Carpinteria Valley Water District

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Dear Carpinteria Valley Resident,

The Carpinteria Valley Water District is pleased to present you with this 2001 annual Drinking Water Consumer Confidence Report for the Year 2001. Operating under a water supply permit issued by the California Department of Health Services, the Carpinteria Valley Water District supplies water to about 17,800 people at their homes and businesses throughout the Valley. Half of the District's water is surface water that comes from Lake Cachuma, including any water delivered to Lake Cachuma through the State Water Project facilities. To protect the quality of this water source, only light recreation is allowed on Lake Cachuma. The surrounding watershed is also protected. The balance of the District's water comes from groundwater pumped from four wells in the Carpinteria Valley Groundwater Basin. A fifth well, the Headquarters Well, was recently drilled next to the abandoned Santa Ynez Well, and is expected to be in service by the end of this year. Water at the Foothill and El Carro wells is filtered to remove excessive amounts of manganese and iron. Small amounts of chlorine are added at the wells to ensure disinfection.

Lake Cachuma surface water is treated at the City of Santa Barbara's Cater Treatment Plant. After treatment it flows toward the Carpinteria Valley in a distribution system that includes the Ortega Reservoir at the western end of the Valley, and the Carpinteria Reservoir located in the eastern end of the Valley. These open reservoirs met health standards of the day when constructed in the early 1950's. Current water works standards, however, in order to prevent contamination from birds, wind-blown material, and vandalism, do not allow for the construction of uncovered reservoirs containing treated drinking water.

To minimize the problems caused by the lack of reservoir covers, the District takes several precautions. The reservoirs are surrounded with six-foot chain link fences, and are inspected twice a day 365 days per year. Water entering the reservoirs contains chlorine residual, and to ensure disinfection, small amounts of chlorine are added when water leaves the reservoirs. Every year the reservoirs are emptied and cleaned. Should a water quality problem arise due to the open reservoirs, the District is prepared to take remedial operational and maintenance action as set forth in the District's operational and monitoring plan on file with the Department of Health Services.

As part of the new regulation governing disinfection byproducts, the U.S. Environmental Protection Agency (EPA) has developed a new drinking water standard for a group of five Haloacetic acids (HAA5) and lowered the current standard for a group of four Trihalomethanes (TTHM). Water systems must meet these new standards starting in January 2002. Currently, while operating under optimum conditions, the Carpinteria Valley Water District cannot meet the new standard on a consistent basis. To address this, the District has embarked on projects to add a new well, 3 million gallon (MG) storage tank, cover the Carpinteria Reservoir, and, with the Montecito Water District, cover the Ortega Reservoir. Unfortunately, projects of this size take several years to complete and improvements needed to comply with the new regulation will not be completed until late 2003.

Under the new regulation, EPA allows for a two-year extension to comply with the new standard if capital improvements are necessary to meet the new standard. The District applied for and received a two-year extension. Under the extension, the District will still have to meet all of the monitoring requirements and notify the public if the state standard for TTHM is exceeded. In addition, Carpinteria Valley Water District must meet the deadlines in an EPA-developed construction compliance schedule. Construction on the Carpinteria Reservoir Project is scheduled to begin by the end of this year, and completed by the end of 2003. Construction of the 3 MG storage tank is expected to occur in 2003.

The District also remains concerned about the potential for a nitrate problem to evolve in its groundwater. In 1996 the District adopted an AB 3030 Groundwater Management Plan, and with the voluntary cooperation of many growers began a systematic monitoring program of private irrigation wells throughout the District. As a part of this effort, the District identified the potential for improperly abandoned old wells throughout the District to act as conduits for nitrate pollution from shallow to deeper aquifers. The District this year received a $125,000 grant of State funds to begin the job of properly destroying these old abandoned wells in the District as a next step in the implementation of the District's AB 3030 Plan.

Thank you for taking the time to review this report. If you have any questions or concerns please feel free to call Bob McDonald, District Engineer, or myself at the District office at 684-2816.

