



County of San Luis Obispo—Department of Public Works County Service Area 16—Shandon 2012 Water Quality Report

March 2013

The County's elected representatives and employees are committed to serve the community with pride to enhance the economic, environmental, and social quality of life in San Luis Obispo County.

SHANDON NEWS

A project to connect Shandon's water system to the State Water system is underway and is scheduled to be constructed in Winter 2013-14. This will improve water supply reliability for the community and benefit the groundwater basin overall. County staff will be pursuing several grant options to help pay for these improvements.

This project will involve a change in disinfectant from chlorine to chloramines in your water. More information on this switch of disinfectants will follow in the coming months. Staff will continue to monitor the status of the Shandon Community Plan and any infrastructure improvements included within it.

YOUR WATER SUPPLY

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, 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 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, which 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.

To help ensure tap water is safe to drink, the United States



The Shandon water tank helps maintain water pressure and a steady supply of water in the distribution system. (Picture by Mike Garcia)

Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Your water comes from two groundwater wells, located in Shandon, which tap into the Paso Robles Groundwater Basin. Your water is normally very clean and is simply disinfected with chlorine to help minimize the potential for viral and bacterial contamination.

Source water assessments were completed for both wells in 2002. The wells were considered to be most vulnerable to the following activities: grazing, utility stations-maintenance areas, historic gas stations, and high density septic systems. Other than low levels of nitrate, no contaminants associated with these activities have been detected in the water. A copy of the assessment is available from Kurt Souza, Regional Engineer Santa Barbara District, California Department of Public Health, at (805) 566-1326 or from John Beaton, Water Quality

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TO OUR CUSTOMERS: The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know. *Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.*





These tables list all of the drinking water contaminants that were detected in your water in 2012, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus, some of our data may be more than one year old, but remains representative. For questions about this data, contact John Beaton, Water Quality Manager, at (805) 781-5111 or email JBeaton@co.slo.ca.us.

Contaminant	Where sampled	When sampled	Reporting units	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Potential Source of Contamination
REGULATED CONTAMINANTS WITH PRIMARY MCLs, MRDLs, TTs or NLs								
MICROBIOLOGICAL CONTAMINANTS								
Total Coliform Bacteria	Distribution	2012	Present or absent	> 1 positive sample per month	(0)	----	ND	Naturally present in the environment
Heterotrophic Bacteria	Distribution	2012	CFU/mL	TT = < 500	----	0 - 96	5.5	Naturally present in the environment
INORGANIC CONTAMINANTS								
Arsenic	Wells	5/7/12	ppb	10	0.004	2.2—2.3	2.3	Erosion of natural deposits
Barium	Wells	5/7/12	ppm	1	2	0.110—0.120	0.115	Erosion of natural deposits
Nitrate as NO ₃	Wells	2012	ppm	45	45	10.9—22.1	15.9	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS								
Gross Alpha Particle Activity	Wells	1/18/12	pCi/L	15	----	4.04—5.07	3.04	Erosion of natural deposits
Uranium	Wells	1/18/12	pCi/L	20	----	2.69—3.48	3.09	Erosion of natural deposits
DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCTS								
Bromoform	Distribution	8/6/12	ppb	----	----	----	2.2	By-product of drinking water disinfection
Chlorine	Distribution	2012	ppm	[4.0 as Cl ₂]	[4 as Cl ₂]	1.10 - 1.65	1.31	Drinking water disinfectant added for treatment.
Dibromochloromethane	Distribution	8/6/12	ppb	----	----	----	1.6	By-product of drinking water disinfection
Total Trihalomethanes	Distribution	8/6/12	ppb	80	----	----	3.8	By-product of drinking water disinfection
CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD (AESTHETICS)								
Chloride	Wells	5/7/12	ppm	500	----	63.6—94.1	78.8	Runoff/leaching from natural deposits
Color	Distribution	2012	CU	15	----	ND—2.0	1.1	Naturally occurring organic materials
Odor – Threshold	Distribution	2012	TON	3	----	1.0 - 3.5	1.4	Naturally occurring organic materials
Specific Conductance	Wells	2012	µS/cm	1600	----	585 - 837	686	Runoff/leaching from natural deposits
Turbidity	Distribution	2012	NTU	5	----	0.04 - 0.29	0.13	Soil runoff
Total Dissolved Solids	Wells	2012	ppm	1000	----	380—590	470	Runoff/leaching from natural deposits
Sulfate	Wells	5/7/12	ppm	500	----	77.9 - 108	92.9	Runoff/leaching from natural deposits
UNREGULATED CONTAMINANTS								
Total Alkalinity as CaCO ₃	Wells	5/7/12	ppm	NS	----	98—110	100	Runoff/leaching from natural deposits; seawater influence.
Calcium	Wells	5/7/12	ppm	NS	----	67 - 89	78	Runoff/leaching from natural deposits.
Total Hardness	Wells	5/7/12	ppm	NS	----	240	240	Generally found in ground and surface water; seawater influence.
Magnesium	Wells	5/7/12	ppm	NS	----	5 - 18	12	Runoff/leaching from natural deposits; seawater influence.
pH	Wells	5/7/12	----	NS	----	7.78—7.91	7.85	Runoff/leaching from natural deposits; seawater influence.
Sodium	Wells	5/7/12	ppm	NS	----	46	46	Runoff/leaching from natural deposits; seawater influence.

