Mid-Peninsula Water District
2005 Annual Water Quality Report

"This report contains important information about your drinking water. Translate it, or speak with someone who understands it."
Spanish: "Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien."
Tagalog: "Mahalaga ang impormasyong ito. Mangyaring ipasalin ito."
French: "Ce rapport contient des informations importantes concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu'un qui peut le comprendre."
Polish: "Ta broszura zawiera wazne informacje dotyczace jakosci wody do picia. Przetlumacz zawartosc tej broszury lub skontaktuj sie z osoba ktora pomoze ci w zrozumieniu zawartych informacji."

The Mid-Peninsula Water District is pleased to present this 2005Annual Water Quality Report (Consumer Confidence Report) to our customers. It is important to our Board of Directors and Staff that our customers are informed about the quality of your drinking water. The Mid-Peninsula Water District exists to serve our customers by obtaining and distributing a safe, reliable, high quality supply of water for current and future needs in the most cost efficient manner. Should you have any questions or concerns regarding this report, please feel free to call the District Office at (650) 591-8941and one of our Office Specialists or Technicians will be happy to assist you.

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 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.

Fluoride: Nature's Cavity Fighter

San Francisco has been adding fluoride to the City's drinking water for more than 50 years to protect dental health. In November 2005, the SFPUC completed the fluoridation of its entire wholesale service area. For more information in either English, Spanish, or Chinese, call the toll-free fluoride information line at 866-668-6008.

Lead Reduction

Some regional water customers' homes may have increased levels of lead in their tap water caused by the deterioration of household plumbing materials that contain lead. Infants and young children are typically at greatest health risk from exposure to lead. There are no known lead service lines in the SFPUC or MPWD water systems. If you are concerned about elevated lead levels in your water, have your water tested or flush your tap for 30 seconds to 2 minutes before using the water whenever the tap has not been used for several hours.

MPWD Board Meetings Held Every 4th Thursday of Every Month

The Mid-Peninsula Water District Board of Directors hold a Board Meeting on the 4th Thursday of each month. Customers are encouraged to attend these meetings. The meetings are held at our District Office at 3 Dairy Lane, Belmont at 6:30 p.m.

CRYPTOSPORIDIUM and Giardia

Cryptosporidium and *Giardia* are parasitic microbes found in most surface water supplies and can pose a potential health threat. If ingested, either may produce symptoms of diarrhea, stomach cramps, upset stomach, and slight fever. The SFPUC tests regularly for *Cryptosporidium* and *Giardia* in both source and treated water supplies. Both were occasionally found at very low levels in the SFPUC's water in 2005.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including *Cryptosporidium* and *Giardia*. The presence of small amounts of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the U.S. EPA Safe Drinking Water Hotline at (800) 426-4791.

Our Drinking Water Sources

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. For our system, the major water source originates from spring snowmelt flowing down the Tuolumne River and is stored in the Hetch Hetchy Reservoir. This pristine water source meets all federal and state criteria for watershed protection, disinfection treatment, bacteriological quality and operational standards. For these reasons, the California Department of Health Services has granted this water source a filtration exemption.

The Alameda Watershed spans more than 35,000 acres in Alameda and Santa Clara counties. Surface water from rainfall and runoff is collected in the Calaveras and San Antonio Reservoirs. Prior to distribution, water from the watershed is treated at the Sunol Valley Water Treatment Plant. This surface water source is supplemented by a small amount of groundwater collected by the Sunol Filter Galleries near the Town of Sunol.

Surface water from rainfall and runoff captured in the 23,000-acre Peninsula Watershed, which is located in San Mateo County, is stored in four reservoirs: Crystal Springs (Lower and Upper), San Andreas, Pilarcitos and Stone Dam. This water source is treated at the Harry Tracy Water Treatment Plant prior to delivery to customers.

Protecting Watersheds

The SFPUC aggressively protects the natural water resources entrusted to its care by continuously monitoring its watersheds' weather conditions, water turbidity levels, and microbial contaminants. The 2005 annual update of the Watershed Control Program and Sanitary Survey describes the Hetch Hetchy watershed and water supply system, identifies potential sources of contamination in the watershed, discusses the existing and recommended watershed management practices that protect water quality, and summarizes the water quality monitoring conducted in 2005. The SFPUC also conducts a sanitary survey of local watersheds every five years. The 2005 assessment found that SFPUC watersheds have very low levels of contaminants, which are associated with wildlife and, to a limited extent, human recreational activity.

Chloramine Helps Reduce Carcinogenic Byproducts

The SFPUC converted its residual drinking water disinfectant from chlorine to chloramine in 2004. Since then, it has helped significantly reduce the levels of trihalomethanes (THMs) in our water. THMs are disinfection byproducts and potentially cancer-causing substances. By applying a residual disinfectant that reduces their formation, the SFPUC has chosen a treatment process that is beneficial to the health of its customers.

