

# 2009 Consumer Confidence Report

Water System Name: CITY OF SANGER

Report Date: June 30, 2010

*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, 2009.*

**Este informe contiene información muy importante sobre su agua potable. 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): Well 2A, Well 6, Well 7A, Well 8, Well 9, Well 11, Well 12, Well 14 and Well 25 are all located within the City of Sanger city limits.

Drinking Water Source Assessment information: A source water assessment was conducted for Well 2A, Well 6, Well 7A, Well 8, Well 9, Well 11, Well 12, Well 14 and Well 25.

A copy of the complete assessment may be viewed at:

City of Sanger  
1700 7<sup>th</sup> 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

Well 2A—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.

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.

Well 7A—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

Discussion of Vulnerability:

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.

Well 8—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

Discussion of Vulnerability:

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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 City has installed granular activated carbon (GAC) for the removal of DBCP from the water produced by Well 8.

Well 9—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.

Well 11—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.

Well 12—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

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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.

Well 14—The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Automobile-Body shops  
 Automobile-Repair shops  
 Junk/scrap/salvage yards  
 Lumber processing and manufacturing  
 Machine shops  
 Septic systems-low density (<1/acre)  
 Wood/pulp/paper processing and mills  
 Automobile-Gas stations  
 Metal plating/finishing/fabricating

Discussion of Vulnerability:

This well has had Dibromochloropropane (DBCP) detected at levels higher than the MCL. There are no PCAs associated with this well that could account for the high DBCP levels.

Well 25— The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Storm Drain Discharge Points  
 Storm Water Detention Facilities  
 Transportation corridors - Road Right-of-ways [herbicide use areas]  
 Wells - Water supply

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.

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.

**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

**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.

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.  
**Variations 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 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

| Microbiological Contaminants<br>(to be completed only if there was a detection of bacteria ) | Highest No. of detections | No. of months in violation | MCL  | MCLG | Typical Source of Bacteria           |
|--|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria  | (In a mo.)<br>1           | 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)<br>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**

(DATE OF MONITORING: SEPTEMBER 2007)

| Lead and Copper<br>(to be completed only if there was a detection of lead or copper in the last sample set) | No. of samples collected | 90 <sup>th</sup> percentile level detected | No. Sites exceeding AL | AL  | MCLG | Typical Source of Contaminant  |
|---|--------------------------|--|------------------------|-----|------|--|
| Lead (ppb)  | 30                       | ND   | 0                      | 15  | 2    | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits. |
| Copper (ppm)  | 30                       | <0.05                                      | 0                      | 1.3 | 0.17 | Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.         |

**TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS**

| Chemical or Constituent<br>(and reporting units) | Last Sampled | Level Detected | Range of Detections | MCL  | PHG<br>(MCLG) | Typical Source of Contaminant               |
|--|--------------|----------------|---------------------|------|---------------|---|
| Sodium (ppm)                                     | May 2008     | 15.0           | 7.8-35              | none | none          | Generally found in ground and surface water |
| Hardness (ppm)                                   | May 2008     | 108.0          | 48-230              | 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.

**TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

| Chemical or Constituent<br>(and reporting units) | Last Sampled | Level Detected | Range of Detections          | MCL      | PHG<br>(MCLG) | Typical Source of Contaminant  |
|--|--------------|----------------|------------------------------|----------|---------------|--|
| Gross Alpha Activity                             | 2007         | 6.0 pCi/l      | 4.0 - 7.9 pCi/l              | 15 pCi/l | N/A           | Erosion of natural deposits  |
| Nitrate (as nitrate, NO <sub>3</sub> )           | 2009         | 14.4 mg/l      | 2.9 - 36.3 <sup>1</sup> mg/l | 45 mg/l  | 45 mg/l       | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits   |
| Dibromochloropropane [DBCP]                      | 2009         | 0.04 ug/l      | <0.01-0.44 <sup>2</sup> 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 |
| Chlorine Residual                                | 2009         | 0.92 mg/l      | 0.33 - 2.20 mg/l             | 4.0 mg/l | N/A           | Added to drinking water for disinfection   |

**TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

| Chemical or Constituent<br>(and reporting units) | Last Sampled | Level Detected | Range of Detections | MCL         | PHG<br>(MCLG) | Typical Source of Contaminant                               |
|--|--------------|----------------|---------------------|-------------|---------------|---|
| Chloride   | 2008         | 7.9 mg/l       | 2.1 - 31.0 mg/l     | 500 mg/l    | N/A           | Runoff/leaching from natural deposits; seawater influence   |
| Specific Conductivity                            | 2008         | 275 umhos      | 130 - 590 umhos     | 1,600 umhos | N/A           | Substances that form ions when in water; seawater influence |
| Sulfate  | 2008         | 22 mg/l        | 5.5-72.0 mg/l       | 500 mg/l    | N/A           | Runoff/leaching from natural deposits; industrial wastes    |
| Total Dissolved Solids (TDS)                     | 2008         | 176 mg/l       | 89 - 360 mg/l       | 1,000 mg/l  | N/A           | Runoff/leaching from natural deposits                       |
| Turbidity  | 2008         | .19 units      | ND - .46 units      | 5 units     | N/A           | Soil runoff   |

**TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS**

| Chemical or Constituent | Last Sampled | Level Detected | Notification 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. |

**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).

<sup>1</sup> **ABOUT NITRATE:** Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

<sup>2</sup> **ABOUT DBCP:** Well No. 7A exceeded the MCL for DBCP during October, November and December 2008. The results from the monitoring conducted in October, November, and December 2008 indicated that the water produced by Well No. 7A exceeded the MCL for DBCP. The City continued to monitor Well No. 7A and after a six month monitoring period the resulting average exceeded the MCL for DBCP resulting in Well No.7A to be taken offline on April 30, 2009. Some people who use water containing DBCP in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

**Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements**

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A CONSUMER CONFIDENCE REPORT SHALL BE PREPARED ANNUALLY AND MAILED OR DELIVERED TO EACH CUSTOMER ON OR BEFORE JULY 1<sup>ST</sup> OF EACH YEAR.

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**For Systems Providing Ground Water as a Source of Drinking Water**  
*(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)*

| <b>TABLE 7 - SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES</b> |                                |                     |                   |                           |                                      |
|--|--------------------------------|---------------------|-------------------|---------------------------|--------------------------------------|
| <b>Microbiological Contaminants</b><br>(complete if fecal-indicator detected)                  | <b>Total No. of Detections</b> | <b>Sample Dates</b> | <b>MCL [MRDL]</b> | <b>PHG (MCLG) [MRDLG]</b> | <b>Typical Source of Contaminant</b> |
| <i>E. coli</i>   | (In the year)<br>0             |                     | 0                 | (0)                       | Human and animal fecal waste         |
| Enterococci  | (In the year)<br>0             |                     | TT                | n/a                       | Human and animal fecal waste         |
| Coliphage  | (In the year)<br>0             |                     | TT                | n/a                       | Human and animal fecal waste         |

**Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Violation of a Ground Water Treatment**

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