

Annual Consumer Confidence Report for the Sonoma State University Drinking Water System 2013



This Consumer Confidence Report is designed to inform the campus community about the quality of water that Facilities Management delivers to the Sonoma State University campus every day. Our goal is to consistently provide a safe and dependable supply of drinking water that meets or exceeds federal and state drinking water standards. We want our customers to understand the effort we make to continually improve the water treatment process and protect our water resources. This report shows the quality of water produced at SSU and explains the data that is collected and reported.

Sonoma State University routinely monitors for contaminants in your drinking water according to Federal and State regulations. **The table that follows shows updated monitoring results for the period ending December 31st, 2013.** All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

If you have any questions about this report or concerning your water utility, please contact Craig Dawson, Director of Energy / Environmental Health & Safety, (707) 664-2932.

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

Prepared on March 27, 2014

2013 TEST RESULTS

Microbiological Contaminants							
	<i>Sample dates</i>	<i>Violation</i>	<i>Highest Number of Detections</i>	<i>Number of months in violation</i>	<i>MCL</i>	<i>MCLG</i>	<i>Likely Source of Contamination</i>
Total Coliform Bacteria	2013 Weekly	No	1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment

Inorganic Contaminants									
<i>Contaminant</i>	<i>Sample Date(s)</i>	<i>Violation</i>	<i>Average</i>	<i>Range</i>	<i>Unit</i>	<i>MCL</i>	<i>PHG</i>	<i>MCLG</i>	<i>Likely Source of Contamination</i>
Arsenic	4/3/12	No	2.8	2.2 - 3.5	ppb	50	N/A	N/A	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride	4/3/12	No	0.20	0.19 – 0.21	ppm	2	1	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO ₃)	2013 quarterly	No	17	9 - 27	ppm	45	45	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Regulated Contaminants with Secondary MCL's							
	<i>Sample Date</i>	<i>Level Detected</i>	<i>Range of Detections</i>	<i>Unit</i>	<i>MCL</i>	<i>PHG (MCLG)</i>	<i>Typical Source of Contaminant</i>
Odor	4/3/12	ND	ND	TON	3	none	Naturally occurring organic materials
Total Dissolved Solids	4/3/12	265	250- 280	mg/L	500	none	Naturally occurring organic and inorganic materials; soil runoff
Specific Conductance	4/3/12	380	360 - 400	umho/cm	900	none	Naturally occurring inorganic materials; industrial pollutants
Chloride	4/3/12	17	16 - 18	mg/L	250	none	Naturally occurring
Sulfate	4/3/12	10	7 -12	mg/L	250	none	Naturally occurring

Sodium and Hardness						
	<i>Sample Date</i>	<i>Level Detected</i>	<i>Range of Detections</i>	<i>MCL</i>	<i>PHG (MCLG)</i>	<i>Typical Source of Contaminant</i>
Sodium (ppm)	4/3/12	19	19 - 20	none	none	Generally found in ground and surface water.
Hardness (ppm)	4/3/12	168	143 -172	none	none	Generally found in ground and surface water.

Lead and Copper Distribution Point*							
	Sample Date	Number of Samples	90 th percentile level detected	Number of sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	7/19/11	20	0	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	7/19/11	20	0.66	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**does not include special lead samples in Cabernet Village (see p. 4)*

Disinfectant Byproducts									
Contaminant	Sample Date	Violation	Average	Range	Unit	MCL	PHG	MCLG	Likely Source of Contamination
chloroform	2013	No	0.47	0 – 0.94	ppb	*	N/A	70	Disinfection chemicals and process
bromodichloromethane	2013	No	0.27	0 – 0.54	ppb	*	N/A	0	Disinfection chemicals and process
bromoform	2013	No	1.05	0 – 2.11	ppb	*	N/A	0	Disinfection chemicals and process
dibromochloromethane	2013	No	0.51	0 – 1.01	ppb	*	N/A	60	Disinfection chemicals and process
Total Trihalomethanes	2013	No	2.29	0.94 – 3.65	ppb	80	N/A	N/A	Disinfection chemicals and process

**Maximum Contaminant Level is the running annual average of these detected compounds and others expressed as Total Trihalomethanes and Haloacetic Acids. No Haloacetic acids were detected during 2013.*

