Kings Mountain Park Mutual Water Company

San Mateo County Woodside California 95062 System ID # 4100539

Watershed Sanitary Survey

Revised January 2010

Preface: This Watershed Sanitary Survey has been completed to meet the requirements of the California Code of Regulations, Title 22 Chapter 17. This is also used periodically review the health of the watershed and to use as a guidance document to plan activities in the watershed. The Watershed survey will be available to all consumers of the water company and will be distributed at the Annual Meeting.

1.0 Physical and hydrological description of the watershed:

The water company is located in the unincorporated community of Kings Mountain and lies near the ridgeline of the Santa Cruz Mountains. Linear valleys and mountains characterize the area and the terrain is rugged and steep. The area is sparsely populated and the watershed of Tunitas Creek up to the point of collection is relatively small.

The watershed is approximately 125 acres or 0.2 square miles of sparsely developed land in the western slopes of the northern Santa Cruz Mountains, wholly within San Mateo County. The large majority, estimated to be greater than 90% of the existing watershed is owned and managed by the non-profit Mid-Peninsula Open Space District. (MPOSD). The land within the watershed that is within MPOSD land is wholly within the Purisima Creek Redwoods Open Space Preserve boundary. District Rangers are responsible for enforcing district regulations and are on regular patrol of the area. The most distant and highest elevation land within the watershed, which runs along the ridgeline, has some privately held parcels, some with residences. The number of residences within the watershed is estimated to be fewer than 25. There is no known commercial, industrial or farming activity within the watershed. Maps of the area, the watershed and the locations of the water sources can be found in Appendix B of this document.

2.0 Summary of the source water Quality Monitoring Data:

The Company samples the source water as required by the San Mateo County Department of Public Health, and all monitoring results are submitted to the county as they are received by the county. Additionally, results are distributed to all members of the water company. This comes in the form of the Annual Consumer Confidence Report (CCR). A copy of the previous five years of reports is attached in appendix A of this document.

- **2.1 Bacteriological tests:** No total coliform of fecal coliform bacteria were detected during routine monthly water testing completed in 2003, 2004, 2005, 2006, 2007, 2008 2009, and 2010 through this November 2010.
- **2.2. Source turbidity.** The Company began source water turbidity sampling in January 2009. The Turbidimeter is tied to the source water pumps so that when source water turbidity reaches 0.100 NTU, the pumps are shut down. Turbidity during this time period ranged from .013 NTU to .282.
- **2.3 pH. pH** of the water from 2005 through 2010 ranged from 8.1 to 8.5 with an average of 8.2.
- **2.4. Temperature**. Temperature is measured after primary and secondary filtration, all of which is performed in uninsulated structures. The temperature of the water between 2005 and 2010 ranged from 2.9 C to 25.0 C.
- **2.5 Disinfection by-products.** A disinfectant residual in the domestic water is necessary to inactivate pathogens, maintain water quality, and prevent regrowth in the distribution system. Disinfection residuals are necessary to maintain water quality, however, it is generally recognized that disinfection may contribute to the formation of disinfection by-products. (DBPs)

Disinfectants react with organic matter to produce DBPs. Researchers have determined that the natural organic matter (NOM) is the principal precursor to DBP formation. Source water contains the precursors of DBPs generally as naturally occurring organic substances such as humic and folic acids. These acids belong to a family of compounds that are formed during the decomposition of vegetation. Halogenated organic byproducts such as chloform and trihalomethanes are produced when free chlorine reacts with NOM. High concentrations of these DBP are thought to be a health concern.

2. 5 Inorganic and Organic Contaminants.

The schedule for testing for Inorganic and organic constituents is prescribed by the county. Only constituents that had detectable levels, whether below or above the MCL or above or below reportable limits are listed. A complete set of the previous 5 years of analytical results are available from the water company upon request.

Note:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Source: Water that is tested prior to any treatment.

Please reference the attached CCR's for a desciption of the likely sources of the different contaminants. Also refer to Appendix C of this document for additional information on sources of contamination and their health effects.

2005

	Level	MCL	Source of water	
Aluminum	20ug/l	1000 ug/l	Source	
Barium	111 ug/l	1000 ug/l	Source	
Nickel	4.3 ug/l	100 ug/l	Source	
Selinium	3.4 ug/l	50 ug/l	Source	
Fluoride	0.38 mg/l	2.0 mg/l	Source	
Nitrate as NO3	1.1 mg/l	45 mg/l	Source	
Nitrate and Nitrite as N	0.25 mg/l	10 mg/l	Source	
TTHM	96 ug/l	80ug/l	Treated water	
HAA5 20 ug/l		60 ug/l	Treated water	

2006

	Level	MCL	Source of water		
Radium 226	0.367+/0509 pCi/l		Source		
Radium 226	0.015 =/- 0.396 pCi/I		Source		