Sincerely, Charles B. Hamilton, General Manager

July, 2002

Carpinteria Valley Water District
P.O. Box 578
Carpinteria, CA 93014

2001 Annual California Drinking Water Consumer Confidence Repor

En Español
Este folleto le muestra como es que la oficina de la Carpinteria Valley Water District continúa proveyéndolo a usted de un servicio de agua potable y segura. Si usted tiene preguntas acerca del agua del Districto, por favor llame a Norma Cosio, a la oficina de Carpinteria Valley Water District, al teléfono (805) 684-2816, durante las horas de 8:00 am a 5:00 pm

Vital Information on Water Quality for Residents of the Carpinteria Valley

Questions and answers about your drinking water...

Is my drinking water pure?

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. For more information about contaminants and potential health effects call the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Is there a risk to Immuno-compromised persons?

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 at (1-800-426-4791).

How do contaminants get into my water?

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.

What types of contaminants could be found in my drinking water?

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, animal waste, fertilizer and farming operations.

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.

How can I know that my drinking water is safe?

In order to ensure that tap water is safe to drink, USEPA and the California 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.

What about radon in the water?

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level c radon in your air is 4 picocuries per liter of air (pCi L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

Currently there is no MCL for radon in Drinkin water but the District has tested all of its ground water sources and found levels upto 963 pCi/L bu on average 487 pCi/L. A possible future MCL may be set by the EPA as high as 4000 pCi/L or as lo 300 pCi/L.

Definitions

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.

Maximum Contaminant Level (MCLs) 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.

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

Treatment Technique (TT) A required process intended to reduce the level of contaminant in 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 effect taste, odor, or appearance of drinking water. Secondary standards are not based on health effects at MCL levels.

Other Constituents Monitored Some of this information was collected from July 1997 to December 1998 as part of a federal study to evaluate disinfectants and disinfection by-products.

Legend

<	denotes 'less than'
µg/L	micrograms per liter (parts per billion)
mg/L	milligrams per liter (parts per million)
ND	not detected at testing limit
NTU	nephelometric turbidity units
PCi/L	picocuries per liter (a measure of radiation)
µmho/cm	micromhos per centimeter
NA	not analyzed
None	none required

