The City's Water Auditors performed nearly 800 surveys in 2008 to help residents save water. Audits are available by calling 428-7487.

Water Quality Concerns

Arsenic — The California Department of Public Health continues to research the health effects of low levels of arsenic, a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems. No arsenic has been found in Fairfield's drinking water.

Lead & Copper — Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible lead levels may be higher in some homes in the community as a result of materials used in house plumbing. None of the samples Fairfield tested in 2008 exceeded the Action Levels for lead or copper. The next round of testing is in 2011.

Security — The City of Fairfield has performed a comprehensive vulnerability assessment for the water system resources. If you should see items of concern or notice anything suspicious, please contact the City of Fairfield at **(707) 428-7594**.

Sensitive Populations — Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons (such as people with HIV/AIDS, people who are undergoing chemotherapy and people who have undergone organ transplants), infants, and some elderly people can be particularly at risk for serious health impacts from infections. These people should seek advice about drinking water from their health care providers. ❑

Este folleto contiene información muy importante sobre su agua potable. Si quiere una copia en Español llame a Sandra Gonzalez al (707) 428-7489. Para recibir más información en Español comuníquese con Laura de Albidress al 707-428-7680 extensión 107.

Cover: A lab analyst takes a water sample at a customer's home. The City's water utility provides water quality testing, water use surveys, conservation programs, and leak detection services.

City employee makes an effort to respond to customer concerns as quickly as possible.

For More Information Call

For questions regarding this report
(707) 428-7680x107
❑ ❑ ❑
Water Billing
(707) 428-7346
❑ ❑ ❑
Water Repairs (707) 428-7415
❑ ❑ ❑
After Hours Water Repairs
(707) 428-7300
❑ ❑ ❑
EPA Safe Drinking Water Hotline
(800) 426-4791
❑ ❑ ❑
Para información en Español
(707) 428-7680x107

Public input on drinking water issues is encouraged. You are welcome to attend a City Council meeting and have your voice heard. Council meetings are held the 1st & 3rd Tuesday of each month at 6 p.m. in the Fairfield City Council Chamber. For more information on water quality, visit our website: www.ci.fairfield.ca.us/water.htm

City of Fairfield

Consumer Confidence Report

2008 Drinking Water

City of Fairfield
Public Works Department
1000 Webster Street • Fairfield, California 94533
www.ci.fairfield.ca.us

Drinking Water

In order to ensure tap water is safe to drink, the US Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations establish limits for contaminants in bottled water that must provide the same protection for public health. This report includes details about where your tap water comes from, what it contains, and how it compares to State and Federal standards.

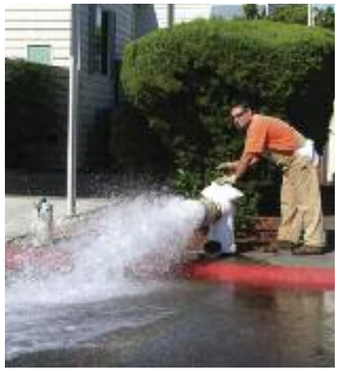
The tables below list the drinking water contaminants detected for the period January 1 - December 31, 2008. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Their presence does not necessarily indicate that water poses a health risk. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. More information about contaminants and potential health effects can be obtained by calling the **USEPA's Safe Drinking Water Hotline (1-800-426-4791)**. ❑

Source 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.

Fairfield's source water originates from Lake Berryessa and the Sacramento Delta. Water is transported for treatment through the Putah South Canal and the North Bay Aqueduct.

Treatment of source water is divided between two conventional water treatment plants, the Waterman Treatment Plant and the North Bay Regional Water Treatment Plant, (NBR is jointly owned by the Cities of Fairfield and Vacaville).



Public Works crew often flush fire hydrants to maintain water quality standards in Fairfield. Flushing is essential and should not be considered wastefull.

Contaminants that may be present in source water before treatment include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, 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, may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, include synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.

