

Armona Community Services District

2011 WATER QUALITY REPORT

A Consumer Confidence Report

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you 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 water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The source of our drinking water comes from two groundwater wells. Well #1 is located on Ada Street. Water from this well is treated to control color, hydrogen sulfides, iron and manganese. This is accomplished by adding chlorine and poly-aluminum-chloride to the well water. This process reduces hydrogen sulfides (odor) and color, and causes small particles in the water to adhere to one another, making them filterable. The water is then filtered through layers of sand and mixed media. As smaller particles are removed, turbidity disappears and clear water emerges. To help reduce color and odor, and as a precaution against bacteria, a chlorine residual is maintained in the storage tanks and distribution system. Well #2 is located near Locust St. This well provides water during periods of peak demand, during a power outage, or for fire suppression or other emergency conditions. Water from this well is higher in color. Customers may notice color in their water during those times that this well must be utilized. Every attempt is made to keep usage from this source at a minimum. However, Well #2 could be called upon at any time to provide all of the water to our town.

Some basic information about drinking water contaminants...

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, 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, that are by-products 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, USEPA and California Department of Health Services (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 must provide the same protection for public health.

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 (1-800-426-4791).

We are pleased to announce that very few of the more than 300 substances we tested for were found in your water. Of those that were detected, all but arsenic were below the levels allowed by federal and state standards. Water from our wells slightly exceeds arsenic limits based on a 4-quarter average.

DEFINITIONS USED IN THIS REPORT

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.

Maximum Contaminant Level Goal (MCLG)

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 and are non-enforceable public health goals.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to public health goals and maximum contaminant level goals as feasible using the best available treatment technology. MCL's are enforceable standards.

Regulatory Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow

Parts per billion (PPB)

A measurement of the concentration of a substance roughly equivalent to one drop in 14,000 gallons or one penny in \$10 million.

Primary Drinking Water Standards (PDWS)

Primary maximum contaminant levels, specific treatment techniques adopted in lieu of primary MCL's, and monitoring and reporting requirements for MCL's that are specified in regulation.

Secondary Drinking Water Standards (SDWS)

MCL's for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS's do not affect the health at MCL levels.

Treatment Technique (TT)

A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Public Health Goals (PHG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. Public health goals are set by the California Environmental Protection Agency.

The Armona Community Services District. (ACSD.) routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables on the following pages show the results of our monitoring for the period of January 1st to December 31st, 2011. . If you have questions about this report or concerns about your water, please contact Office Manager Krystal Richards at the ACSD office at 559-584-4542. The public is also invited to attend regularly scheduled board meetings. These meetings are held at 7:00 pm, the second Tuesday of every month at 11115 "C" Street.

The following tables list all of the drinking water constituents that were detected during the most recent sampling for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (2010)	Number Of Samples Collected	90th percentile level detected	Number of samples exceeding AL	Action Level (AL)	MCLG	Typical source of constituent
Lead (ppb)	10	6.3	NONE	15	.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	10	.071	NONE	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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 materials and components associated with service lines and home plumbing. Armona C.S.D. 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 from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

TABLE 2 - 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 constituent
Sodium (ppm)	1/20/09	90	88-92	NONE	NONE	Generally found in ground and surface water.
Hardness (ppm)	1/20/09	4.2	4.2-4.2	NONE	NONE	Generally found in ground and surface water.

TABLE 3 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL or MRDL	PHG (MCLG)	Typical source of constituent
Gross Alpha particle activity (pCi/L)	2009- Well 1 2009- Well 2	14.5 10.6	12 - 17 6.2 - 15	15 15	0	Erosion of natural deposits
Aluminum (ppb)	1/20/09	520	340-700	1000	600	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic (ppb) (Well #1)	2011	14.25*	12 - 17	10	n/a	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Arsenic (ppb) (Well #2)	2011	11.00*	7 - 15	10	n/a	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Fluoride (ppm)	1/20/09	1.8	1.8-1.8	2	1	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Haloacetic Acids, Total (ppb)	2011	21.2	7 – 34.5	60	n/a	By-product of drinking water chlorination
Trihalomethanes, Total (ppb)	2011	46.9	10.2 – 74	80	n/a	By-product of drinking water chlorination
Chlorine Residual (ppm)	2011	0.96	.08 – 2.96	4.0	4.0	Drinking water disinfectant added for treatment

Recent tests of our drinking water have shown levels of Arsenic slightly above the Maximum Contaminant Level of 10 Parts Per Billion. As a result we are required to drill a new well, treat the water, or both. ACSD has applied for funding of up to \$6.5 million dollars, and has drilled a test well. Once the new production well is complete, a determination will be made as to what type of treatment will be required for new and existing water sources.

** Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.*

TABLE 4 – 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 constituent
Aluminum (ppb)	1/20/09	520	340-700	200	n/a	Erosion of natural deposits: residual from some surface water treatment processes
Turbidity (NTU)	1/20/09	2.16	0.42-3.9	5.0	n/a	Soil runoff
Color (Units) Prior to Treatment	2009	37.5	35 - 40	15	n/a	Naturally-occurring organic materials
Iron (ppb)	1/20/09	295	260-330	300	n/a	Leaching from natural deposits; industrial wastes
Specific Conductance (uhmos/cm2)	10/20/10	415	400 - 430	1600	n/a	Substances that form ions when in water; seawater influence
Odor-Threshold (Units)	1/20/09	0.5	0 - 1	3	n/a	Naturally-occurring organic materials

Micro Biological Contaminants (Distribution System Monitoring)

Contaminant	Highest # of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Contamination
Total Coliform	ONE	NONE	1	0	Naturally Present in the Environment

Please Note...

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/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 (800-426-4791).