2007

~~~			
	Level	MCL	Source of water
Radium 226	0.604 +/-0.296 pCil		Source
Radium 228	0.275 +/- 0.108 pCi/l		Source
Radium 226	0.187 +/- 0.11 pCi/l		Source
Radium 228	0.532 +/-0.23 pci/l		Source
Radium 226	0.0878 +/00539 pC/I		Source
Radium 228	0.187 +/- 0.106 pCi/l		Source

Radium 226	0.505 +/- 0.232 pCi/l		Source
Radium 228	0.532 +/230 pCi/l		Source
Barium	110 ug/l	1000 ug/l	Source
Nickel	4.1 ug/l	100 ug/l	Source
Selenium	1.8 ug/l	50 ug/l	Source
Nitrate as NO3	0.93 mg/l	45 mg/l	Source
Nitrate and Nitrite as N	0.21 mg/l	10 mg/l	Source
HAA5	9.9 ug/l	60 ug/l	Treated water
TTHM	34 ug/l	80 ug/l	Treated water
HAA5	8.2 ug/l	60 ug/l	Treated water
Nitrate as NO3	.087 mg/l	45 mg/l	Source

# 

	Level	MCL	Source of water	
Aluminum	15ug/l	1000 ug/l	Source	
Barium	120 ug/l	1000 ug/l	Source	
Nickel	4.9 ug/l	100 ug/l	Source	
Cadmium	0.26 ug/l	5 ug/l	Source	
Fluoride	0.31 mg/l	2.0 mg/l	Source	
Nitrate as NO3	1.0 mg/l	45 mg/l	Source	
Nitrate and Nitrite as N	0.24 mg/l	10 mg/l	Source	
TTHM	39 ug/l	80ug/l	Treated water	
HAA5	16 ug/l	60 ug/l	Treated water	

# 

	Level	MCL	Source of water
Iron	0.38mg/l		Source
TTHM	50 ug/l	80 ug/l	Treated water
HAA5	15 ug/l	60 ug/l	Treated water

# 

	Level	MCL	Source of water
Barium	130 ug/l	1000 ug/l	Source
Manganese	4.4 ug/l		Source
Nickel	4.0 ug/l	100 ug/l	Source
Zinc	31 ug/l	5 ug/l	Source
Fluoride	le 0.30 mg/l 2.0 mg/l		Source
Nitrate as NO3	1.1 mg/l	45 mg/l	Source
Nitrate and Nitrite as N	0.24 mg/l	10 mg/l	Source

TTHM	85 ug/l	80ug/l	Treated water
HAA5	34 ug/l	60 ug/l	Treated water
Hardness as CaCo3	260 mg/l		Source
Total Dissolved solids	350 mg/l		Source
······	0.00 0		0
Iron	0.62 mg/l		Source
Sulfate	52 mg/l		Source
Chloride	19 mg/l		Source
Bicarbonate	222 mg/l		Source
alkalinity as CaCO3			

### Description of activities and sources of Contamination:

Due to the rural and remote nature of the watershed, the fact that much of it is designated as park land, the lack of private residences (thus few septic tanks), no industry, no commercial actively and only two roads (highway 35 and Tunitas Creek Road) that bisect the entire watershed, there are minimal activities and sources of contamination within the existing watershed. The set backs of existing homes and septic systems from the collection points of the drinking water greatly limit septic tanks as a potential source of contamination. Additionally, the watershed is monitored for illegal dumping, and there have been no recorded instances of dumping of materials that could contaminate the watershed within the past five years. There have been no known vehicular accidents that have released hazardous materials along the roadways within the watershed. Also, there are no commercial lumbering activities in the watershed.

# Description of any significant changes in the past five years, which could affect the source water:

There have been no significant changes within the watershed within the past five years. There have been no new road building, no new homes, and no new septic systems that the company is aware of that have been developed within the boundaries of the existing watershed.

### Watershed control and Management Practices:

As the vast majority of the watershed is owned by the MPOSD and is designated permanently as open space, the Company relies of the MPOSD to manage the watershed. It is the MPOSD policy to not alter or develop the land within the existing watershed. There a couple of sparsely used hiking trials within the watershed, and none that come close where the water source is. There are no plans to expand or develop any new trails within ht watershed at this time. The forested areas within the watershed are almost exclusively second and third growth redwood, Douglas fir and Tanbark oak. Though the terrain is

sloped, there have been no visible signs of erosion of landslides dues to the fact that there has been no active logging with the watershed for several decades. This has allowed for the watershed to remain quite stable and consistent for the past several decades. Due to the MPOSD mandate to preserve the park for future generations, it is anticipated that the watershed will remain well preserved without risk from development or erosion or logging activities, which are the greatest threats to watersheds of this type.

# Evaluation of the Company water systems ability to meet the requirements of Chapter 17, Title 22 of the California Code of Regulations:

The Company, through its Board and System Manager, is confidant that is can maintain safe and healthy drinking water as required by Health and Safety code to its customers. The infrastructure of the water company meets all current regulatory requirements. Due to the rural nature of the watershed and that it is permanently projected as open space; there is minimal risk of contaminating that water supply. Furthermore, in close cooperation with the local governing agency, The San Mateo County Department of Public Health, the company regularly monitors a wide variety water quality parameters as required.

### Recommendations and corrective actions:

Currently, the water company has no recommendations or corrective actions underway as the recent sanitary survey as performed by the county of Public health had found no deficiencies in the source water/watershed. The company will continue to monitor the watershed for threats the existing surface water supply and will mitigate any issues as they develop.

# Appendix A

# 2005 Consumer Confidence Report

Waste against Associ-	Nings Mountain Par	K Waler Company Repa	97 12aici June 30, 2006
		nxituents as regidred by Saa ring for the period of January	e and Federal Regulations. This exposi- : I - December 34, 2005.
Este informe contiene	información muy impor	tante sobre su agua potable entienda blen.	. Tradúzealo ó hable con alguien que l
Type of water source(s)	in use. Surface Water		
Name & location of son	veets): Purissima Creek	watershed	
Drinking Water Source	Assessment information:		npiled by Chris Day, County of San th, attached to copy that is submitted to
Time and place of regal	arly scheduled board meet	ings for public participations	Every third Tuesday of the month at 7:30 pm at board members home.
For wore information, e	onart: Michael Van der	Less Pi	hone. <u>( 650 )</u> 851.5644

#### TERMS USED IN THIS REPORT:

Assimum Contaminant Level (MCL): The highest level of a comminant that is allowed in drinking water. Primary MCLs are set as close to the PHG₈ (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the oder, 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 (USEPA).

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 Good (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected isk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Communicants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

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

ppt: parts per trillion or assognams per liter (ng/L)

pCiA: picocuries per later (a measure of radiation).

The sources of drinking water (both top water and bouled water) heliade rivers, lakes, streams, pools reservors, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring inertals and, at some cases, radioactive material, and can pick up substances resulting from the presence of animals of from human activity.

### Contaminants that may be present in source water include:

- Microbial contominants, such as viruses and bacteria, that may come from sawage meatment plants, sopic systems, agricultural livestock operations, and wildfide.