Radioactive Contaminants									
Contaminant	Sample Date	Violation	Average	Range	Unit	MCL	PHG	MCLG	Likely Source of Contamination
Alpha Activity, Gross	2006	No	0.78	0.31-0.86	pCi/L	15	N/A	N/A	Erosion of natural deposits
Uranium	2006	No	ND	ND	pCi/L	20	N/A	N/A	Erosion of natural deposits

Explanation for Test Results Table

General

The table shows that the Sonoma State University water system had no violations for microbiological contaminants, primary inorganic chemicals, asbestos, nitrate, volatile organic chemicals, and synthetic organic chemicals.

A small number of contaminants have been detected above the detection limit but still fall below the Maximum Contaminant Level (MCL) established by the Environmental Protection Agency. EPA research has determined that your water is safe to consume where contaminant levels fall below the MCL.

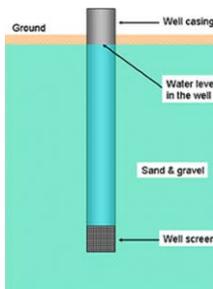
Elevated Lead Levels at Cabernet Village

Routine distribution point lead and copper sampling revealed elevated concentrations of lead in drinking water in Cabernet Village residential buildings. Investigatory samples ranged from non-detect to 75 ppb. An advisory has been issued to residents to flush the tap for 15 - 30 seconds prior to using water for consumption. Sonoma State University Facilities Services is currently evaluating the best option for reducing lead concentrations in drinking water at Cabernet Village.

Monitoring Violations

There were no monitoring violations for the campus water system during 2013.

Campus Water Source



The campus water source is derived from three active wells located at the northwest corner of campus. Two of three wells are drawn from at any time and rotated on a monthly rotational basis. This water is pumped to a chlorination facility that maintains chlorine residual at a concentration above 0.20 parts per million (ppm) as a means of killing target pathogenic microorganisms that may be present. NSF-certified chlorine is currently the only chemical added to SSU's drinking water supply.

SSU Source Water Assessment

A source water assessment was conducted for drinking water wells of the Sonoma State University water system in July, 2002. Well 03 and 04 are considered most vulnerable to the following activity not associated with any detected contaminants: Sewer collection systems. Well 04 is also vulnerable to the following activity not associated with any detected contaminants: Photo processing/printing

No contaminants were detected in Well 03 or 04 during the assessment, however these sources are still considered vulnerable to the identified activities located near the drinking water source. Well 2A was brought on line subsequent to this report and subject to design review and water quality testing as part of the permitting process.

More Information



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; and 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 U.S. Environmental Protection Agency (USEPA) and the State 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 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 US EPA'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).

Terms Used in This Report

AL - Regulatory Action Level –

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

MCL - Maximum Contaminant Level –

The “Maximum Allowed” is 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.

MCLG - Maximum Contaminant Level Goal

The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG’s are set by the U.S. Environmental Protection Agency.

mrem/yr - Millirems per year –

Measure of radiation absorbed by the body.

MFL - Million Fibers per Liter –

Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

NTU - Nephelometric Turbidity Unit –

Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

N/A – Not Applicable –

Does not apply in this context.

ND - Non-Detect –

Laboratory analysis indicates that the constituent is not present above the limit of detection for reporting purposes.

ppb - Parts per billion or Micrograms per liter (ug/L) –

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

ppm - Parts per million or Milligrams per liter (mg/L) –

One part per million corresponds to one minute in two years or a single penny in \$10,000.

ppq - Parts per quadrillion or Picograms per liter (picograms/l) –

One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000

ppt - Parts per trillion or Nanograms per liter (nanograms/l) –

One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

pCi/L - Picocuries per liter –

Picocuries per liter is a measure of the radioactivity in water.

PHG - Public Health Goal –

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.

Primary Drinking Water Standard –

MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

TON - Threshold Odor Number -

The concentration of sample water in odor-free water that creates a detectable odor as averaged by a group of individual testers.

TT - Treatment Technique –

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

Turbidity –

The cloudy appearance of water caused by the presence of suspended or colloidal matter. A measure used to indicate the clarity of water