

ANNUAL WATER QUALITY REPORT

Water testing performed in 2007



PWS ID#: 1910143

Meeting the Challenge

Once again the City of San Fernando is proud to present to you its 2007 annual water quality report. This edition covers all testing completed from January 1 through December 31, 2007. Over the years, the City has dedicated itself to producing drinking water that meets all state and federal drinking water standards. As new challenges to drinking water safety emerge, City staff 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.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are 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 15 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 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.

Community Participation

You are invited to participate at our city council meetings and 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, California.

Source Water Assessment

In August 2002 the California Department of Health Services, 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

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 24,600 residents. Annually, the city serves 1 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 2006, the City of San Fernando received about 76% of its water supply from local groundwater and the other 24% from MWD surface water. In this report you will find a summary of water quality data for MWD. However, you may obtain a complete MWD Water Quality Report by calling (818) 898-1298, or by visiting the MWD Web site at www.mwdh2o.com (click on the link for the Annual Water Quality Report).

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% 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% 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.

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.



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.

Sampling Results

During the past year we have taken numerous water samples in order to determine the presence of any radioactive, biological, 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.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES				City of San Fernando		MWD			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2007	0.2	0.6	NA	NA	0.084	0.053–0.11	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic ¹ (ppb)	2007	10	0.004	NA	NA	ND	ND–2.4	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Bromate (ppb)	2007	10	(0)	NA	NA	6.3	3.4–10	No	By-product of drinking water disinfection
Fluoride [Naturally-occurring] (ppm)	2007	2.0	1	0.37	0.37–0.37	0.1	0.1–0.2	No	Erosion of natural deposits
Fluoride [Treatment-related] (ppm)	2007	2.0	1	NA	NA	0.55	0.1–1.0	No	Water additive for dental health
Free Chlorine Residual (ppm)	2007	4.0	4.0	1.69	0.01–3.50	NA	NA	No	Drinking water disinfectant added for treatment
Gross Alpha Particle Activity (pCi/L)	2007	15	(0)	NA	NA	ND	ND–4.2	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2007	60	NA	1.9	ND–8.3	5.9	2.6–12	No	By-product of drinking water disinfection
Nitrate [as N] (ppm)	2007	10	10	NA	NA	0.6	ND–0.8	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate [as NO ₃] ² (ppm)	2007	45	45	33	16–58	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2007	80	NA	10	ND–31	22	13–48	No	By-product of drinking water chlorination
Tetrachloroethylene [PCE] (ppb)	2007	5	0.06	0.8	ND–0.8	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Total Chlorine Residual (ppm)	2007	4.0	4.0	1.93	0.01–2.90	2.4	0.72–3.40	No	Drinking water disinfectant added for treatment
Total Chromium (ppb)	2007	50	100	3.65	3.10–4.30	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Total Coliform Bacteria (# positive samples)	2007	No more than 1 positive monthly sample	(0)	1	NA	NA	NA	No	Naturally present in the environment
Total Coliform Bacteria (% positive samples)	2007	More than 5.0% of monthly samples are positive	(0)	NA	NA	0.14	NA	No	Naturally present in the environment
Uranium (pCi/L)	2007	20	0.43	NA	NA	1.4	1.1–1.9	No	Erosion of natural deposits

SECONDARY SUBSTANCES			City of San Fernando		MWD				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2007	200	600	NA	NA	84	53–110	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2007	500	NS	NA	NA	61	40–70	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2007	15	NS	0.03	ND–3.00	2	1–2	No	Naturally-occurring organic materials
Corrosivity (as Aggressiveness Index)	2007	Non-corrosive	NS	NA	NA	12.0	11.9–12.0	No	Elemental balance in water; affected by temperature, other factors
Corrosivity (as Saturation Index)	2007	Non-corrosive	NS	NA	NA	0.19	0.08–0.25	No	Elemental balance in water; affected by temperature, other factors
Odor–Threshold (TON)	2007	3	NS	1.08	1.00–3.00	2	2–2	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2007	1,600	NS	NA	NA	477	414–520	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2007	500	NS	NA	NA	52	46–57	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2007	1,000	NS	NA	NA	267	248–285	No	Runoff/leaching from natural deposits; seawater influence
Turbidity (NTU)	2007	5	NS	0.12	ND–0.55	0.04	0.04–0.05	No	Soil runoff

UNREGULATED SUBSTANCES (MWD RESULTS)				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron (ppb)	2007	180	170–200	Runoff/leaching from natural deposits; Industrial wastes
Chromium VI [Hexavalent Chromium] (ppb)	2007	0.12	0.06–0.22	Industrial waste discharge; Naturally present as well
Vanadium (ppb)	2007	3.1	ND–3.7	Naturally-occurring; industrial waste discharge

Footnotes:

¹ Effective 01/23/2006, the federal arsenic MCL is 10 ppb. A new state MCL has not yet been adopted and remains as 50 ppb.
² Even though one of the City's water-wells reached levels of 58 ppm in May of 2007. These levels never reached the distribution system. This water was pumped into a reservoir which blended our groundwater with MWD surface water. By blending these two water sources together, it lowered the nitrate levels below the MCL of 45 ppm. Be assured no nitrate levels exceeding the MCL was ever served to our consumers. This water-well is currently "Inactive" status, a new nitrate treatment system will be installed before restoring this water-well back in service.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

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 consumer'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.

pCi/L (picocuries per liter): A measure of

radioactivity.

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).

TON (Threshold Odor Number): A measure of odor in water.

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