## VANDENBERG VILLAGE COMMUNITY SERVICES DISTRICT CONSUMER CONFIDENCE REPORT FOR YEAR ENDING DECEMBER 31, 2008

The District routinely monitors for constituents in accordance with Federal and State laws. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. THE DISTRICT HAS MET ALL STANDARDS.

**Our water** comes from 3 wells which draw from the "Lompoc Uplands Aquifer." Our wells are located at 702 and 704 Highway 1 about 1/4 mile west of the "Wye" intersection.

In accordance with the State's Drinking Water Source Assessment and Protection (DWSAP) Program, a Drinking Water Source Assessment for all 3 District wells was completed in April 2001. The assessments included: A delineation of the areas around a drinking water source through which contaminants might move and reach that drinking water supply; an inventory of possible contaminating activities (PCAs) that might lead the release of microbiological or chemical contaminants within the delineated area; and a determination of the PCAs to which the drinking water source is most vulnerable. In summary District sources, wells 1B, 3B, and 3A are considered most vulnerable to the following activities **NOT** associated with any detected contaminants: National Pollutant Discharge Elimination System/Waste Discharge Requirements (NPDES/WDR) permitted discharges and pesticide/fertilizer/petroleum storage and transfer areas. It is important to note that no contaminants have been detected. The Drinking Water Source Assessment is the first step in the development of a complete drinking water source protection program.

A copy of the complete assessment may be viewed at:

California Department of Public Health (CDPH)
Drinking Water Field Operations Branch
1180 Eugenia Place, Suite 200
Carpinteria, CA 93013-2000

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

Kurt Souza District Engineer 805-566-1326

## 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 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.
- **MCLG Maximum Contaminant Level 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 U.S. Environmental Protection Agency (USEPA).
- **mfl** Million Fibers per Liter: a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- MRDL Maximum Residual Disinfectant Level
- ND Not detectable at testing limit

## Contaminants that may be present in source water include:

*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.

**NTU** - Nepholometric Turbidity Unit: a measure of the clarity of water. Turbidity in excess of 5NTU is just noticeable to the average person.

pCi/L -: picocuries per liter (a measure of radiation)

- **PDWS Primary Drinking Water Standards**: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **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.
- ppb parts per billion or micrograms per liter (ug/L)
- ppm parts per million or milligrams per liter (mg/L)
- **SDWS Secondary Drinking Water Standards:** 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.

**Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

**In order to ensure that tap water is safe to drink**, USEPA and the state Department of Health Services 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.

**Microbiological Quality monitoring** is required of the VVCSD Distribution system. Required samples are 3 per week. VVCSD samples 4 per week. In 2008, we tested 208 samples; none were found to be positive. The District is in compliance with the Total Coliform Rule.

**Radiological Water Quality** Results of water sample analysis performed to measure radiological constituents: The District is in compliance. The level did not exceed 15 picoCuries per Liter (pCi/L). Results of the most recent tests for Gross Alpha was 1.1 - 1.3 pCi/L for the year 2002. The next radiological testing is due in 2011.

Tables 1, 2, 3, and 4 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper sampled: Sep 2005 Next round of sampling: Aug/Sep 2011	No. of samples collected	90 <sup>th</sup> percentile level detected	No. Sites exceedin g AL	AL	MCL G	Typical Source of Contaminant	
Lead (ppb)	20	5.8	0	15	2	Internal corrosion of household water plumbing systems; erosion of natural deposits; discharges from industrial manufacturers.	
						Internal corrosion of household water plumbing systems; erosion	
Copper (ppm)	20	1.3	0	1.3	0.17	of natural deposits; leaching from wood preservatives.	

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 Contaminant	
Sodium (ppm)	3/12/08	109	120 - 96	none	none	Generally found in ground and surface water	
Hardness (ppm)	3/12/08	350	460 - 210	none	none	Generally found in ground and surface water	

**Note**: Because treated water is blended from different water sources which have different hardness levels, Detected Levels are calculated based on the amount of water pumped from each well during the reporting period. To obtain the grains per gallon (gpg), as used by the water softener industry, divide the hardness level by 17.1. In this case the gpg is 20.5 gpg.