- Diorganic continuuments, such as sales and metals, that can be manually-occurring or result from tables stormwater count, industrial in domestic wastewater discharges, oil and gas production, mining, or farming
- Pesticiles and herblides, which may come from a variety of sources such as agriculture, arban stormwater ranoff, and residential uses.
- Organic chemical contaminants, including synthetic and volutile organic chemicals, that are hyproduces of industrial
  processes and petroleum production, and can also come from gas stations, urban stormwater ranoff, agricultural
  application, and septic systems.
- Rudioactive contrationats, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to cosure that tap water is safe to drink, USEPA 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 that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants has than once per year became the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water hality, are more than one year old.

Microbiological Contaminants on be completed only a these was a detection of bacteria l	Highest No. of detections	No. of months in violation	MCf.	MCLG	Typical Source of Barteria
Үмэ Соббазі Ұвстеіз	Ü		More than I sample in a secret with a degree on	(;	Nativally present of the environment
toca: Coliforn of E. (196	11		A routine strople and a repeat strope arrive trial californial addition strople also detects feed cohfants or R. ruff.	(I	Timino and surrold feeal waste

### TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (a) be completed only of their strend detection of had of register to the lead sample sect	No. of samples collected	90f° percentic levéi détécted	No. 8465 exceeding AL	AL.	PHG	Typical Source of Contaminant
Louis (pph)	7		Nose	.4		Internal corresion of household water plumbing systems; discharges from in dusta of transific fineris; erosion of natural deposits
Сирри (१५%)	9		None	***	0.17	Internal currences of beans field water planning systems, excision of natural deposits, leading from wexal preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
themical or Crimitions( and Strong in Se,	Sample Date	Level Deterted	Range of Defections	MCL	PHG (MCI/G)	Typical Source ज Contaminant
Secretal Lypton	3.5			36.5%	New	Concretly transitive promotive continue wido:
Headness (ppm)	24			dend	Noor	Generally count in own to be section within

Ann dolphun of in MU, is Al, conscribed. Addipsial information consisting the distance population in this report.

Chanical or Constituent and exposure units	Sample Date	Level Detected	Reagn of Detections	MCL (MRDL)	PHG (MCLG) (MRDLG)	Typical Source of Contamiumpt
\$3334H	9/37/03	130 рус	Andreas and the terreture constructions	1/98/ppv	The second secon	Resser from astable deposits
Nake	9/27/05	2.4 prib		700 pylo		Toursour fixon in tage? depasts
Schown:	vi29/08	3 d pph		50 ppb		From on the manusal deposits
TABLES - DETE	CTION OF C	ONTAMIN	<del></del>		DARY DRINI	KING WATER STANDARD
Themical or Constituent and reporting (2018)	Sample Date	Level Detected	Range of Detections	MCI.	PHG (MCLG)	Typical Source of Communicant
	***					
· · · · · · · · · · · · · · · · · · ·			İ			
					***************************************	
				:	· · · · · · · · · · · · · · · · · · ·	
	a Victoria de la constanta de					
	TABLE 6	DETECTIO	N OF UNRE	GULATED	CONTAMIN	SANTS
hemical of Censelvent of Legerner (pits)	Sample Date	lavel Deteste		ion Level		Health Effects Language
						· · · · · · · · · · · · · · · · · · ·
			(	i		

Story resistion of an MCL MRDL of TV is intermited statistional information regarding the elohaton is provided tucer in this region.

# Additional General Information on Drinking Water

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 the water poses a health risk. More information about communicants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water attine (1-800-426-4701).

NOW SWS CCR From Remod Feb 2006.

A consenses & considerates Respons	Logr (A)
Some people may be there valuerable to continuumits in drinking we compromised persons such as persons with cannot undergoing chames absplants, people with HIV/AIDS or other immane system disorders, so risk from infections. These people should seek advice about drinkin USEPA/Conters for Disease Control (CDC) guidefines on appropriate Cryptosperiatum and other interoblar contaminants are available from (4794).	therapy, persons who have undergone organ onto elderly, and infants can be particularly at any water from their health cure providers, t means to lasson the tiple of infection by
Summary Information for Contaminants Exceeding an MC Any Treatment Technique or Monitoring and I	L, MRDL, or AL, or a Violation of
Inadequately treated water may contain organisms that can equise if include bacteria, viruses, and parasites that can cause symptoms issociated headaches. In the month of Maych 2008, due to heav exceeded the 0.2 NFO twice during a one month period. The highest identified, pumping from source water was suspended until the storm Dally monitoring is performed and is more frequent before, durin ensure that the Water Company weets or exceeds the Tarbidity Perfor	such as nausea, cramps, diarrhea, and water storm activity the harbidity of water of the two reading were 0.219 and when tevent passed and the water ran clearer, ig and after significant storm events to
the CCR must include an explanation of the violation including indverse health effects (included in Attachment 1), and actions	the duration of the violation, potential taken to address the violation.
Distributing the CCR	
	And the state of t

# For Systems Providing Surface Water as a Source Of Drinking Water: (Rejectorpage 1, Type of water source in over 10 sec if your source of water is no face water or groundwater).

TABLE 7 - SAMPLING RESULTS SHOW	ING TREATMENT OF SURFACE WATER SOURCES
Treatment Technologie (*) Type sit gypared tiliusion technology med;	Roseda o Páto
Turning Parkemance Samundos: " (Jud cost forms trained the scale controling pascess)	Datadisyn (the filteral exact mast 1 - 11, less than or equal to 0.2 NTL in 2512 of measurements or a manth

JOSES SWY CUR From Review Feb 2004.

	2 - Not exceed the extreme than aging ones abordaries
	Not respond the NTO an any range
Ludest on thir pain integer of sateples that not Todsidity. Performance Standard Na. 1	V\$ 255
Highest englic to health, now as wong or during the year	0.319
Straiber of wolfdrans at any surface water traitment of option of the strain of the st	Though there were 0 months that the foliation turbulity standard. The filter on swell that been open and along the design three for all so the post 12 minutes and 3 to reform a violation, for the antito year.

A required products or crated to refer a dig level of a continuous and making scales.

### Summary Information for Surface Water Treatment

Water is minially filtered through a Rescoule filter bag. Chilorine solution is then injected and water is routed to a storage tank to ensure adequate obtains connect time. Daily measurements of Obtains and turbidity are taken. Automated systems presum water with elevated furbility to enter system. Automated differing machine system to ansare that observe is within a specific operating range. Weekly residual eliferine usus are performed at first point of use to ensure advigance offloring in system.

the Turbollay apparent in NTCV as a measurement of the characters of water and is a good enhance of water quality and climater performance. halfed by to selfs with a poor porthern spor standards are considered to be an compliance which includes confirmments