COPPER IN SHANDON HOMES (2011)							
Contaminant	Reporting units	NL	MCLG	Number of Samples Collected	90th Percentile Level Detected	Number of Sites found above the NL	Potential Source of Contamination
Copper	ppb	1300	300	12	120	0	Internal corrosion of household water plumbing systems

KEY TERMS and ABBREVIATIONS

CU - color units

CFU/mL—number of colony forming units per milliliter of sample

MCL (Maximum Contaminant Level) – The highest level of a contaminant that is allowed in drinking water.

MCLG (Maximum Contaminant Level Goal) and PHG (Public Health Goal) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.

MRDL (Maximum Residual Disinfectant Level) - The level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap.

MRDLG (Maximum Residual Disinfectant Level Goal) - The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

ND (Not Detected) - Contaminant is not detectable at testing limit.

NL (Notification) – The concentration of a contaminant that, if exceeded, triggers treatment or other requirement which a water system must follow.

NS (No Standard) - Contaminant for which there is no established MCL.

NTU - Nephelometric Turbidity Unit

pCi/L - picoCuries per liter (a measure of radioactivity)

ppb - parts per billion, or micrograms per liter (µg/L)

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

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

Secondary Drinking Water Standards – MCLs for contaminants to protect the taste, odor, or appearance of the drinking water.

TON - Threshold Odor Number

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

µS/cm— microSiemens per centimeter (1 S = 1 ohm⁻¹)
A measure of electrical conductance.

DRINKING WATER AND HEALTH RISKS

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 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. The 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).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water typically comes from materials and components associated with service lines and home plumbing.

The County of San Luis Obispo 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 (1-800-425-4791) or at <http://www.epa.gov/safewater/lead>.

OPERATIONS

The Shandon water system is assigned one primary operator who, like all operators who work for the County, is certified by the California Department of Public Health (CDPH). Our operators are knowledgeable professionals who have many years of experience. They are dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Operators conduct weekly inspections of the wells, tank, and distribution system to ensure a safe and reliable water supply. In addition, the CDPH routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

Water Statistics		
Year	Total Production, million gallons	Average Daily Demand, gallons
2010	45.4	124,000
2011	43.4	119,000
2012	48.0	131,000

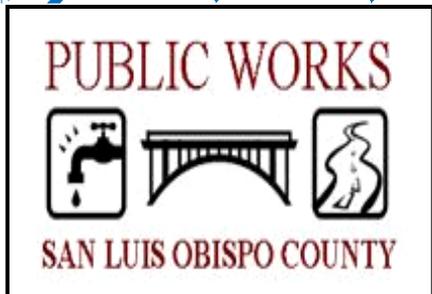
Manager, County of San Luis Obispo Department of Public Works, at (805) 781-5111.

A resource capacity study has been conducted on the Paso Robles Groundwater Basin. Copies can be found online at <http://www.slocounty.ca.gov/planning> or <http://www.slocountywater.org> and in the Shandon Community Library.

Source Water Protection Tips for Consumers

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



Provide public facilities and services that ensure health and safety and enhance quality of life for the community.

Internet

- USEPA Office of Ground Water and Drinking Water
<http://water.epa.gov/drink/index.cfm>
- California Department of Public Health
www.cdph.ca.gov/programs/Pages/DDWEM.aspx
- San Luis Obispo County Public Works Department
www.slocountywater.org

Telephone

John Beaton, SLO County Water Quality Manager, 805-781-5111.

Mailing Address

County of San Luis Obispo
 Department of Public Works
 County Government Center, Room 207
 San Luis Obispo, CA 93408

You can find this report is on the Web at: www.slocountywater.org/ccr/shandon.pdf

COMMUNITY PARTICIPATION

The governing body for Shandon is the San Luis Obispo County Board of Supervisors. The Board meets every Tuesday (except the 5th Tuesday in a month) at 9:00 a.m. in the new Government Center, 1055 Monterey Street, San Luis Obispo. Agendas for Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the County's website at www.slocounty.ca.gov.

The Shandon Community Advisory Council meets the first Wednesday of every month at 7:00 pm in the Clubhouse in the Crawford W. Clarke Park. You can contact the advisory council by email at shandoncouncil@yahoo.com, or at P.O. Box 92, Shandon, 93461. Advisory council recommendations are considered by the Board of Supervisors when they make decisions that affect Shandon, including the water system.

The North County Water Forum/Groundwater Advisory Committee meets periodically to discuss water issues related to the Paso Robles Groundwater basin, which is the source for Shandon's drinking water. Current topics include the implementation of the Groundwater Management Plan and Resource Capacity Study for the basin. All interested parties are invited to attend. To receive notification for upcoming meetings, please contact Courtney Howard, SLO County Water Resources Engineer, at (805) 781-1016, or via email (choward@co.slo.ca.us).