***When buying fish**, consult your pet store about tablets to protect the health of your fish. Chloramine as well as chlorine needs to be removed before placing fish in tap water.*

DETECTED CONTAMINANTS	Unit	MCL	PHG (MCLG)	Range	Average (Maximum)	Typical Sources in Drinking Water
TURBIDITY [2]						
Unfiltered Hetch Hetchy Water, max 5 NTU	-	TT	NS	0.25 - 1.00 [3]	(1.74) [4]	Soil run-off
Filtered water - Harry Tracy WTP, max 1 NTU	-	TT	NS	-	(0.17)	Soil run-off
more than 95% of measurements < 0.3 NTU	-	TT	NS	100% [5]	-	Soil run-off
Filtered Water - Sunol Valley WTP, max 1 NTU	-	TT	NS	-	(0.27)	Soil run-off
more than 95% of measurements < 0.3 NTU	-	TT	NS	100% [5]	-	Soil run-off
DISINFECTION BY-PRODUCTS (SFPUC Regional System)						
Total Trihalomethanes (TTHMs)	ppb	80	NS	11 - 71	(38) [6]	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)	ppb	60	NS	6 - 47	(24) [6]	By-product of drinking water chlorination
Total Organic Carbon (TOC) [7]	ppm	NS	NS	0.9 - 3.0	2.3	Various natural and man-made sources
DISINFECTION BY-PRODUCTS (MPWD)						
Total Trihalomethanes (TTHMs)	ppb	80	NS	36.3 - 50.3	42.2 [6]	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)	ppb	60	NS	1.2 - 43.3	28.4 [6]	By-product of drinking water chlorination
Total Organic Carbon (TOC) [7]	ppm	NS	NS	.9 - 3.0	2.9	Various natural and man-made sources
MICROBIOLOGICAL [8] **(MPWD)**						
Total Coliform, highest % of positives detected in any month	%	<5	(0)	0	0	Naturally present in the environment
INORGANIC CHEMICALS						
Aluminum	ppb	1000	600	6 - 70	38	Erosion of natural deposits
Fluoride [9]	ppm	2.0	1.0	0.1 - 1.2	1.0	Water additive that promotes strong teeth
Chlorine (MPWD)	ppm	MRDL=4.0	MRDLG=4	1.42 - 2.47	2.0 [6]	Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS	**Unit**	**SMCL**	**PHG**	**Range**	**Average**	**Typical Sources in Drinking Water**
Chloride	ppm	500	NS	<3 - 25	9	Runoff / leaching from natural deposits
Color	unit	15	NS	<5 - 25 [10]	12	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	NS	25 - 435	155	Substances that form ions when in water
Sulfate	ppm	500	NS	1 - 42	19	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	NS	20 - 210	116	Runoff / leaching from natural deposits
Turbidity	NTU	5	NS	0.09 - 0.49	0.24	Soil runoff
LEAD AND COPPER RULE STUDY (MPWD)	**Unit**	**AL**	**PHG**	**Range**	**90th Percentile**	**Typical Sources in Drinking Water**
Copper	ppb	1300	170	4.2 - 105 [11]	82.9	Corrosion of household plumbing systems
Lead	ppb	15	2	< 1.0 - 10.3 [12]	3.8	Corrosion of household plumbing systems
OTHER WATER QUALITY PARAMETERS	**Unit**	**NL**	**Range**	**Average**		
Alkalinity (as $CaCO_3$)	ppm	NS	6 - 150	54		
Boron	ppb	1000	16 - 168	73		
Calcium	ppm	NS	3 - 30	16		
Fluoride (source water)	ppm	NS	<0.1 - 0.2	0.1		
Hardness (as $CaCO_3$)	ppm	NS	8 - 150	56		
Magnesium	ppm	NS	<0.5 - 12.3	6.6		
pH	Unit	NS	7.6 - 9.8	8.9		
Potassium	ppm	NS	<0.5 - 1.4	0.8		
Silica	ppm	NS	4.4 - 7.2	6.3		
Sodium	ppm	NS	3-26	15		

(1) All results met State and Federal drinking water regulations.
(2) Turbidity is the water clarity indicator; it also indicates the quality of the water and the treatment system efficiency.
(3) Turbidity is measured every four hours. These are monthly average turbidity values.
(4) This is a single, maximum measuring result.
(5) This is the minimum percentage of time that the filtered water tubidity was less than 0.3 NTU.
(6) This is the highest quarterly running annual average value.
(7) TOC is a precursor for disinfection by-product formation.
(8) The Mid-Peninsula Water District had 0 positive samples in 2005.
(9) There is 1.0 ppm of fluoride in your drinking water.
(10)The sample collected from Harry Tracy Water Treatment Plant effluent on 7/16/2005 had a color result above the SMCL. There is no health effect due to this exceedance.
(11) Latest round of Lead and Copper Rule monitoring was in 2004. 0 out of 31 residences were over the copper action level at consumer taps.
(12) Latest round of Lead and Copper Rule monitoring was in 2004. 0 out of 31 residences were over the lead action level at consumer taps.

Note: Additional water quality data may be obtained by calling the Mid-Peninsula Water District phone number at (650) 591-8941.

Key:

< / ≤ = less than / less than or equal to
TT = Treatment Technique
AL = Action Level
NS = no standard
NTU = Nephelometric Turbidity Unit
ppb = parts per billion
ppm = parts per million
µS/cm = microSiemens/centimeter
Max = maximum
NL = Notification Level

How Your Water Measures Up

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

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

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 U.S. Environmental Protection Agency.

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

Maximum Residual Disinfectant Level Goal (MRDLG): 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. Environmental Protection Agency.

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

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

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