

# 2012 Consumer Confidence Report

Water System Name: Shiloh Schools District Water System Report Date: 02/11/13

*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, 2012*

**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: Groundwater Well  
Name & location of source(s): Main Well at 6633 Paradise Rd. Modesto, CA  
Drinking Water Assessment information: Performed June, 2002 - See Last Page  
Time and place of regularly scheduled board meetings for public participation: 2nd Tuesday at 6:45 pm at Shiloh School  
For more information, contact: Aaron Velo Phone#: (209) 568-9551

## **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.

**Primary Drinking Water Standards (PDWS):** MCLs 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.

**ND:** not detectable at testing limit

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

**NTU:** nephelometric turbidity unit

**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 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).

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

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

**ppt:** parts per trillion or nanograms per liter (ng/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*, 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 byproducts 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, the U. S. Environmental Protection Agency (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 must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 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	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 (and reporting units)	No. of Samples Collected (Date)	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10 (09/21/11)	<5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	10 (09/21/11)	0.16	0	1.3	0.17	Internal corrosion of household water 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)	08/24/09	81		None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	08/24/09	301		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 (units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Nitrate as NO3 (ppm)	2012	42	41 - 43	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic (ppb)	08/09/12	8		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	08/09/12	0.1		1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Uranium (pCi/l)	08/25/10	16		20	N/A	Erosion of natural deposits
Gross Alpha (pCi/l)	08/25/10	18*		15	N/A	Erosion of natural deposits

**TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (ppm)	08/24/09	486		1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (umho/cm)	08/24/09	714		1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	08/24/09	84		500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	08/24/09	15		500	N/A	Runoff/leaching from natural deposits' industrial wastes
Turbidity (NTU)	08/24/09	0.06		5	N/A	Soil runoff

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

## **Additional General Information On 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 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.

Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

While your drinking water meets the current EPA standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

### **Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements**

Radionuclide (gross alpha) has been detected in the drinking water in 2010 above the maximum allowable limit (MCL). Radionuclide contaminants such as gross alpha may occur naturally in the environment. Therefore, its presence may be related to natural occurrences in the environment. However, medical, veterinary offices and military installations, are potential sources for radionuclide contamination related to the activities of man. Some people who drink water containing gross alpha in excess of the MCL over many years may have an increased risk of getting cancer. State regulations base compliance with the MCL on the four quarter average of gross alpha minus the uranium, as part of the new radionuclide monitoring regulations. Radionuclide testing in 2010 was within acceptable limits and therefore in compliance.

### **Vulnerability Assessment Summary**

A source water assessment was conducted for the main well of the Shiloh Schools District water system in June of 2002. The source is considered most vulnerable to the following activities not associated with any detected contaminants: septic systems - low density. This source is still considered vulnerable to activities located near the drinking water source. For more information regarding the assessment summary, contact: Aaron Velo at (209) 568-9551.