

2011 Consumer Confidence Report

Water System Name: Alta Sierra Mutual Water Company Report Date: May 1, 2012

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2011.

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

Type of water source(s) in use: Wells (Groundwater)

Name & location of source(s): Our water source is a blended supply derived from six gravity driven horizontal wells located within two sites and one electrically powered vertical well. All the wells are located on private property adjacent to Alta Sierra Tract 2, of which we have Riparian water rights.

Drinking Water Source Assessment information: A new Source Water Vulnerability Assessment was completed in December of 2011. Information about the Assessment and the potential sources of contamination to our water wells can be obtained from the Manager. The water distribution system is considered vulnerable to these activities: aging distribution system, pipe corrosion and freezing of homeowner water lines.

Time and place of regularly scheduled board meetings for public participation: Memorial Day and Labor Day Weekends at Alta Sierra, California.

For more information, contact: William Preston Phone: (760) 376-1561

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

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.

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.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, 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 USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	99 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8	8.0	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8	.300	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	11-14-11	7.6	7.3 - 7.9	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	11-14-11	105	100 - 110	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum ppm	11-14-11	.120		1	0.6	Erosion of natural deposits; residue from Some surface water treatment process
Antimony ppb	11-17-05	<6.0		6	20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic ppb	7-8-08	0.11		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production waste
Barium ppm	7-8-08	.038		1	2	Discharge of oil drilling wastes and metal refineries; erosion of natural deposits
Beryllium ppb	11-17-05	<1.0		4	1	Discharge from metal refineries, coal-burning factories, and electrical, aerospace. And defense industries
Cadmium ppb	7-8-08	E.0.02		5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints

Chromium ppb	7-8-08	E 0.08		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper ppm	7-8-08	E .0012		(AL=1.3)	.03	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead ppb	11-17-05	<5.0		(AL=15)	.02	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Mercury ppb (Inorganic)	11-17-05	<0.20		2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel ppb	11-17-05	<10		100	12	Erosion of natural deposits; discharge from metal factories
Nitrate as nitrate ppm (N03)	12-17-11	ND		45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate as nitrogen ppm	11-14-11	ND		1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium ppb	7-8-08	.01		50	30	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Thallium ppb	11-17-05	<1.0		2	0.1	Leaching from ore-processing sites; discharge from electronics, glass and drug factories
Gross Alpha pCi/L	5-22-08	3.5		15	(0)	Erosion of natural Deposits
Perchlorate ppb	5-22-08	<4.0		6	6	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Total Xylenes ppm	11-14-11	<0.50	<0.50 - <0.50	1.750	1.8	Discharge from petroleum and chemical factories; fuel solvent
Total Trihalomethanes ppb	11-14-11	.85	<0.50 - 1.2	80	N/A	By-product of drinking water disinfection
Haloacetic Acids ppb	11-14-11	ND		60	N/A	By-products of drinking water disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color Units	11-14-11	<1.0		15	N/A	Naturally-occurring organic materials
Iron ppb	11-14-11	240		300	N/A	Leaching from natural deposits
Manganese ppb	7-8-08	.0412		50	500	Leaching from natural deposits
Odor--Threshold Units	11-14-11	ND		3	N/A	Naturally-occurring organic materials
Silver ppb	11-17-05	<10		100	N/A	Industrial discharge
Turbidity Units	11-14-11	.54	.30 - .78	5	N/A	Soil runoff
Zinc ppm	11-14-11	.107	.093 - .120	5.0	N/A	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids ppm	11-14-11	165	160 - 170	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance micromhos	11-14-11	245	220 - 270	1600	N/A	Substance that form ions when in water; seawater influence
Chloride ppm	5-13-10	42		500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate ppm	11-14-11	5.2	4.7 - 5.7	500	N/A	Runoff/leaching from natural deposits; industrial influence
Foaming Agents ppb (MBAS)	11-14-11	<.050		500	N/A	Municipal and Industrial waste discharge

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Boron ppm	7-8-08	.0038		1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Trichloropropane ppt (1,2,3-TCP)	5-6-10	<0.50		5	Some people who use water containing 1,2,3-trichloropropane in excess of the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA'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 from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Although our water system was not in violation during 2011 for Lead and Copper. We know from past years Lead has been detected in some of the older cabins. Please read the following AL explanation for Lead, *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 at 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/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).*

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year) 0		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

**Summary Information for Fecal Indicator-Positive Ground Water Source Samples,
Uncorrected Significant Deficiencies, or Ground Water TT**

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
VIOLATION OF GROUND WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique ^(a) (Type of approved filtration technology used)	
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				

Summary Information for Operating Under a Variance or Exemption