Drinking Water Consumer Confidence Report for the Year 2001

	Substance/(Parameter)	Public Health Goal (MCLG)	Maximum Contaminant Level (MCL)	SURFACE WATER (Cater Treatment Plant) Reporting Value	SURFACE WATER Range Detected	GROUNDWATER (District Wells) Reporting Value	GROUNDWATER Range Detected	Likely Source of Substance
PRIMARY STANDARDS	**Monitored Before Distribution**							
	Turbidity (NTU)	None	TT = 5 NTU TT=Percentage of samples <0.5 NTU	0.02-0.10	0.10 100%	0.1-0.6	0.60	Natural river sediment; soil run-off
	Arsenic (µg/L)	None	50	ND	ND	ND-5.5	2.9	Erosion of natural deposits
	Aluminum (µg/L)	600	1000	13-212	70	ND	ND	Residual from some treatment processes
	Fluoride (mg/L)	1	2	0.38-0.47	0.41	0.14-0.61	0.3	Natural geology
	Nitrate as NO3 (mg/L)	45	45	ND	ND	ND-13	5.4	Natural deposit, fertilizer
	Gross Alpha Particle Activity (pCi/L)	(0)	15	1.6-2.9	1.69	ND-6.7	1.6	Erosion of natural deposits
	Beta particles and photon emitters (pCi/L)	(0)	50	1.6-4.3	2.68	NA	NA	Decay of natural deposits
	Radon 222 (pCi/L)	None	None	ND	ND	190-963	487.0	Decay of naturally occuring radium
	Chromium Hexavalent (µg/L)	2.5	50	ND	ND	ND-1	0.3	Erosion of natural deposits
	Tetrachloroethylene (PCE) (µg/L)	(0)	5	ND	ND	ND	ND	Discharge from dry cleaners
	Monitored in the Distribution System							
	Total Coliform Bacteria	0	< 5% positive	ND	ND	ND	ND	Naturally present in the environment
	Total Trihalomethanes (TTHMs) (µg/L)	NA	100**	NA	NA	49.7-75.1	62.9	By-product of water chlorination
	Chlorine Residual (Free chlorine) (mg/L)	4	4	NA	NA	0.3-1.9	0.9	Used as a disinfectant
LEAD COPPER RULE	**Monitored at the Customer's Tap**	*33 sites sampled.*	*0 samples exceeded action level for copper;*	*0 samples exceeded the action level for lead*				
	Lead (µg/L)	2	15 (AL)	NA	NA	5	5	Corrosion of household water, plumbing
	Copper (µg/L)	0.17	1.3 (AL)	NA	NA	0.05-0.49	0.17	and errosion of natural deposits
SECONDARY STANDARDS	**Monitored Before Distribution**	**Aesthetic Standards Established By the State of California, Department of Health Services*						
	Color (units)	None	15	ND	ND	ND	ND	Naturally occuring organic materials
	Threshold Odor Number at 60 oC	None	3	2-8	4.3	ND-2	1.25	Naturally occuring organic materials
	Aluminum (µg/L)	None	200	13-212	70	ND	ND	Residue from some water treatment processes
	Chloride (mg/L)	None	500	15-19	18	25-56	38.50	Runoff/leaching from natural deposits
	Iron (µg/L)	None	300	ND	ND	ND	ND	Erosion of natural deposits
	Manganese (µg/L)	None	50	ND	ND	ND	20.75	Erosion of natural deposits
	Sulfate (mg/L)	None	500	246-332	284	96-150	126.50	Runoff/leaching from natural deposits
	Specific Conductance (µmhos)	None	1600	769-974	873	850-930	872.50	Substances that form ions in water
	Total Dissolved Solids (mg/L)	None	1000	580-856	685	520-560	540.00	Runoff/leaching from natural deposits
	pH (units)	None	None	7.9-8.2	8.10	6.9-7.5	7.15	Runoff/leaching from natural deposits
	Total Hardness as CaCO3 (mg/L)	None	None	344-436	389	330-380	365.00	Runoff/leaching from natural deposits
	Total Alkalinity as CaCO3 (mg/L)	None	None	171-199	182	290-320	302.50	Runoff/leaching from natural deposits
	Calcium (mg/L)	None	None	91-120	88	91-120	110.25	Runoff/leaching from natural deposits
	Magnesium (mg/L)	None	None	39-85	52	23-27	25.50	Runoff/leaching from natural deposits
	Sodium (mg/L)	None	None	40-64	50	36-79	51.00	Runoff/leaching from natural deposits
	Potassium (mg/L)	None	None	2.0-2.7	2.3	1.2-1.8	1.53	Runoff/leaching from natural deposits
	Methyl Tertiary-Butyl Ether (MTBE) (µg/L)	13	13	ND	ND	ND	ND	Leaking underground tanks; discharge from petroleum or chemical factories
OTHER CONSTITUENTS MONITORED	**Unregulated Constituents**	*(µg/L)- Additional Parameters Analyzed*						
	Haloacetic acids - HAA 5 (µg/L)	None	None	1.0-110	41	24-133	65.49***	
	Haloacetilenitrite - HAN (µg/L)	None	None	1.7-6.7	4.7	NA	NA	
	Chloropicrin - CP (µg/L)	None	None	0.0 - 1.2	0.4	NA	NA	
	Chloral hydrate - CH (µg/L)	None	None	0.0 - 33	7.9	NA	NA	
	Total Organic halides - TOX (µg/L)	None	None	50 - 450	178	NA	NA	
	Chlorate (g/L)	None	None	4.9 - 15	8.9	NA	NA	

** The MCL for TTHMs has been lowered to 80 ppb effective January 1, 2002 *** Represents 2001 levels. Does not meet new 2002 standards of 60 µg/L

General Information

Listed in the table above are substances detected in the District's drinking water. All are below the Maximum Contaminant Level (MCL) except as noted. Not listed are 126 substances which were below the laboratory detection level.

Surface water is all water open to the atmosphere and subject to surface runoff such as lakes, reservoirs and rivers. Lake Cachuma and Gibraltar Reservoir are the City's main surface water supply, which is treated at the William B. Cater Water Treatment Plant. Surface water was 98.5% of the total drinking water production in 1999.

Groundwater is all subsurface water found underground in cracks and spaces in soil, sand and rock. The area where water fills these spaces is the saturated zone, the top of this zone is called the water table. The City draws from three major groundwater basins through five active wells. Groundwater was 1.5% of the total drinking water production in 1999.

For water softener users the City's water has a hardness range of 24 to 33 grains per gallon. One grain per gallon equals 17 milligrams per liter.