



**CENTRAL COAST WATER AUTHORITY
POLONIO PASS WATER TREATMENT PLANT
1999 ANNUAL WATER QUALITY REPORT**

Please see last page for key to abbreviations.

Parameter	Units	State MCL	PHG (MCLG)	Range	TREATED	SOURCE STATE WATER	Major Sources in Drinking Water
				Average Highest	CCWA PPWTP		

PRIMARY STANDARDS--Mandatory Health-Related Standards

CLARITY

Combined Filter Effluent Turbidity	NTU	5.0 & 0.5 (a)	NS	Highest % < 0.5	0.07 100%	-- --	Soil runoff
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MICROBIOLOGICAL (b)

Total Coliform Bacteria (Distr. System-Wide)	(b)	5.0%	(0)	Range	0 - 1.7%	NS	Naturally present in the environment
				Average	0.21%	NS	
				Highest	1.7%	NS	
Fecal Coliform and E. coli (Distr. System-Wide)	(b)	(b)	(0)	Range	0 Positives	NS	Human and animal fecal waste
				Average	0 Positives	NS	
				Highest	0 Positives	NS	

ORGANIC CHEMICALS

Total Trihalo-methanes (c)	ppb	100	n/a	Range	23.0 - 31.2	NC	By-product of drinking water chlorination
				Average	28.6	NC	
				Highest	31.2	NC	

INORGANIC CHEMICALS

Aluminum (d)	ppm	1	n/a	Range	0.09 - 0.25	ND-0.74	Residue from water treatment process; Erosion of natural deposits
				Average	0.09	0.31	
				Highest	0.25	0.74	
Arsenic	ppb	50	n/a	Range	ND - 2.1	ND-3.00	Erosion of natural deposits; glass & electronics production wastes
				Average	0.30	1.05	
				Highest	2.1	3.00	
Asbestos	MFL	7	(7)	Range	ND		Internal corrosion of asbestos cement pipes; erosion of natural deposits
				Average	ND		
				Highest	ND	2.1	
Copper	ppm	AL=1.3	0.17	Range	ND - 0.03	ND-0.04	Internal corrosion of household pipes; erosion of natural deposits
				Average	0.00	ND	
				Highest	0.03	0.04	
Fluoride	ppm	2	1	Range	0.07-0.09	0.08-0.09	Erosion of natural deposits; water additive that promotes strong teeth
				Average	0.08	0.08	
				Highest	0.09	0.09	
Nitrate (as N) (e)	ppm	10	10	Range	NC	NC	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
				Average	NC	NC	
				Highest	1.40	1.20	

RADIONUCLIDES (f)

Gross Alpha Particle Activity	pCi/L	15	(0)	Range	0.78 - 1.21		Erosion of natural deposits
				Average	1.0		
				Highest	1.21	2.34	

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				Average	Highest	CCWA PPWTP		
SECONDARY STANDARDS--Aesthetic Standards								
Chloride	ppm	500	NS	Range	50 - 72		30-70	Runoff/leaching from natural deposits; seawater influence
				Average	61			
				Highest	72			
Color	Units	15	NS	Range	1 - 3		2-22	Naturally occurring organic materials
				Average	1.83			
				Highest	3			
Corrosivity		non-corrosive	NS	Range			n/a	Balance of hydrogen, carbon, & oxygen in water; affected by temp., other factors
				Average	non-corrosive			
				Highest	non-corrosive			
Hardness (Total Hardness)	ppm	NS	NS	Range	86 - 106		86-106	Leaching from natural deposits
				Average	96			
				Highest	106			
Heterotrophic Plate Count (h)	CFU/mL	NS	NS	Range	< 1 - 1		NS	Naturally present in the environment
				Average	< 1			
				Highest	1			
Iron	ppb	300	NS	Range	ND		64-868	Leaching from natural deposits; industrial wastes
				Average	ND			
				Highest	ND			
Manganese	ppb	50	NS	Range	ND		ND-36	Leaching from natural deposits
				Average	ND			
				Highest	ND			
Odor Threshold	Units	3	NS	Range	ND		2.5-5.0	Naturally occurring organic materials
				Average	ND			
				Highest	ND			
Sodium	ppm	NS	NS	Range	33 - 62		28-57	Runoff/leaching from natural deposits; seawater influence
				Average	48			
				Highest	62			
Specific Conductance	µmho/cm	1600	NS	Range	335 - 548		308-518	Substances that form ions when in water; seawater influence
				Average	446			
				Highest	548			
Sulfate	ppm	500	NS	Range	35 - 79		25-65	Runoff/leaching from natural deposits; industrial wastes
				Average	53			
				Highest	79			
Total Dissolved Solids	ppm	1000	NS	Range	222 - 510		187-296	Runoff/leaching from natural deposits; seawater influence
				Average	300			
				Highest	510			
Turbidity (Monthly)	NTU	5	NS	Range	0.04 - 0.07		3.6-9.8	Soil runoff
				Average	0.04			
				Highest	0.07			

