

ANNUAL
WATER
QUALITY
REPORT
Water testing performed in 2008



PWS ID#: 1910143

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

Meeting the Challenge

The City of San Fernando is proud to present its 2008 annual water quality report. This edition covers all testing completed from January 1 through December 31, 2008. Staff continue to dedicate themselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you, our customers. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791.

Where Does My Water Come From?

The City of San Fernando, incorporated in 1911, provides water service to an area of approximately 2.42 square miles with an approximate population of 25,000 residents. Annually, the city serves one billion gallons of water to our customers. San Fernando residents are fortunate to have three sources of water: (1) Local groundwater wells that draw water from the Sylmar basin; (2) Imported water from the Metropolitan Water District (MWD), which delivers surface water from the Joseph Jensen Plant; and (3) A connection from the City of Los Angeles distribution system that is used only in extreme emergencies. In 2008, the City of San Fernando received 100 percent of its water supply from local groundwater. No imported water was needed to purchase from MWD in 2008.

Community Participation

You are invited to participate at our City Council meetings and to voice your concerns about your drinking water. The City Council meets every first and third Monday of each month beginning at 6 p.m. at City Hall, 117 Macneil Street, San Fernando, CA.

Source Water Assessment

In August 2002 the California Department of Public Health, Drinking Water Field Operations Branch, Central District, conducted a Drinking Water Source Assessment for the City of San Fernando Water Division. The purpose of the assessment was to determine the vulnerability of our water sources to "possible contaminating activities." The following are the results for wells 2A, 3, 4A, and 7A.

| Source | Vulnerability Associated With Detected Contaminants | Vulnerability Not Associated With Any Detected Contaminants |
|---------|---|---|
| Well 2A | Housing-high density; Parks; Septic systems-high density; Apartments and condominiums | Sewer collection systems |
| Well 3 | Housing-high density; Parks; Septic systems-high density; Apartments and condominiums | Sewer collection systems, Automobile gas stations, Dry cleaners |
| Well 4A | Sewer collection systems; Dry cleaners | None |
| Well 7A | Housing-high density; Septic systems-high density; Apartments and condominiums | Automobile gas stations |

Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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 must provide the same protection for public health. 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.

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 can 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

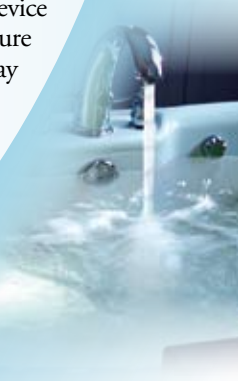
Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Questions?

If you should have any questions relating to your drinking water, or for additional information regarding this report, you may contact Public Works Superintendent Tony Salazar at (818) 898-1293.



How much water is lost to a dripping faucet?

Dripping faucets waste a precious resource and cost you money. As an example, if you have a faucet that drips 60 times a minute, this adds up to over 3 gallons each day or 1,225 gallons each year.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

What makes water hard?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Conversely, water containing little calcium or magnesium is called soft water.

Is it safe to drink water from a garden hose?

Substances used in vinyl garden hoses to keep them flexible can get into the water as it passes through the hose. These chemicals are not good for you nor are they good for your pets. Allow the water to run for a short time to flush the hose before drinking or filling your pets' drinking containers. There are hoses made with "food-grade" plastic that will not contaminate the water. Check your local hardware store for this type of hose.

Water Conservation

The City of San Fernando has a water conservation program in place at City parks and buildings. You can also play a role in conserving water. Here are a few tips:

Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste up to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you can save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak. For more tips, visit www.bewaterwise.com.



How Is My Water Treated and Purified?

The treatment process consists of some basic steps. First, groundwater is drawn from the Sylmar basin; then chlorine is injected in a sodium hypochlorite solution of 0.8 percent for disinfection (as a precaution against any bacteria that may be present). All of the city's wells utilize an on-site chlorine generation (OSG) system, in which the 0.8 percent of sodium hypochlorite solution is used as a disinfectant agent. Through an electrolytic process, the OSG operates automatically, requiring only salt, water (softened) and electricity to produce the sodium hypochlorite solution. We carefully monitor on a daily basis the amount of chlorine injected at each well site. Water is then pumped to reservoirs, where it flows by gravity through the distribution system into your home or business. Likewise, chlorine residuals are monitored from the distribution system daily in order to ensure a reliable supply of drinking water.

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at www.epa.gov/safewater/lead.

Sampling Results

During the past year we have taken numerous water samples in order to determine the presence of any biological, general physical, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | PHG (MCLG) [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|--------------|--|--------------------|-----------------|----------------|-----------|--|
| Haloacetic Acids (ppb) | 2008 | 60 | NA | 0.17 | ND–2.8 | No | By-product of drinking water disinfection |
| Nitrate (as NO₃) (ppm) | 2008 | 45 | 45 | 30.9 | 18.0–38.0 | No | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| TTHMs [Total Trihalomethanes] (ppb) | 2008 | 80 | NA | 4.77 | ND–18.0 | No | By-product of drinking water chlorination |
| Tetrachloroethylene [PCE] (ppb) | 2008 | 5 | 0.06 | 0.95 | 0.8–1.1 | No | Discharge from factories, dry cleaners, and auto shops (metal degreaser) |
| Total Chromium (ppb) | 2008 | 50 | 100 | 3.08 | ND–3.6 | No | Discharge from steel and pulp mills; erosion of natural deposits |
| Total Coliform Bacteria (# positive samples) | 2008 | No more than 1 positive monthly sample | (0) | 1 | NA | No | Naturally present in the environment |
| Turbidity (NTU) | 2008 | TT | NA | 0.35 | ND–0.35 | No | Soil runoff |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community (lead was not detected at the 90th percentile)

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | PHG | AMOUNT DETECTED (90TH%TILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|-----------------------------|--------------|-----|-----|-----------------------------|----------------------------|-----------|---|
| Copper (ppm) | 2008 | 1.3 | 0.3 | 0.4 | 0/30 | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

SECONDARY SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | PHG (MCLG) | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|-------------------------------|--------------|------|------------|-----------------|----------------|-----------|---|
| Color (Units) | 2008 | 15 | NS | 0.06 | ND–3.0 | No | Naturally occurring organic materials |
| Copper (ppm) | 2008 | 1.0 | NS | 0.255 | 0.062–0.780 | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Odor–Threshold (Units) | 2008 | 3 | NS | 1.14 | 1.0–2.0 | No | Naturally occurring organic materials |
| Turbidity (Units) | 2008 | 5 | NS | 0.13 | ND–0.35 | No | Soil runoff |

Definitions

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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 (SMCLs) 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. EPA.

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

MRDLG (Maximum Residual Disinfectant Level Goal): 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. EPA.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

PCE (Perchloroethylene): A volatile organic compound used as a dry-cleaning or vapor-degreasing solvent. PCE is regulated by U.S. EPA.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contamination Level): A nonenforceable numeric limit set by U.S. EPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor, or appearance that would have an adverse impact on the public welfare.

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