

ANNUAL WATER QUALITY REPORT

Water testing performed in 2006

Proudly Presented By:

CITY OF
San Fernando
Historic & Visionary

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Substances That Might Be in Drinking 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 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, which 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, which 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, 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, 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, which 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.

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

Continuing Our Commitment

We are pleased to present our 2006 annual water quality report. This edition covers all testing completed from January 1 through December 31, 2006. The City of San Fernando continues to meet compliance with all state and federal drinking water laws. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

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) 898-1298.

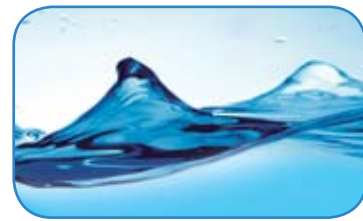
Important Health Information

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.



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, CA.



About Our Violation

We are required to monitor your drinking water for specific contaminants on a regular basis (every three years) for lead and copper. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2005 we did not monitor for lead and copper and, therefore, cannot be sure of the quality of your drinking water during that time. After being notified by the Department of Health Services of this monitoring violation, we immediately made preparations to collect samples for lead and copper monitoring in 2006. Results of the water samples have been received and properly recorded as required by state and federal law. All water samples collected for lead and copper monitoring in 2006 met all state health drinking water requirements. We do not believe that missing the 2005 deadline of this state monitoring requirement had any impact on public health and safety. We have already taken the steps to ensure that adequate monitoring be performed in the future so that this oversight will not be repeated.

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.



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 83% of its water supply from local groundwater and the other 17% 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).

Nitrate in Drinking Water

Nitrate in drinking water at levels above 45 ppm 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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

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 allows 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)	2006	1	0.6	NA	NA	0.081	ND–0.11	No	Erosion of natural deposits; residue from some surface water treatment processes
Barium (ppm)	2006	1	2	0.14	0.1–0.17	ND	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2006	10	(0)	NA	NA	5.6	3.3–7.2	No	By-product of drinking water disinfection
Fluoride (ppm)	2006	2.0	1	0.18	0.08–0.23	0.18	0.16–0.22	No	Naturally-occurring
Free Chlorine Residual (ppm)	2006	[4.0]	[4.0]	1.33	ND–2.30	NA	NA	No	Drinking water disinfectant added for treatment
Gross Alpha Particle Activity (pCi/L)	2006	15	(0)	NA	NA	ND	ND–4.2	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2006	60	NA	0.4	ND–2.9	18	5–41	No	By-product of drinking water disinfection
Nitrate [as N] (ppm)	2006	10	10	7.075	4.1–9.2	0.47	ND–0.54	No	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrate (as NO ₃) (ppm)	2006	45	45	31	18–41	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2006	80	NA	4.7	0.6–15	24	15–50	No	By-product of drinking water chlorination
Tetrachloroethylene [PCE] (ppb)	2006	5	0.06	0.8	0.8–0.8	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Total Chlorine Residual (ppm)	2006	[4.0]	[4.0]	1.56	ND–2.60	2.4	1.4–2.8	No	Drinking water disinfectant added for treatment
Total Chromium (ppb)	2006	50	(100)	3.54	2.9–4.60	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Uranium (pCi/L)	2006	20	0.43	NA	NA	1.2	1.1–1.2	No	Erosion of natural deposits

Tap water samples were collected from 30 sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper ¹ (ppm)	2006	1.3	0.17	0.25	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead ¹ (ppb)	2006	15	2	1	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; 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
Chloride (ppm)	2006	500	NS	24	14–35	50	44–56	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2006	15	NS	0.09	ND–3.00	1	1–2	No	Naturally-occurring organic materials
Copper (ppm)	2006	1.0	NS	0.25	ND–0.43	ND	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Corrosivity (as Aggressiveness Index) (Units)	2006	Non-corrosive	NS	12.0	12.0–12.0	12.0	11.9–12.1	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Corrosivity (as Saturation Index) ² (Units)	2006	Non-corrosive	NS	0.35	0.30–0.40	0.14	0.02–0.26	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Odor–Threshold (TON)	2006	3	NS	1.08	1.0–2.0	2	2–2	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2006	1,600	NS	571	454–656	480	411–539	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2006	500	NS	61	51–80	69	55–86	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2006	1,000	NS	NA	NA	273	236–304	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2006	5	NS	0.15	0.05–0.90	0.04	0.04–0.04	No	Soil runoff / Naturally present in groundwater

UNREGULATED SUBSTANCES		City of San Fernando		MWD		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron (ppb)	2006	NA	NA	190	150–210	Runoff/leaching from natural deposits: Industrial wastes
Chromium VI [Hexavalent Chromium] (ppb)	2006	NA	NA	0.09	0.07–0.10	Industrial waste discharge

¹ Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The action level which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.

²Footnote for City of San Fernando: as Langelier Index

Table 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.