

2010 Consumer Confidence Report



CALIFORNIA
AMERICAN WATER



East Palo Alto
PWS ID: 4110024

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

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Ang ulat na ito ay naglalaman ng mahalagang impormasyon ukol sa iniinom ninyong tubig. Tumawag po lamang sa SFPUC Customer Service Bureau sa telepono 415-551-3000 kung kailangan ninyo ng tulong sa wikang tagalog.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

As a trusted leader in the industry, American Water places a strong emphasis on sharing water quality information with our customers.

Please review this Consumer Confidence Report (CCR), which outlines information applicable to your local water system for testing completed through December, 2010. You'll find that we provide water that surpasses or meets all Federal and State water quality regulations. In fact, we often address regulations well before they go into effect.

Our customers are our top priority, and we are committed to providing them with the highest quality drinking water and service possible now and in the years to come. In addition to this written report, you can view information about your water system at: www.ci.east-palo-alto.ca.us

Protecting Our Watersheds

The SFPUC aggressively protects the natural water resources entrusted to its care. Its annual Hetch Hetchy Watershed survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities by the SFPUC and its partner agencies, including the National Park Service, to reduce or eliminate contamination sources. The SFPUC also conducts sanitary surveys of the local Alameda and Peninsula watersheds every five years. These surveys identified wildlife and human activity as potential contamination sources. The reports are available for review at the CDPH's San Francisco District office (510-620-3474).

SFPUC Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. The SFPUC also maintains stringent disinfection treatment practices, extensive bacteriological quality monitoring, and high operational standards. As a result, the California Department of Public Health and USEPA have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed, spanning more than 35,000 acres in Alameda and Santa Clara counties, are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant before distribution. Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant before distribution.

In 2010, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the local watersheds.

Rainfall and runoff captured in the 23,000-acre Peninsula Watershed, located in San Mateo County, are stored in reservoirs, including Crystal Springs (Lower and Upper), San Andreas, and Pilarcitos. The water from these reservoirs is treated at the Harry Tracy Water Treatment Plant (HTWTP). Treatment processes at the HTWTP include ozonation, coagulation, flocculation, filtration, disinfection, fluoridation, corrosion control treatment, and chloramination.

In 2009, the Hetch Hetchy Watershed provided approximately 84% with the remainder contributed by the two local watersheds.

Water Quality: Contaminants and Regulations

The SFPUC's Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the SFPUC's water meets the federal and state drinking water standards. In 2010, Water Quality staff conducted more than 58,750 drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

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. Such substances are called contaminants. 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.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

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 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

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

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Reducing Lead from Plumbing Fixtures

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. East Palo Alto is responsible for providing high-quality drinking water, but cannot control the variety of materials used in your household or building 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 800-426-4791, or at www.epa.gov/safewater/lead.

For more information about the contents of this report, contact Gopi Nathan (650) 325-6195, or visit us online at www.ci.east-palo-alto.ca.us.

Water quality policies are decided at public hearings held at the EPA Government Center 2415 University Ave - First Floor - City Council Chamber. For more information visit: www.ci.east-palo-alto.ca.us.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

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.

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 USEPA.

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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

Turbidity: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

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

KEY:	
</≤	less than/less than or equal to
AL	Action Level
Max	Maximum
Min	Minimum
N/A	Not Available
ND	Non-Detect
NL	Notification Level
NTU	Nephelometric Turbidity Unit
ORL	Other Regulatory Level
ppb	part per billion
ppm	part per million
µS/cm	microSiemens/centimeter

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, 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 800-426-4791 or at www.epa.gov/safewater.

Water Quality Data for Year 2010

The table below lists all 2010 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with the CDPH guidance.

City of East Palo Alto - Water Quality Data for Year 2010¹

DETECTED CONTAMINANTS						
Substance	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
TURBIDITY						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 ²	[4.9] ³	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SWTP)	NTU	1 ⁴	N/A	-	[0.54]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU ⁴	N/A	97.6% - 100%	-	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 ⁴	N/A	-	[0.19]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU ⁴	N/A	100%	-	Soil runoff
DISINFECTION BY-PRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes	ppb	80	N/A	14 - 92	[40] ⁵	By-product of drinking water chloramination
Haloacetic Acids	ppb	60	N/A	7 - 55	[25] ⁵	By-product of drinking water chloramination
Total Organic Carbon ⁶	ppm	TT	N/A	2.4 - 3.2	2.7	Various natural and man-made sources
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	1.2 - 3.0	2.12 ⁵	Drinking water disinfectant added for treatment
DISINFECTION BY-PRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	32 - 58.5	46.2 ⁵	By-product of drinking water chloramination
Haloacetic Acids	ppb	60	N/A	21.8 - 49.58	31.2 ⁵	By-product of drinking water chloramination
MICROBIOLOGICAL						
Total Coliform ⁶	-	≤ 5.0% of monthly samples	(0)	-	0	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	ND - 0.06	[0.06]	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) ⁷	ppm	2.0	1	ND - 0.7	0.3 ⁸	Erosion of natural deposits
CONSTITUENTS WITH SECONDARY STANDARDS						
Substance	Unit	SMCL	PHG	Range	Average	Typical Sources of Contaminant
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff/leaching from natural deposits
Color	unit	15	N/A	< 5 - 6	< 5	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff/leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff/leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff
LEAD AND COPPER						
Substance	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppm	1300	300	< 0.001 - 0.225 ⁹	0.047	Corrosion of household plumbing systems
Lead	ppb	15	0.2	< 1 - 21 ¹⁰	6	Corrosion of household plumbing systems
OTHER WATER QUALITY PARAMETERS						
Substance	Unit	ORL	Range	Average		
Alkalinity (as CaCO ₃)	ppm	N/A	8 - 98	49		
Bromide	ppb	N/A	< 10 - 17	< 10		
Calcium (as Ca)	ppm	N/A	2 - 26	12		
Chlorate ¹¹	ppb	(800) NL	92 - 357	150		
Hardness (as CaCO ₃)	ppm	N/A	8 - 104	53		
Magnesium	ppm	N/A	0.3 - 9	4.6		
pH	-	N/A	8.2 - 8.7	8.5		
Potassium	ppm	N/A	0.34 - 1.2	0.6		
Silica	ppm	N/A	4.1 - 7.6	5.7		
Sodium	ppm	N/A	3 - 22	13		

Notes:

- All results met State and Federal drinking water health standards.
- Turbidity is measured every four hours. These are monthly average turbidity values.
- This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines. The turbidity spike was not observed further downstream at Alameda East.
- There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.
- This is the highest quarterly running annual average value.
- Total organic carbon is a precursor for disinfection by-product formation. The TT requirement applies to the filtered water from the SWTP only.
- The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively.
- The naturally occurring fluoride levels in the Hetch Hetchy and SWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.
- The most recent Lead and Copper Rule monitoring was in 2009. 0 of 30 water samples collected at consumer taps had copper concentrations above the Action Level.
- The most recent Lead and Copper Rule monitoring was in 2009. 1 of 30 water samples collected at consumer taps had lead concentrations above the Action Level.
- There were no chlorate detected in the raw water sources except the Crystal Springs and San Andreas reservoirs, where the detected chlorate were 81 ppb and 57 ppb, respectively. The chlorate levels in both reservoirs are due to the transfer of the disinfected Hetch Hetchy water and SWTP effluent into the Crystal Springs Reservoir. The detected chlorate in treated water is a degradation by-product of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

Note: Additional water quality data may be obtained by calling the City of East Palo Alto water system (650) 325-6195.