# 2006 Consumer Confidence Report

Water System Name: Kings Mountain Park Water Company Report Date: June 30, 2007

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2006.

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

Type of water source(s) in use: Surface Water

Name & location of source(s): Purissima Creek watershed

Drinking Water Source Assessment information: See attached copy of the source water assessment (SWA) summary

page that is attached.

Time and place of regularly scheduled board meetings for public participation: Every third Tuesday of the month at

7:30 pm at board members home.

For more information, contact: Werner Glinka Phone: 650.851.5909

### TERMS USED IN THIS REPORT:

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 (USEPA).

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.

Maximum Contaminant Level (MCL): The highest Primary Drinking Water Standards (PDWS): MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

> Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

> Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

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

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

#### 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, 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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 that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 -	SAMPLING	RESULTS	SHOWING T	HE DETECT	TION OF (	COLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	МС	CL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 san with a detection	ple in a month	0	Naturally present in the environment
Fecal Coliform or E. coli	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste
TABLE 2	- SAMPLIN	G RESUL	rs showing	THE DETEC	CTION OF	LEAD AND COPPER
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	4	1.1ppb	None	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	4	.02 ppm	None	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3 -	SAMPLII	NG RESULTS	FOR SODIU	M AND H	ARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/18/03	17 ppm		none	None	Generally found in ground & surface water

Hardness (ppm) 2/18/03 240 ppm none None Generally found in ground & surface water

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRÐLG]	Typical Source of Contaminant
Barium	9/12/06	110 ppb		1000 ppb		Erosion from natural deposits
Nickel	9/12/06	4.3 ppb		100 ppb		Erosion from natural deposits
Selinium	9/12/06	3.4 ppb		50 ppb		Erosion from natural deposits
Flouride	9/12/06	0.4 ppm				Erosion from natural deposits
Nitrate	9/12/06	1.1 ppm		•		Erosion from natural deposits
Trihaloacetic acid	9/12/06	20 ppb		60 ppb		
TTHM (Total trihalomethane)	9/12/06	96 ppb		80 ppb		
Aluminum	9/12/06	20 ppb				Erosion from natural deposits
Chemical or Constituent	CTION OF C Sample Date	ONTAMIN Level Detected	ANTS WITH  Range of Detections	A <u>SECONE</u> MCL	PHG (MCLG)	KING WATER STANDARD  Typical Source of Contaminant
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
TABLE 5 - DETE Chemical or Constituent (and reporting units)	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample Date	Level Detected	Range of	MCL	PHG (MCLG)	Typical Source of Contaminant
Chemical or Constituent and reporting units)	Sample Date	Level Detected  Detected	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant
Chemical or Constituent	Sample Date  TABLE 6 -	Level Detected  DETECTION Level	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

2005 SWS CCR Form

### Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 (1-800-426-4791).

# Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

TTHM (Total Trihalomethane) standards were exceeded on 9/12/06. The water company failed to complete the quarterly monitoring for TTHM as required by regulations. The water company will conduct annual TTHM monitoring again this summer, and if the standard is exceeded, quarterly monitoring will be conducted.

The water system failed the monthly turbidity average during march and April of 2006. The current filtration system does not meet federal standards for the removal of Cryptosporidium. The water company has applied for and is in process of securing a loan through the State Revolving fund to improve the filter system to comply with federal and state regulatory standards.

# For Systems Providing Surface Water as a Source Of Drinking Water:

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

TABLE 7 - SAMPLING RESULTS SHO	WING TREATMENT OF SURFACE WATER SOURCES
Treatment Technique (a) (Type of approved filtration technology used)	Rosedale Filter
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:  1 - Be less than or equal to 0.2 NTU in 95% of measurements in a month.  2 - Not exceed 0.5 NTU for more than eight consecutive hours.  3 - Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	93.5%
Highest single turbidity measurement during the year	0.219
Number of violations of any surface water treatment requirements	Though there were 0 months that the filtration turbidity standard, the filtration system has been operated above the design flow for all of the past 12 months and therefore in violation for the entire year.

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

### **Summary Information for Surface Water Treatment**

Water is initially filtered through a Rosedale filter bag. Chlorine solution is then injected and water is routed to a storage tank to ensure adequate chlorine contact time. Daily measurements of Chlorine and turbidity are taken. Automated systems prevent water with elevated turbidity to enter system. Automated chlorine monitors system to ensure that chlorine is within a specific operating range. Weekly residual chlorine tests are performed at first point of use to ensure adequate chlorine in system.

# 2007 Consumer Confidence Report

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2007.

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

Type of water source(s) in use:

Name & location of source(s):

Drinking Water Source Assessment information:

See attached copy of the source water assessment (SWA) summary page that is attached.

Time and place of regularly scheduled board meetings for public participation:

Every third Tuesday of the month at 7:30 pm at board members home.

For more information, contact:

Werner Glinka

Phone: 650.851.5909

### TERMS USED IN THIS REPORT:

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 (USEPA).

**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 Standards (PDWS):** MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

**Variances and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

**ppm**: parts per million or milligrams per liter (mg/L)

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

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

#### 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, 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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 that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 -	SAMPLING	RESULTS	SHOWING T	HE DETECT	TION OF	COLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	МС	L	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 san with a detection	ple in a month	0	Naturally present in the environment
Fecal Coliform or E. coli	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste
TABLE 2	- SAMPLING	G RESULT	rs showing	THE DETEC	CTION OF	LEAD AND COPPER
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)				15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)				1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3 -	SAMPLII	NG RESULTS	FOR SODIU	M AND H	ARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/18/03	17 ppm		none	None	Generally found in ground & surface water

Hardness (ppm) 2/18/03 240 ppm none None Generally found in ground & surface wat					
	\$ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	 ~ TO ppin	none	None	Generally found in ground & surface water

^{*}Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium	9/13/07	110 ppb		1000 ppb		Erosion from natural deposits
Nickel	9/13/07	4.1 ppb		100 ppb		Erosion from natural deposits
Selinium	9/13/07	1.8 ppb		50 ppb		Erosion from natural deposits
Combined Radium	Composite	.879 pCi/l		5 pCi/l		Erosion from natural deposits
Nitrate	12/14/07	.87 ppm		45 ppm		Erosion from natural deposits
Trihaloacetic acid	12/12/07	8.2 ppb		60 ppb		By-product of drinking water chlorination
TTHM (Total trihalomethane)	12/12/07	34 ppb		80 ppb		By-product of drinking water chlorination
A. L	9/12/06	20 ppb		l ppm		Erosion from natural deposits
Aluminum						
			ANTS WITH	A SECONE	DARY DRIN	KING WATER STANDARD
TABLE 5 - DETE			ANTS WITH  Range of  Detections	A SECONE	PHG (MCLG)	KING WATER STANDARD  Typical Source of Contaminant
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C	ONTAMIN Level	Range of		PHG	
TABLE 5 - DETE	CTION OF C Sample Date	ONTAMIN Level Detected	Range of	MCL	PHG (MCLG)	Typical Source of Contaminant
TABLE 5 - DETE Chemical or Constituent and reporting units) Chemical or Constituent	CTION OF C Sample Date	ONTAMIN.  Level Detected  Detected	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant
	CTION OF C Sample Date  TABLE 6 -	ONTAMIN.  Level Detected  Detected	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 <i>Cryptosporidium</i> and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

# Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

The current filtration system does not meet federal standards for the removal of Cryptosporidium. The water company has applied for and is in process of securing a loan through the State Revolving fund to improve the filter system to comply with federal and state regulatory standards.

# For Systems Providing Surface Water as a Source Of Drinking Water:

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

TABLE 7 - SAMPLING RESULTS SHO	WING TREATMENT OF SURFACE WATER SOURCES
Treatment Technique ^(a) (Type of approved filtration technology used)	Rosedale Filter
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:  1 - Be less than or equal to 0.2 NTU in 95% of measurements in a month.  2 - Not exceed 0.5 NTU for more than eight consecutive hours.  3 - Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100
Highest single turbidity measurement during the year	0.198
Number of violations of any surface water treatment requirements	Though there were 0 months that the filtration turbidity standard, the filtration system has been operated above the design flow for all of the past 12 months and therefore in violation for the entire year.

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

# **Summary Information for Surface Water Treatment**

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Water is initially filtered through a Rosedale filter bag. Chlorine solution is then injected and water is routed to a storage tank to ensure adequate chlorine contact time. Daily measurements of Chlorine and turbidity are taken. Automated systems prevent water with elevated turbidity to enter system. Automated chlorine monitors system to ensure that chlorine is within a specific operating range. Weekly residual chlorine tests are performed at first point of use to ensure adequate chlorine in system.

# 2008 Consumer Confidence Report

Water System Name: Kings Mountain Park Water Company Report Date: June 30, 2009 We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2007. Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. Type of water source(s) in use: Surface Water Name & location of source(s): Purissima Creek watershed Drinking Water Source Assessment information: See attached copy of the source water assessment (SWA) summary page that is attached. Time and place of regularly scheduled board meetings for public participation: Every third Tuesday of the month at 7:30 pm at board members home.

### TERMS USED IN THIS REPORT:

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.

For more information, contact: Werner Glinka

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 (USEPA).

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.

Maximum Contaminant Level (MCL): The highest Primary Drinking Water Standards (PDWS): MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Phone: 650.851.5909

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND**: not detectable at testing limit

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

**ppb**: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

#### 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, 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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 that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 -	SAMPLING	RESULTS	S SHOWING T	THE DETECT	TION OF	COLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL		MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection		0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste
TABLE 2	- SAMPLING	G RESUL1	rs showing	THE DETEC	CTION OF	LEAD AND COPPER
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)				15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)				1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3 -	SAMPLII	NG RESULTS	FOR SODIU	M AND H	ARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/18/03	17 ppm		none	None	Generally found in ground & surface water

Hardn	ess (ppm)	2/18/03	2.40	***************************************		3.1	Generally found in ground & surface water
17411411	сээ (рриг)	2/10/03	240 ppm		none	None	Generally found in ground & surface water

^{*}Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium	9/13/07	110 ppb		1000 ppb		Erosion from natural deposits
Nickel	9/13/07	4.1 ppb	***************************************	100 ppb		Erosion from natural deposits
Selinium	9/13/07	1.8 ppb		50 ppb		Erosion from natural deposits
Combined Radium	Composite	.879 pCi/l		5 pCi/l		Erosion from natural deposits
Nitrate	12/14/07	.87 ppm		45 ppm		Erosion from natural deposits
Trihaloacetic acid	12/12/07	8.2 ppb		60 ppb		By-product of drinking water chlorination
TTHM (Total trihalomethane)	12/12/07	34 ppb		80 ppb		By-product of drinking water chlorination
Aluminum	9/12/06	20 ppb		1 ppm	***************************************	Erosion from natural deposits
CELL TAX IN M. YA KURUTU	AMEAL AN A	A \$100 L \$ 6757				
Chemical or Constituent	Sample Date	Level Detected	Range of Detections	A SECONE MCL	PHG	KING WATER STANDARD  Typical Source of Contaminant
Chemical or Constituent	Sample	Level	Range of			
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample	Level	Range of		PHG	
Chemical or Constituent	Sample Date	Level Detected	Range of	MCL	PHG (MCLG)	Typical Source of Contaminant
Chemical or Constituent and reporting units)	Sample Date	Level Detected  Detected	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant
Chemical or Constituent and reporting units)  Chemical or Constituent and reporting units)	Sample Date  TABLE 6 -	Level Detected  Detected	Range of Detections  ON OF UNRE	MCL	PHG (MCLG)	Typical Source of Contaminant

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 <i>Cryptosporidium</i> and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

# Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

The current filtration system does not meet federal standards for the removal of Cryptosporidium. The water company has applied for and is in process of securing a loan through the State Revolving fund to improve the filter system to comply with federal and state regulatory standards.

# For Systems Providing Surface Water as a Source Of Drinking Water:

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

TABLE 7 - SAMPLING RESULTS SHO	WING TREATMENT OF SURFACE WATER SOURCES
Treatment Technique (a) (Type of approved filtration technology used)	Rosedale Filter
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:  1 - Be less than or equal to 0.2 NTU in 95% of measurements in a month.  2 - Not exceed 0.5 NTU for more than eight consecutive hours.  3 - Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100
Highest single turbidity measurement during the year	0.198
Number of violations of any surface water treatment requirements	Though there were 0 months that the filtration turbidity standard, the filtration system has been operated above the design flow for all of the past 12 months and therefore in violation for the entire year.

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

# **Summary Information for Surface Water Treatment**

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Water is initially filtered through a Rosedale filter bag. Chlorine solution is then injected and water is routed to a storage tank to ensure adequate chlorine contact time. Daily measurements of Chlorine and turbidity are taken. Automated systems prevent water with elevated turbidity to enter system. Automated chlorine monitors system to ensure that chlorine is within a specific operating range. Weekly residual chlorine tests are performed at first point of use to ensure adequate chlorine in system.

# 2009 Consumer Confidence Report

Water System Name: K	ings Mountain Par	k Water Company Repo	rt Date: <b>Feb. 1, 2010</b>
		tuents as required by State ar for the period of January 1 -	nd Federal Regulations. This report shows December 31, 2008.
Este informe contiene info	ormación muy impor	tante sobre su agua potable. entienda bien.	Tradúzcalo ó hable con alguien que lo
Type of water source(s) in u	se: Surface Water		
Name & location of source(s	s): Purisima Creek y	watershed	
Drinking Water Source Asse	essment information:	See attached copy of the soupage that is attached.	irce water assessment (SWA) summary
Time and place of regularly:	scheduled board moet	ingo for public porticipation.	Evenue third Typeday of the weeth of
Time and place of regularly	schediled board meet	ings for public participation:	Every third Tuesday of the month at 7:30 pm at board members home.
For more information, conta	ect: Werner Glinka, P	resident Pl	none: 650.851.5909

### TERMS USED IN THIS REPORT:

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 (USEPA).

**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 Standards (PDWS):** MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

**Variances and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

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

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

#### 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, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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 that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

			1			COLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL		MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection		0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli		0	Human and animal fecal waste
TABLE 2	- SAMPLING	G RESULT	rs showing	THE DETEC	CTION OF	LEAD AND COPPER
Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5		0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5		0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservative
	TABLE 3 -	SAMPLI	NG RESULTS	FOR SODIU	M AND H	ARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/18/03	17 ppm		none	None	Generally found in ground & surface wate
Hardness (ppm)	2/18/03	240 ppm		none	None	Generally found in ground & surface wate

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium	8/28/08	120 ppb		1000 ppb		Erosion from natural deposits
Nickel	8/28/08	4.9 ppb		100 ppb		Erosion from natural deposits
Combined Radium	Composite	.879 pCi/l		5 pCi/l		Erosion from natural deposits
Flouride	8/28/08	0.31 ppm		2.0 ppm		Erosion from natural deposits
Cadmium	8/28/08	0.26 ppb		5 ppb		Erosion from natural deposits. Internal corrosion of galvanized pipes.
Nitrite ( as Nitrogen N)	8/28/08	0.24 ppm		1.0 ppm		Runoff and leaching from fertilizer use. Leaching from septic tanks. Erosion from natural deposits.
Nitrate (as nitrate NO3)	8/28/08	.87 ppm	***************************************	45 ppm		Erosion from natural deposits
Haloacetic acids (HAA5)	8/24/09	15 ppb		60 ppb		By-product of drinking water chlorination
TTHM (Total trihalomethane)	8/24/09	55 ppb		80 ppb		By-product of drinking water chlorination
Aluminum	8/28/08	15 ppb	***************************************	1 ppm		Erosion from natural deposits
TABLE 5 - DETE	CTION OF C	ONTAMIN.	ANTS WITH	A <u>SECONI</u>	DARY DRINI	KING WATER STANDARÐ
Chemical or Constituent and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
	TABLE 6 -	DETECTIO	ON OF UNR	EGULATED	CONTAMI	NANTS
Chemical or Constituent and reporting units)	Sample Date	Leve Detect		ation Level	months and the contract of the	Health Effects Language
					•	

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

# Additional General Information on Drinking Water

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 the water poses a health risk. More

information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a violation of
Any Treatment Technique or Monitoring and Reporting Requirement

### For Systems Providing Surface Water as a Source Of Drinking Water:

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

Treatment Technique (a)	Rosedale Filter	
(Type of approved filtration technology used)	Roscuate Pater	
	Turbidity of the filtered water must:	
Turbidity Performance Standards (b) (that must be met through the water treatment process)	1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month.	
	2 - Not exceed 0.5 NTU for more than eight consecutive hours.	
	3 - Not exceed 1.0 NTU at any time.	
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100	
Highest single turbidity measurement during the year	0.034	
Number of violations of any surface water treatment requirements		

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

### **Summary Information for Surface Water Treatment**

Water is initially filtered through a Rosedale filter bag. The water is then processed through Homespring untrafiltration units which meets current federal requirements for removal of Cryptosporidium. Chlorine solution is then injected and water is routed to a storage tank to ensure adequate chlorine contact time. Daily measurements of Chlorine and turbidity are taken. Automated systems prevent water with elevated turbidity to enter system. Automated chlorine monitors system to ensure that chlorine is within a specific operating range. Weekly residual chlorine tests are performed at first point of use to ensure adequate chlorine in system.

