2005 Consumer Confidence Report

Water System Name: CITY OF SANGER Report Date: June 30, 2006

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, 2005.

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

Type of water sources used: The City of Sanger supplies potable water from City Wells.

Name & location of source(s):

Drinking Water Source
Assessment information:

Well 2A (Standby), Well 6, Well 7A, Well 8, Well 9, Well 11, and Well 12 are all located within the City of Sanger city limits.

A source water assessment was conducted for Well 2A (Standby), Well 6, Well 7A, Well 8, Well 9, Well 11, and Well 12 in April, 2003. A copy of the complete assessment may be viewed at:

City of Sanger 1700 7th Street Sanger, CA 93657

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

John A. White Public Works Director 559-875-6513

<u>Well 2A</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Photo processing/printing Automobile—Body shops Automobile—Repair shops

Machine shops

Pesticide/fertilizer/petroleum storage & transfer areas

Hospitals

Crops, irrigated

Fertilizer, Pesticide/Herbicide Application

Housing—high density

Parks

Appliance/Electronic Repair Medical/dental offices/clinics Veterinary offices/clinics Apartments and condominiums Office buildings/complexes Schools

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

Discussion of Vulnerability:

The following constituents were detected in the source:

Tetrachloroethylene

Nitrate

Trihalomethanes

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

 $\underline{\text{Well 6}}$ —The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Fertilizer, Pesticide/Herbicide Application

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

Discussion of Vulnerability:

The following constituents were detected in the source: Dibromochloropropane (DBCP)

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

<u>Well 7A</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Pesticide/fertilizer/petroleum storage & transfer areas

Crops, irrigated

Fertilizer, Pesticide/Herbicide Application

Hospitals

Housing-high density

Parks

Apartments and condominiums

Medical/dental offices/clinics

Septic systems—low density

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Wells-Agricultural/Irrigation

<u>Discussion of Vulnerability:</u>

The following constituents were detected in the source:

Tetrachloroethylene

Dibromochloropropane (DBCP)

Gross Alpha

Nitrate

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

<u>Well 8</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Pesticide/fertilizer/petroleum storage & transfer areas

Veterinary offices/clinics

Automobile—Repair shops

Crops, irrigated

Fertilizer, Pesticide/Herbicide Application

Housing-high density

Parks

Septic systems—high density

Apartments and condominiums

Medical/dental offices/clinics

Septic systems—low density

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

<u>Discussion of Vulnerability:</u>

The following constituents were detected in the source:

Nitrate

Nitrite

Gross Alpha

Dibromochloropropane (DBCP)

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

DBCP is a pesticide that was used on vineyards prior to 1979. The $\it City$ has installed granular activated carbon ($\it GAC$) for the removal of DBCP from the water produced by Well 8.

<u>Well 9</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Pesticide/fertilizer/petroleum storage & transfer areas

Fertilizer, Pesticide/Herbicide Application

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

Septic systems—high density

Discussion of Vulnerability:

The following constituents were detected in the source:

Dibromochloropropane (DBCP)

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

DBCP is a pesticide that was used on vineyards prior to 1979. The City has installed granular activated carbon (GAC) for the removal of DBCP from the water produced by Well 9.

<u>Well 11</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Pesticide/fertilizer/petroleum storage & transfer areas

Fertilizer, Pesticide/Herbicide Application

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Septic systems—high density

Discussion of Vulnerability:

The following constituents were detected in the source:

Dibromochloropropane (DBCP)

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

<u>Well 12</u>—The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Fertilizer, Pesticide/Herbicide Application

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

Septic systems—high density Wells-Agricultural/Irrigation Automobile—Gas stations

<u>Discussion of Vulnerability:</u>

The following constituents were detected in the source:

Dibromochloropropane (DBCP)

These constituents were found after running the trigger report from the Water Quality Inquire and from the DHS system files.

Time and place of regularly scheduled City Council meetings for public participation:

First & Third Thursdays of the month at 6 p.m.

For more information, contact:

John A. White, Public Works Director

Phone:

(559) 875-6513

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.

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 affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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)

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

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 (USEPA).

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

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

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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, 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.

In order to ensure that tap water is safe to drink, 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 must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 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 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	C A MADI TA IC	DECL! TO	CLIONITALS T	UE PETER	TTON OF 6	OLIFORNI DAGTERIA
I ABLE 1 -	SAMPLING		SHOWING I	HE DETEC	ITON OF C	OLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MC	L	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) O	0	More than 1 sample in a month with a detection		0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) O	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	- SAMPLIN		S SHOWING	THE DETE	CTION OF	LEAD AND COPPER
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. Sites exceeding	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	31	< 5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	31	<0.1	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.
	TABLE 3	- SAMPLIN	G RESULTS F	OR SODIU	IM AND HA	ARDNESS
Chemical or Constituent (and reporting units)	Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	April 2005	13.3	8-27	none	none	Generally found in ground and surface water
Hardness (ppm)	April 2005	92.0	38-198	none	none	Generally found in ground and surface water

^{*}Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

Chemical or Constituent (and reporting units)	Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha Activity	2004	4.70 pCi/l	.16 - 9.23 pCi/l	15 pCi/l	N/A	Erosion of natural deposits
Nitrate (as nitrate, NO ₃)	2005	18.0 mg/l	3.1 - 39.4 ¹ mg/l	45 mg/l	45 mg/l	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as nitrogen, N)	2005	<400 ug/l	<400 ug/l	1000 ug/l	1000 ug/l	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Dibromochloropropane [DBCP]	2005	.02 ug/l	<.01 -0.11 ug/l	0.2 ug/l	0.0017 ug/l	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Tetrachloroethylene [PCE]	2005	0.71 ug/l	<.5 - 1.8 ug/l	5 ug/l	0.06 ug/l	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreaser)
TTHMs [Total trihalomethanes]	2005	6.46 ug/l	5.7 - 7.0 ug/l	80 ug/l	N/A	By-product of drinking water chlorination
HAA5 [Haloacetic Acids Five]	2005	1.3 ug/l	ND - 1.3 ug/l	60 ug/l	N/A	By-product of drinking water chlorination
Chlorine Residual	2005	.69 mg/l	.6472 mg/l	4.0 mg/l	N/A	Added to drinking water for disinfection
TABLE 5 - DETE	CTION OF	CONTAMI	NANTS WITH	1 A SECON	IDARY DRIN	NKING WATER STANDARD
Chemical or Constituent (and reporting units)	Last Sampled	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride	2005	8.0 mg/l	<2 - 30.6 mg/l	500 mg/l	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductivity	2005	213 umhos	90 - 430 umhos	1,600 umhos	N/A	Substances that form ions when in water; seawater influence
Sulfate	2005	24.3 mg/l	4.8 - 68.9 mg/l	500 mg/l	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	2005	164 mg/l	87 - 315 mg/l	1,000 mg/l	N/A	Runoff/leaching from natural deposits
Turbidity	2005	.15 units	.14 units	5 units	N/A	Soil runoff
	TABLE 6	- DETECT	ION OF UNR	EGULATED	CONTAMI	NANTS
Chemical or Constituent	Last Sampled		Level Detected	Notifica- tion Level	Health Effects Language	
Vanadium	2004		6.7 ug/l	50 ppb	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals	

¹ 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 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 specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Additional General Information On Drinking Water

All 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).

A CONSUMER CONFIDENCE REPORT SHALL BE PREPARED ANNUALLY AND MAILED OR DELIVERED TO EACH CUSTOMER ON OR BEFORE JULY 1^{ST} OF EACH YEAR.