

# 2011 Consumer Confidence Report

Water System Name: Menlo College Report Date: June 16, 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: Well and purchased water.

Name & location of source(s): Well 03, 1000 El Camino Real, Atherton CA

Purchased water: California Water Service Co.

Drinking Water Source Assessment information: July 2002. Copy attached.

Time and place of regularly scheduled board meetings for public participation: N/A

For more information, contact: Robert Talbott Phone: (650) 543-3714

## 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	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>	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	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	11	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	0.120	0	1.3	0.3	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)				none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)				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, mg/L	9/5/08	0.010		1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Barium, mg/L	9/5/08	0.13		1		Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Copper, mg/L	9/5/08	0.0039		AL=1.3		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nickel, µg/L	9/5/08	5.6				Erosion of natural deposits; discharge from metal factories
Nitrate as NO <sub>3</sub> , mg/L	Quarterly	24.7	20.2-31.7			Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium, µg/L	9/5/08	3.7				Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Total Trihalomethanes (TTHM), µg/L	Quarterly	61.1	43.9-87.9			By-product of drinking water disinfection
Haloacetic Acids, µg/L	Quarterly	14.2	1.0-19.2			Byproduct of drinking water disinfection
Gross Alpha Particle Activity, pCi/L	9/17/09	5.65		15	(0)	Erosion of natural deposits
Combined Radium 226 & 228	6/25/07, 7/2/07	0.64	0.63-0.64	5	(0)	Erosion of natural deposits
Uranium	1/23/08	3.39	7.54-7.66	20	0.43	Erosion of natural deposits

**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
Chloride, mg/L	11/9/11	81		500		Runoff/leaching from natural deposits; seawater influence
Manganese, mg/L	11/9/11	0.022		50		Leaching from natural deposits
Sulfate, mg/L	11/9/11	83		500		Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS), mg/L	9/5/08	780		1000		Runoff/leaching from natural deposits
Turbidity, NTU	11/9/11	0.36		5		Soil runoff
Specific Conductance, µS/cm	11/9/11	1350		1600		Substances that form ions when in water; seawater influence
Zinc, mg/L	11/9/11	0.073		5.0		Runoff/leaching from natural deposits; industrial wastes

\*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).

Nitrate in drinking water at levels above 45 mg/L 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 a 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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

<b>TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES</b>					
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>	0		0	(0)	Human and animal fecal waste
Enterococci	0		TT	n/a	Human and animal fecal waste
Coliphage	0		TT	n/a	Human and animal fecal waste

### For Systems Providing Surface Water as a Source of Drinking Water

Menlo College supplies water blended from the on campus well and purchased from California Water Service Co. Information regarding the quality of purchased water can be found on the California Water Service Co. Consumer Confidence Report. According to the company, water supplied met all of the primary and secondary water quality standards during the reporting period. The document is available on the internet at:

[California Water Service Company 2011 Consumer Confidence Report](#)

## Source Water Assessment Attachment 1

**Drinking Water Source Assessment and Protection (DWSAP) Program****Vulnerability Summary**

District Name LPA San Mateo County District No. 71 County San Mateo  
 System Name MENLO SCHOOL System No. 4100517  
 Source Name WELL 03 Source No. 003 PS Code 4100517-003  
 Completed by chris day Date June, 2002

**THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT**

A source water assessment was conducted for the WELL 03  
 of the MENLO SCHOOL water system in June, 2002

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

- Sewer collection systems
- Wells - Agricultural/ Irrigation
- Automobile Gas stations

**Discussion of Vulnerability**

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. The source is most vulnerable to the following activities that were identified within the recharge area for Well 03:

1. Sewer collections systems - sewer laterals and mains may break or leak. These are potential sources of harmful bacteria and/or household and commercial chemicals.
2. Agricultural/Irrigation wells - water wells in the area may serve as a conduit for contaminants at the surface to enter the groundwater.
3. Fertilizer/Pesticide/Herbicide application - the use of these chemicals may be a source of synthetic organic chemicals.
4. Food processing - may be a source of cleaning chemicals particularly if discharges are not carefully controlled.
5. Parking lots/malls - the presence of many parking spaces in the surrounding area may be a source of automotive chemical leaks and discharges.
6. Automobile gas stations - a possible source of automotive and petroleum-based chemicals.
7. Known contaminant plumes - groundwater contamination has been documented at a facility within the recharge area for the well. While this may present a risk to water quality, the contamination is being carefully tracked and evaluated by Environmental Health staff.
8. Transportation corridors - El Camino Real is a possible source of automotive and other chemical discharges and/or leaks.

The Menlo College public water system conducts routine periodic monitoring of the water quality from well 03 to ensure that the water supply is safe for human consumption. The well head is protected from surface flooding.

**Drinking Water Source Assessment and Protection (DWSAP) Program****Vulnerability Summary**System Name MENLO SCHOOLSystem No. 4100517Source Name WELL 03Source No. 003PS Code 4100517-003

A copy of the complete assessment may be viewed at:

Environmental Health Services  
455 County Center, 4th floor  
Redwood City, CA 94063

You may request a summary of the assessment be sent to you by contacting:

Christopher Day  
Environmental Health Specialist  
650-363-4727  
650-363-7882 (fax)  
cday@co.sanmateo.ca.us