Radioactive contaminants, can be naturally-occurring or be the result of oil and gas production and mining activities. ❑

Treated Water

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Substance (reporting units)	MCL	PHG (MCLG)	Drinking Water Range	Drinking Water Average	Contaminant Sources
Aluminum (ppm)	1	0.6	ND-0.75	0.056	Erosion of natural deposits; residue from some surface water treatment processes.
Cadmium (ppb)	5	0.04	ND-1.08	0.573	Dischrges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm) (Natural Source)	2	1	0.68-1.03	0.850	Erosion of natural deposits, water additive that promotes strong teeth.
Nickel (ppb)	100	12	ND-24.4	11.9	Erosion of natural deposits, discharge from metal factories.
Nitrate (ppm) (as nitrate)	45	45	ND-5.27	3.03	Runoff and leaching from fertilizer use, leaching from septic tanks and sewage; erosion of natural deposits.

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Substance (reporting units)	MCL	PHG (MCLG)	Drinking Water Range	Drinking Water Average	Contaminant Sources
Aluminum (ppb)	200	NA	ND-75	56	Erosion of natural deposits; residue from some surface water treatment processes.
Chloride (ppm)	500	NA	8-54.5	16.8	Runoff/leaching from natural deposits; seawater influence.
Foaming Agents (ppb)	500	NA	ND-53	28.5	Municipal and Industrial waste discharges.
Manganese	50	NA	ND-66	18.1	Leaching from natural deposits.
Odor Threshold (Units)	3	NA	1.4-2.0	1.48	Naturally-occurring organic materials.
Silver (ppb)	100	NA	ND-16.5	10.8	Industrial discharges
Specific Conductance (µS/cm)	1600	NA	238-630	370	Substances that form ions when in water; seawater influence.
Sulfate (ppm)	500	NA	35-88.5	54.9	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (ppm)	1000	NA	163-387	229	Runoff/leaching from natural deposits.
Turbidity (NTU)	5	NA	0.034-0.198	0.047	Soil runoff.

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Substance (reporting units)	MCL	PHG (MCLG)	Drinking Water Range	Drinking Water Average	Contaminant Sources
Hardness (ppm)	NA	NA	58-204	138	Generally found in ground and surface water.
Sodium (ppm)	NA	NA	15.1-75.7	33.2	Generally found in ground and surface water.

DETECTION OF UNREGULATED CONTAMINANTS

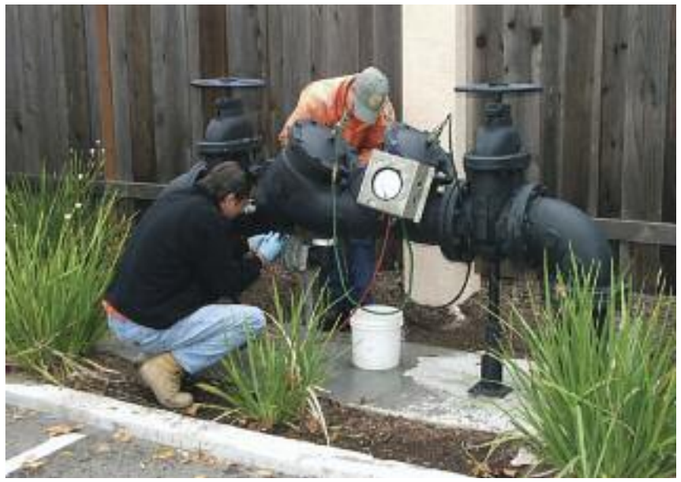
Substance (reporting units)	NL	PHG (MCLG)	Drinking Water Range	Drinking Water Average	Contaminant Sources
Boron (ppb)	1000	NA	110-360	166	Unregulated contaminant monitoring helps EPA and the State determine where certain contaminants occur and whether the contaminants need to be regulated.
Vanadium (ppb)	50	NA	ND-4.6	1.73	Unregulated contaminant monitoring helps EPA and the State determine where certain contaminants occur and whether the contaminants need to be regulated.