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	PHG (MCLG)	Typical Source of Contaminant		
Arsenic <sup>1</sup> (ppb)	3/12/08	5.02	2.6 – 8.1	10	na - (na)	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
Asbestos (mfl)	3/08/06	ND	System Sample	7	na - (7)	Internal corrosion of asbestos cement water mains; erosion of natural deposits		
Nitrate (as NO <sub>3</sub> ) (ppm)	3/12/08	ND	ND	45	45 - (na)	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Fluoride (ppm)	3/12/08	0.35	0.38 - 0.31	2	1 - (na)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories		

<sup>&</sup>lt;sup>1</sup> USEPA has revised the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. On February 22, 2002 the arsenic in drinking water rule became effective; the date by which systems must comply with the 10 ppb standard was January 23, 2006. The District is in compliance.

Table 4 - Detection of Contaminants with a Secondary Drinking Water Standard							
Chemical or Constituent (and reporting units)	Level Detected	MCL	Typical Source of Contaminant				
Color (units)	<5	15	Naturally occurring organic materials.				
Copper (ppm)	ND	1	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Iron (ppb) after filtration	<100	300	Leaching from natural deposits; industrial wastes				
Manganese (ppb) after filtration	<50	50	Leaching from natural deposits				
Odor (TON -Threshold Odor Number)	1	3	Naturally occurring organic material				
Corrosivity (Aggressive Index)	12 non corrosive	12 non corrosive	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors				
Foaming Agents (MBAS) (ppb)	ND	500	Municipal and industrial waste discharges				
Turbidity - Clarity (ntu)	<0.1	5	Soil Runoff				
Total Dissolved Solids (ppm)	817	1000	Runoff/Leaching from natural deposits				
Specific Conductance (micromhos)	1162	1600	Substances that form ions when in water				
Chloride (ppm)	167	500	Run of/leaching from natural deposits, seawater influence				
Sulfate (ppm)	172	500	Runoff/leaching from natural deposits, industrial wastes				

**Note**: There are no PHG's or MCLG's for constituents with Secondary drinking Water Standards because these are not health based levels, but set on basis of aesthetics.

Disinfection Byproducts, Residuals, and Byproduct Precursors	Date Tested	MCL	(2008) Average	(2008) Range	Major Sources
Total Trihalomethanes (TTHMs) (ppb)	03/12/2008	80	20.1	NA	By-product of drinking water chlorination
Haloacetic acids (HAA5s) (ppb)	08/15/2007	60	ND	NA	By-product of drinking water chlorination
Free Chlorine Residuals (ppm)	4 per week	MRDL 4.0 (as CL2)	0.65	0.2 - 1.0	Drinking water disinfectant added for treatment

**Note**: Due to recent concerns regarding the contaminant MTBE (Methyl Tertiary-Butyl Ether) our wells were sampled in 2005 and **no MTBE** was detected. MTBE is a gasoline additive used to help reduce air pollution that is now polluting some of the country's underground water supply. Since MTBE is still currently being used, there are efforts to pass laws to ban this additive.

The District's "Stage 1 Disinfection Byproduct Rule" monitoring has consistently revealed low levels of Total Trihalomethanes (TTHMs) and Haloacetic acids (HAA5s) and has been granted a waiver to reduce monitoring in the main distribution system to a triennial basis, next testing to be done in 2010.

Tested for 39 **regulated Volatile Organic Compounds**, all 39 non-detectable. Tested for 4 **unregulated Volatile Organic Compounds**, all 4 non-detectable.

(Sampled March 12, 2008; next required sampling is due 2011). Results are available at the District office.

IF YOU HAVE ANY QUESTIONS ABOUT THIS REPORT OR YOUR WATER QUALITY, PLEASE CONTACT:

MARTIN R. DAMWYK

PHONE: 733-2475

EMAIL: ADMINISTRATION@VVCSD.ORG

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. More information about contaminants and potential health effects are available from the Safe Drinking Water Hotline (800-426-4791).

The Board of Directors holds regularly scheduled Board meetings on the first Tuesday of every month at 7:00 P.M. in the District's office conference room at 3757 Constellation Rd. The public is encouraged to attend.

This report may also be viewed online at <a href="http://vvcsd.org">http://vvcsd.org</a>. Large print copies of this report are available upon request from the District office. Please call 733-2475 to have a copy mailed to you.

Information for your water softener:
Hardness = 20.5 gpg
Iron = <100 ppb

