (AL)	0	.006	ND to 0.007	0.007	No	Corrosion of household plumbing systems; erosion of natural deposits
<b>Microbiological contaminants</b>								
2010	Total coliform (positive samples/month)	0	1	0	0	NA	No	Naturally present in the environment
<b>Radioactive contaminants</b>								
2010	Beta/photon emitters	50	N/A	ND	ND	NA	No	Decay of natural and

	(pCi/l)							man-made deposits
2010	Alpha emitters (pCi/L)	15	0	7.4	ND	7.4	No	Erosion of natural deposits
2010	Combined radium 226/228 (pCi/L)	5	0	ND	ND	NA	No	Erosion of natural deposits
2010	Uranium (ug/L)	30	0	9.6	ND	9.6	No	Erosion of natural deposits