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

# **Appendix B**



## PURISIMA CREEK REDWOODS

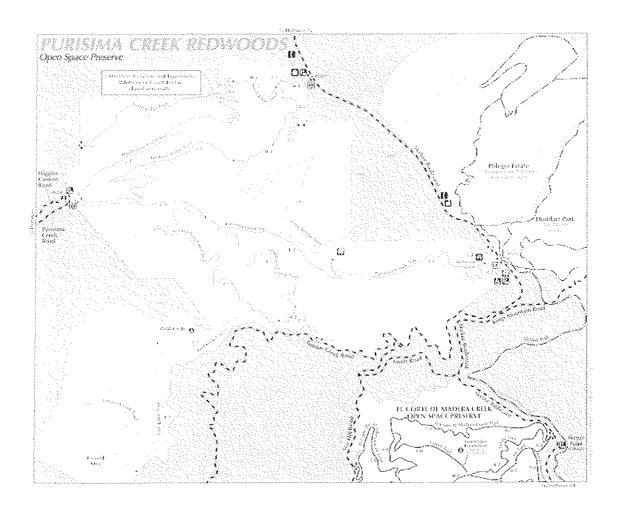
## Open Space Preserve

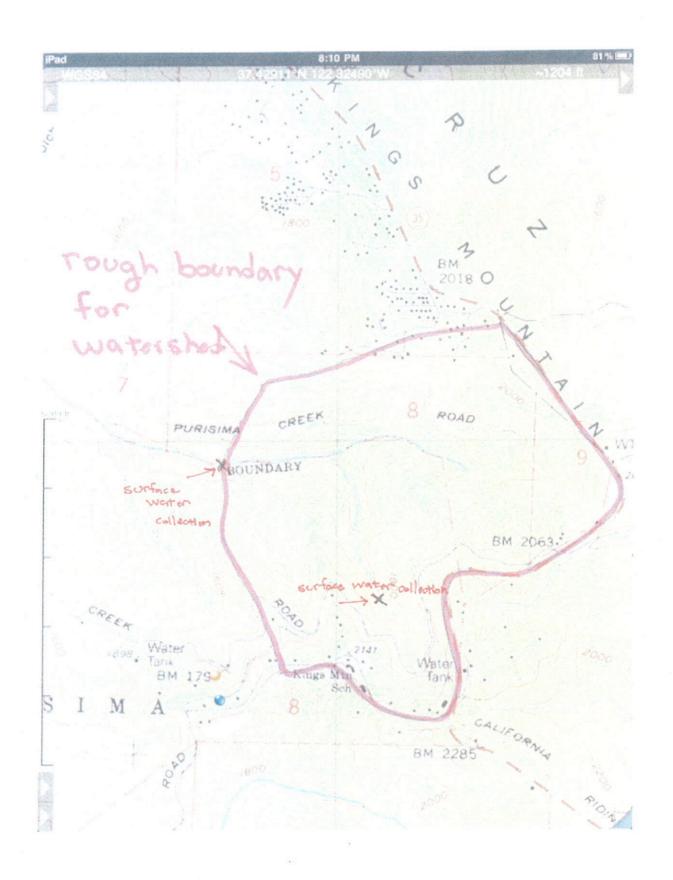
MIDPENINSULA REGIONAL OPEN SPACE DISTRICT www.openspace.org

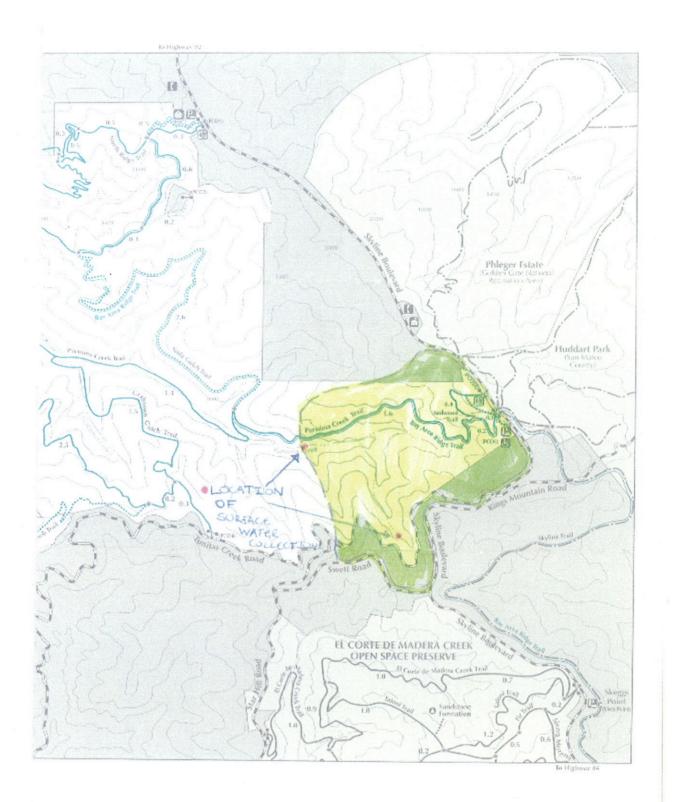


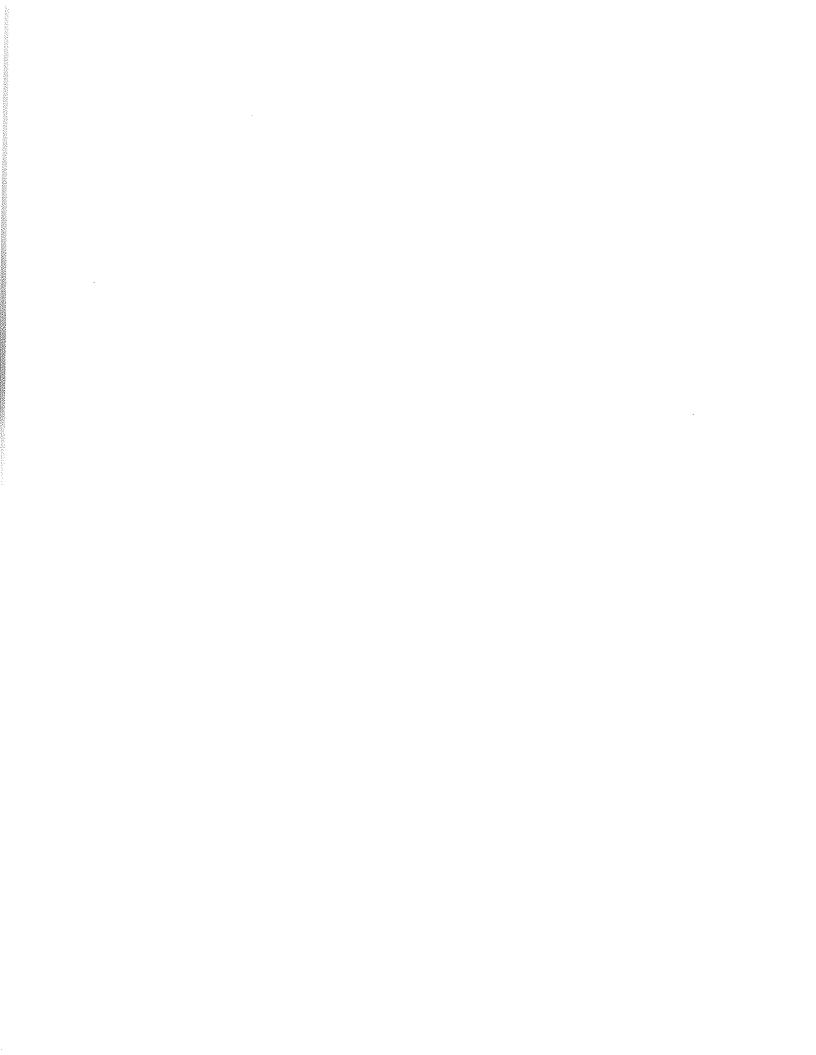


Check trail conditions and seasonal closures by calling the District cities or visiting the Web site www.openspare.ong.
GPS coordinates displayed on this map are projected in WGS 1984 and represent the approximate locations of points of interest.









Appendix A-2: Regulated Contaminants with Secondary MCLs

Monitoring Required by Section 64449, Chapter 15, Title 22, California Code of Regulations

Constituent	Secondar y MCL (units)	To convert to CCR, multiply by	MCL in CCR units	Typical Source of Contaminant
Aluminum	0.2 mg/L	1000	200 ug/L	Erosion of natural deposits; residual from some surface water treatment processes
Color	15 Units	-	15 Units	Naturally-occurring organic materials
Copper	1.0 mg/L	-	1.0 mg/L	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents [MBAS]	0.5 mg/L	1000	500 ug/L	Municipal and industrial waste discharges
Iron	0.3 mg/L	1000	300 ug/L	Leaching from natural deposits; industrial wastes
Manganese	0.05 mg/L	1000	50 ug/L	Leaching from natural deposits
Methyl-tert- butyl ether [MTBE]	0.005 mg/L	1000	5 ug/L	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor Threshold	3 Units	_	3 Units	Naturally-occurring organic materials
Silver	0.1 mg/L	1000	100 ug/L	Industrial discharges
Thiobencarb	0.001 mg/L	1000	1 ug/L	Runoff/leaching from rice herbicide
Turbidity	5 Units	-	5 Units	Soil runoff
Zinc	5.0 mg/L	-	5.0 mg/L	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	1000 mg/L	-	1,000 mg/L	Runoff/leaching from natural deposits
Specific Conductance	1,600 μS/cm	-	1,600 μS/cm	Substances that form ions when in water; seawater influence
Chloride	500 mg/L	-	500 mg/L	Runoff/leaching from natural deposits; seawater influence
Sulfate	500 mg/L	-	500 mg/L	Runoff/leaching from natural deposits; industrial wastes

Appendix A-2: Regulated Contaminants with Secondary MCLs

Monitoring Required by Section 64449, Chapter 15, Title 22, California Code of Regulations

Constituent	Secondar y MCL (units)	To convert to CCR, multiply by	MCL in CCR units	Typical Source of Contaminant
Aluminum	0.2 mg/L	1000	200 ug/L	Erosion of natural deposits; residual from some surface water treatment processes
Color	15 Units	-	15 Units	Naturally-occurring organic materials
Copper	1.0 mg/L	-	1.0 mg/L	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents [MBAS]	0.5 mg/L	1000	500 ug/L	Municipal and industrial waste discharges
Iron	0.3 mg/L	1000	300 ug/L	Leaching from natural deposits; industrial wastes
Manganese	0.05 mg/L	1000	50 ug/L	Leaching from natural deposits
Methyl-tert- butyl ether [MTBE]	0.005 mg/L	1000	5 ug/L	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor Threshold	3 Units	<u>.</u>	3 Units	Naturally-occurring organic materials
Silver	0.1 mg/L	1000	100 ug/L	Industrial discharges
Thiobencarb	0.001 mg/L	1000	1 ug/L	Runoff/leaching from rice herbicide
Turbidity	5 Units	-	5 Units	Soil runoff
Zinc	5.0 mg/L	-	5.0 mg/L	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	1000 mg/L	-	1,000 mg/L	Runoff/leaching from natural deposits
Specific Conductance	1,600 μS/cm	_	1,600 μS/cm	Substances that form ions when in water; seawater influence
Chloride	500 mg/L	-	500 mg/L	Runoff/leaching from natural deposits; seawater influence
Sulfate	500 mg/L	-	500 mg/L	Runoff/leaching from natural deposits; industrial wastes

## Appendix A-1: Regulated Contaminants with Primary MCLs, MRDLs, TTs, or ALs

Key
AL = Regulatory Action Level
MCL = Maximum Contaminant Level
PHG = Public Health Goal

**MRDL** = Maximum Residual Disinfectant Level **MRDLG** ≈ Maximum Residual Disinfectant Level Goal

MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter
NTU = Nephelometric Turbidity Units
TT = Treatment Technique

pCi/L = picocuries per liter (a measure of radioactivity)
 ppm = parts per million, or milligrams per liter (mg/L)
 ppb = parts per billion, or micrograms per liter (μg/L)
 ppt = parts per trillion, or nanograms per liter
 ppq = parts per quadrillion, or picograms per liter

		To		:	AVERTAGE AND A STATE OF THE STA	
	Traditio for CCR,		MCL in	PHG		
Contaminant (CCR units)			CCR units	(MCLG	Major Sources in Drinking Water	Health Effects Language
			Micro	biologi	Microbiological Contaminants	
(1) Total Coliform Bacteria	MCL: Syste samples/m 5.0% of mo positive; Sy <40 sampl than 1 positive than 1 positive.	MCL: Systems that collect ≥40 samples/month: more than 5.0% of monthly samples are positive; Systems that collect <40 samples/month: no more than 1 positive monthly sample	lect ≥40 than es are collect no more	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform and $E.\ coli$	MCL: a rou repeat sam; positive, an fecal colifor	MCL: a routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	and a coliform se is also positive	(0)	Human and animal fecal waste	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
Turbidity	TT	1	TT	n/a	Soil runoff	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause

		<b>C</b>				
Contaminant (CCR units)	Traditio nal MCL in mg/L	convert for CCR, multiply by	MCL in CCR units	PHG (MCLG )	Major Sources in Drinking Water	Health Effects Language
						symptoms such as nausea, cramps, diarrhea and associated headaches.
Giardia lamblia Viruses Heterotrophic plate count bacteria Legionella Cryptosporidium	Surface wa	Surface water treatment = TT	$\mathfrak{1t}=\mathrm{\Gamma}\mathrm{\Gamma}$	HPC = n/a; Others = (0)	Naturally present in the environment	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
The state of the s			Rad	ioactive	Radioactive Contaminants	
						Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of
Gross Beta particle activity (pCi/L)	50 (a)	1	50	9	Decay of natural and man-made deposits	the MCL over many years may have an increased risk of getting cancer.
(a) Effective 6/11/2006, the gross beta particle activity MCL is organ. 50 pCi/L is used as a screening level.	he gross be a screening	eta particle level.	activity	ACL is 4	millirem/year annual d	4 millirem/year annual dose equivalent to the total body or any internal
Strontium-90 (pCi/L)	8	a .	ω	0.35	Decay of natural and man-made deposits	Some people who drink water containing strontium-90 in excess of the MCL over many years may have an increased risk of getting cancer.
Tritium (pCi/L)	20,000	ŧ	20,000	400	Decay of natural and man-made deposits	Some people who drink water containing tritium in excess of the MCL over many years may have an increased risk of getting cancer.
Gross Alpha particle activity (pCi/L)	15	ı	٣٠	(0)	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium (pCi/L)	5	1	5	(0)	Erosion of natural	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years

Contaminant (CCR units)	Traditio nal MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	PHG (MCLG	Major Sources in Drinking Water	Health Effects Language
					deposits	may have an increased risk of getting cancer.
Uranium (pCi/L)	20	1	20	0.43	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.
			Inc	Inorganic	Contaminants	
Aluminum (ppm)	H	s , s i		9.0	Erosion of natural deposits; residue from some surface water treatment processes	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