Source Water Assessment

Under State law, water utilities are required to check water supplies for possible contaminating activities which may put the source water at risk. This assessment does not mean that the water is necessarily affected by those activities at this time, but that the utility should be aware of these potential concerns and take necessary measures to protect the drinking water sources.

Lake Berryessa (Completed February 2003): A Source Water Assessment has been completed and shows that the most significant potential sources of contamination are illegal activities/ unauthorized dumping, herbicide application, storm drain discharge points, and recreational use.

Sacramento Delta (Completed May 2003): A Source Water Assessment has been completed and shows that the most significant potential sources of contamination are recreational use, urban & agricultural runoff, grazing animals, herbicide application, and seawater intrusion.



Public Works employees regularly check water pressure throughout the City.

A copy of the complete assessments and associated vulnerability summaries can be obtained through the **California Department of Public Health, Drinking Water Field Operations Branch, San Francisco District Office, 850 Marina Bay Parkway, Building P 2nd floor, Richmond, CA 94804** or **Ms. Betty Graham, Senior District Engineer, California Department of Public Health at (510) 620-3454.** ❑

Distribution System

DISINFECTION BYPRODUCTS PRECURSORS, DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS

Substance	Compliance Ratio	Range	Average	Contaminant Sources
DBP Precursors (TOC)	More than or equal to 1.0	1.90-4.07	2.52	Various natural and man-made sources.

Substance (reporting units)	MCL	PHG (MCLG)	Range	Highest Running Annual Average	Contaminant Sources
Trihalomethanes (ppb)	80	NA	2.96-53.2	31.6	By-product of drinking water chlorination.
Haloacetic Acids (ppb)	60	NA	1.6-19.0	9.6	By-product of drinking water chlorination.
Substance (reporting units)	**MRDL**	**MRDLG**	**Range**	**Average**	**Contaminant Sources**
Chlorine (ppm)	4.0	4.0	ND-1.29	0.64	Drinking water disinfectant added for treatment.

TURBIDITY AS A MEASURE OF FILTER PERFORMANCE (Measures the relative clarity of the water produced.)

Substance (reporting units)	MCL	PHG (MCLG)	Entry Point to Distribution System	Contaminant Sources
Turbidity (NTU)	TT = 1	NA	0.32 (Highest Level)	Soil runoff.
	Percentage of samples ≤0.3		99%	

DETECTION OF COLIFORM BACTERIA

Substance	MCL	MCLG	Distribution System	Contaminant Sources
Total Coliform Bacteria	5%	0	2.07% (Highest monthly value)	Naturally present in the environment
Fecal Coliform/*E. coli*	*	0	0	Human and animal fecal waste.

* A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E.coli*.

DETECTION OF LEAD AND COPPER IN CUSTOMER TAPS

Substance (reporting units)	AL	PHG	No. of Samples (Collected in 2008)	90th Percentile Detected	No. Sites Exceeding AL	Contaminant Sources
Lead (ppb)	15	2	50	<5	2	Plumbing corrosion; erosion of natural deposits.
Copper (ppm)	1.3	0.3	50	0.078	0	Plumbing corrosion; erosion of natural deposits.

ABBREVIATIONS

AL - 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 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.

MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. Set by USEPA.

MRDL - Maximum Residual Disinfectant Level: The level of a disinfectant added for water treatment 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. MRDLs are set by USEPA.

NA - Not Applicable

ND - Not Detected

NL - Notification Level

NTU - Nephelometric Turbidity Units: The standard unit for turbidity measurements.

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 California EPA.

ppb - Parts per billion: or micrograms per liter (ug/L)

ppm - Parts per million: or milligrams per liter (mg/L)

TOC - Total Organic Carbon

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

µS/cm - microsiemens per centimeter