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Parameter	Units	State MCL	PHG (MCLG)	Range	TREATED	SOURCE	Major Sources in Drinking Water
				Average Highest	CCWA PPWTP		
Additional Parameters (Unregulated)							
Alkalinity	ppm	--	--	Range	62 - 76	67-83	Runoff/leaching from natural deposits; seawater influence
				Average	69		
				Highest	76		
Calcium	ppm	--	--	Range	16 - 27	16-28	Runoff/leaching from natural deposits; seawater influence
				Average	21		
				Highest	27		
Haloacetic acids	ppb	--	--	Range	12.7 - 28.4	n/a	By-product of drinking water chlorination
				Average	17.1		
				Highest	28.4		
Magnesium	ppm	--	--	Range	8.0 - 14.0	8-15	Runoff/leaching from natural deposits; seawater influence
				Average	11.6		
				Highest	14.0		
pH	pH Units	--	--	Range	7.99 - 8.22	8.19-8.87	Runoff/leaching from natural deposits; seawater influence
				Average	8.11		
				Highest	8.22		
Potassium	ppm	--	--	Range	1.6 - 2.9	1.6-2.9	Runoff/leaching from natural deposits; seawater influence
				Average	2.3		
				Highest	2.9		
Total chlorine residual	ppm	--	--	Range	1.8 - 2.12	n/a	Measurement of the disinfectant used in the production of drinking water
				Average	2.0		
				Highest	2.2		

ABBREVIATIONS AND NOTES

n/a = not applicable

NS = No Standard

NC = Not Collected

ND = None Detected. Detection Limits for the purposes of reporting (DLRs) available on request.

µmho/cm = micromhos per centimeter

(a) The turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the *Secondary Standards* section.

(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform positive. Fecal coliform/*E. coli* MCLs: The occurrence of 2 consecutive total coliform positive samples, one of which contains fecal coliform/*E. coli*, constitutes an acute MCL violation. These MCLs were not violated in 1999. Results are based on the distribution system's highest percent positives.

Compliance is based on the combined distribution system sampling from all the filtration plants. 1,888 samples were analyzed in 1999.

(c) Calculated from the highest of quarterly filtration plant effluent samples. Compliance is based on a running annual average of more than 44 quarterly distribution system samples, which was 36.3 ppb for 1999.

(d) Aluminum has a secondary MCL of 200 ppb (0.2 ppm).

(e) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as N.

(f) Results are for the 1998 calendar year.

Water utilities are required to make these surveys every four years.

(g) Standard is for Radium-226 and -228 combined.

(l) Pour plate technique, 48-hour incubation at 35°C, monthly averages.

California DHS Abbreviations

AL = Regulatory Action Level

MCL = Maximum Contaminant Level

PHG = Public Health Goal

MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter

NTU = Nephelometric Turbidity Units

pCi/L = PicoCuries per liter

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 (ng/L)

ppq = parts per quadrillion, or

picograms per liter (pg/L)

TT = Treatment Technique