Antimony (ppb)	900.0	1000	9	20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony in excess of the MCL over many years may experience increases in blood cholesterol and decreases in blood sugar.
Arsenic (ppb)	0.010(b)	1000	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
(b) Effective 1/23/2006, the federal arsenic MCL is 0.010 mg/L. A new state MCL has no ppb, refer to pages 17 and 18 for the special educational statement to include in the CCR.	enic MCL is 0.010 cial educational	0 mg/L. A new statement to incl	tate MCL has nude in the CCF	not yet been a	dopted and remains as 0.5 mg/L (or	(b) Effective 1/23/2006, the federal arsenic MCL is 0.010 mg/L. A new state MCL has not yet been adopted and remains as 0.5 mg/L (or 50 ppb). If the arsenic concentration is above 5 up to and including 10 ppb, refer to pages 17 and 18 for the special educational statement to include in the CCR.
Asbestos (MFL)	7 MFL	į	7	7	Internal corrosion of asbestos cement water mains; erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	Н	* 1 * 2	$\vdash$	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.

Contaminant (CCR units)	Traditio nal MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	PHG (MCLG	Major Sources in Drinking Water	Health Effects Language
Beryllium (ppb)	0.004	1000	4	<del></del>	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries	Some people who drink water containing beryllium in excess of the MCL over many years may develop intestinal lesions.
Cadmium (ppb)	0.005	1000	7.5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years may experience kidney damage.
Chromium (ppb)	0.05	1000	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits	Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis.
Copper (ppm)	AL = 1.3	ı	AL = 1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Cyanide (ppb)	0.15	1000	150	150	Discharge from steel/metal, plastic, and	Some people who drink water containing cyanide in excess of the MCL over many years may

Contaminant (CCR units)	Traditio nal MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	PHG (MCLG	Major Sources in Drinking Water	Health Effects Language
				-	fertilizer factories	experience nerve damage or thyroid problems.
Fluoride (ppm)	2.0	r	2.0	<del></del>	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.
Lead (ppb)	AL = 0.015	1000	AL = 15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Mercury [inorganic] (ppb)	0.002	1000	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland	Some people who drink water containing mercury in excess of the MCL over many years may experience mental disturbances, or impaired physical coordination, speech and hearing.
Nickel (ppb)	0.1	1000	100	12	Erosion of natural deposits, discharge from metal factories	Some people who drink water containing nickel in excess of the MCL over many years may experience liver and heart effects.
Nitrate (ppm)	45 (as nitrate)	ι	45 (as nitrate)	45 (as NO3)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of

MATERIA TO TOTAL PROPERTY AND		nk may I, may nd
age		Runoff and leaching from Infants below the age of six months who drink fertilizer use; leaching water containing nitrite in excess of the MCL may from septic tanks and quickly become seriously ill and, if untreated, may sewage; erosion of die. Symptoms include shortness of breath and natural deposits blueness of the skin.
Health Effects Language		months xcess of and, if u
Effects		ge of six trite in e iously ill ude shon
Health	omen.	w the ay ining ni ome ser ome included the skin the skin
	pregnant women.	Infants below the agwater containing nit quickly become seric die. Symptoms inclublueness of the skin.
	pre	m Infa wat qui die. blu
Major Sources in Drinking Water		hing fro aching ks and 1 of s
Major Sources in Drinking Water		Runoff and leaching frofertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Maj Dri		Runoff and leach fertilizer use; lea from septic tank: sewage; erosion natural deposits
PHG (MCLG )		
MCL in CCR units		1 (as nitrogen) 1 as N
To convert for CCR, nultiply by		r :
col col		
Contaminant (CCR units)  To root To convert nal MCL multiply in mg/L by		1 (as nitrogen)
units)	C. P. C.	
t (CCR 1		***************************************
minan	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(mdd)
Conta		Nitrite (ppm)

Health Effects Language		Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse affects associated	with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for	normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.	Selenium is an essential nutrient. However, some	people who drink water containing selenium in excess of the MCL over many years may experience hair or fingernail losses, numbness in fingers or toes, or circulation system problems.
Major Sources in Drinking Water	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a	variety of industries. It usually gets into drinking water as a result of environmental	historic aerospace or other industrial	operations that used or use, store, or dispose of perchlorate and its salts.	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines	and chemical manufacturers; runoff from livestock lots (feed additive)
PHG (MCLG				9	e .	(20)
MCL in CCR units				9		50
To convert for CCR, multiply by				1000		1000
Traditio nal MCL in mg/L				900.0		0.05
Contaminant (CCR units)		20	N	Perchlorate (ppb)		Selenium (ppb)

Contaminant (CCR units)	Traditio nal MCL or [MRDL] in mg/L	To convert for CCR, multiply by	MCL or [MRDL] in CCR units	PHG, (MCLG) or [MRDLG]	Major Sources in Drinking Water	Health Effects Language
	Disinfection Byproducts, Disir	oducts, I	)isinfecta	unt Resid	uals, and Disinfecti	ifectant Residuals, and Disinfection Byproduct Precursors
Federal Rule			-		10000	
TTHMs [Total Trihalomethanes] (ppb)	0.080	1000	. 08	n/a	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (ppb)	0.060	1000	09	n/a	Byproduct of drinking water disinfection	Some people who drink water containing halocetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Bromate (ppb)	0.010	1000	10	(0)	Byproduct of drinking water disinfection	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
Chloramines (ppm)	[MRDL = 4.0 (as Cl ₂₃ ]	1	[MRDL = 4.0 (as Cl ₂ )]	[MRDLG = 4 (as Cl2)]	Drinking water disinfectant added for treatment	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
Chlorine (ppm)	[MRDL = 4.0 (as Cl2)]	a	[MRDL = 4.0 (as Cl ₂₎ ]	[MRDLG = 4 (as Cl2)]	Drinking water disinfectant added for treatment	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chlorite (ppm)	1.0	١	1.0	(8.8)	Byproduct of drinking water disinfection	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who

Traditio nal MCL or Contaminant (CCR units) in mg/L	Traditio nal MCL or [MRDL] in mg/L	To convert for CCR, multiply by	MCL or [MRDL] in CCR units	PHG, (MCLG) or [MRDLG]	Major Sources in Drinking Water	Health Effects Language
					- Production	drink water containing chlorite in excess of the MCL. Some people may experience anemia.
Chlorine dioxide (ppb)	[MRDL = 0.8 (as ClO ₂ )]	1000	[MRDL = 800 (as ClO ₂ )]	[MRDLG = 800 (as ClO ₂ )]	[MRDLG = Drinking water 800 (as disinfectant added for ClO ₂ )] treatment	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people experience anemia.
						Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking
Control of DBP precursors (TOC)	TT		TT	n/a	Various natural and man-made sources	water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.