

2006 Water Quality Report to MWD Member Agencies--*The Metropolitan Water District of Southern California*

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Effluent					Major Sources in Drinking Water	
						Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant		
Percent State					Range	60-85	59-71	100	41-59	100		
Project Water	%	NA	NA	NA	Average	73	65	100	51	100		
PRIMARY STANDARDS--Mandatory Health-Related Standards												
CLARITY												
Combined Filter Effluent Turbidity	NTU	0.3			Highest	0.09	0.08	0.05	0.11	0.06		
	%	95 (a)	NA	NA	% < 0.3	100%	100%	100%	100%	100%	Soil runoff	
MICROBIOLOGICAL												
Total Coliform					Range	Distribution System-wide: 0%						
Bacteria	%	5.0 (b)	(0)	NA	Average	Distribution System-wide: 0%					Naturally present in the environment	
Fecal Coliform and <i>E. coli</i>	(c)	(c)	(0)	NA	Distribution System-wide Fecal Coliform-positive samples						0	
					Distribution System-wide <i>E. coli</i> -positive samples:						0	Human and animal fecal waste
Heterotrophic Plate Count (HPC) (d)	CFU/mL	TT	NA	NA	Range	Distribution System-wide: TT						
					Average	Distribution System-wide: TT					Naturally present in the environment	
<i>Cryptosporidium</i> (e)	Oocysts/200 L	TT	(0)	NA	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Human and animal fecal waste	
<i>Giardia</i> (e)	Cysts/200 L	TT	(0)	NA	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Human and animal fecal waste	
Total Culturable Viruses (e)	P or A/1000L	TT	(0)	NA	Range	A	A	A	A	A		
					Average	A	A	A	A	A	Human and animal fecal waste	
ORGANIC CHEMICALS												
Pesticides/PCBs												
Alachlor	ppb	2	4	1	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops	
Atrazine	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops and along highways	
Bentazon	ppb	18	200	2	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice, alfalfa, and grapes	
Carbofuran	ppb	18	1.7	5	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Leaching of soil fumigant used on rice, alfalfa and grapes	
Chlordane	ppt	100	30	100	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Residue of banned insecticide	
2,4-D	ppb	70	70	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops, range land, lawns	
Dalapon	ppb	200	790	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used on right-of-way, crops, and landscapes	
Dibromochloropropane (DBCP)	ppt	200	1.7	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Banned nematocide that may still be present in soils	
Dinoseb	ppb	7	14	2	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used on soybeans, vegetables, and fruits	
Diquat	ppb	20	15	4	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestria and aquatic weeds	
Endothall	ppb	100	580	45	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestria and aquatic weeds	
Endrin	ppb	2	1.8	0.1	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Residue of banned insecticide and rodenticide	
Ethylene Dibromide (EDB)	ppt	50	10	20	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Petroleum refinery discharges; underground gas tank leaks	
Glyphosate	ppb	700	1000	25	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff from herbicide use	
Heptachlor	ppt	10	8	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Residue of banned insecticide	
Heptachlor Epoxide	ppt	10	6	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Breakdown product of heptachlor	
Lindane	ppt	200	32	200	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on cattle, lumber, and gardens	
Methoxychlor	ppb	30	30	10	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses	
Molinate (Ordram)	ppb	20	NA	2	Range	ND	ND	ND	ND	ND		
					Average	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice	

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						Weymouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	
						Range	Range	Range	Range	Range	
Oxamyl (Vydate)	ppb	50	50	20	Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses
Pentachlorophenol	ppb	1	0.4	0.2	Average	ND	ND	ND	ND	ND	Discharge from wood preserving factories other insecticidal and herbicidal uses
Picloram	ppb	500	500	1	Average	ND	ND	ND	ND	ND	Herbicide runoff
Polychlorinated Biphenyls (PCBs)	ppt	500	(0)	500	Average	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
Simazine	ppb	4	4	1	Average	ND	ND	ND	ND	ND	Herbicide runoff
Thiobencarb (f)	ppb	70	70	1	Average	ND	ND	ND	ND	ND	Runoff leaching from rice herbicide
2,4,5-TP (Silvex)	ppb	50	25	1	Average	ND	ND	ND	ND	ND	Residue of banned herbicide
Toxaphene	ppb	3	0.03	1	Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on cotton and cattle
Semi-Volatile Organic Compounds											
Acrylamide	NA	TT	(0)	NA	Range	TT	TT	TT	TT	TT	Water treatment chemical impurities
Benzo(a)pyrene	ppt	200	4	100	Average	ND	ND	ND	ND	ND	Leaching from water storage tank linings and distribution lines
Di(2-ethylhexyl)adipate (DEHA)	ppb	400	200	5	Average	ND	ND	ND	ND	ND	Discharge from chemical factories
Di(2-ethylhexyl)phthalate (DEHP)	ppb	4	12	3	Average	ND	ND	ND	ND	ND	Chemical factory discharge; inert ingredient in pesticides
Epichlorohydrin	NA	TT	(0)	NA	Range	TT	TT	TT	TT	TT	Water treatment chemical impurities
Hexachlorobenzene	ppb	1	0.03	0.5	Average	ND	ND	ND	ND	ND	Discharge from metal refineries & agricultural factories; wastewater chlorination rxn by-product
Hexachloro-cyclopentadiene	ppb	50	50	1	Average	ND	ND	ND	ND	ND	Discharge from chemical factories
2,3,7,8-TCDD (Dioxin)	ppq	30	(0)	5	Average	ND	ND	ND	ND	ND	Waste incineration emissions; chemical factory discharges
Volatile Organic Compounds											
Benzene	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND	Plastics factory discharges; gas tanks and landfill leaching
Carbon Tetrachloride	ppt	500	100	500	Average	ND	ND	ND	ND	ND	Chemical plant discharges; other industrial waste discharges
1,2-Dichlorobenzene	ppb	600	600	0.5	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,4-Dichlorobenzene	ppb	5	6	0.5	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,1-Dichloroethane	ppb	5	3	0.5	Average	ND	ND	ND	ND	ND	Extraction and degreasing solvent; fumigant
1,2-Dichloroethane	ppt	500	400	500	Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,1-Dichloroethylene	ppb	6	10	0.5	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	ppb	6	100	0.5	Average	ND	ND	ND	ND	ND	Industrial chemical factory discharges; by-product of TCE and PCE
trans-1,2-Dichloroethylene	ppb	10	60	0.5	Average	ND	ND	ND	ND	ND	Industrial chemical factory discharges; by-product of TCE and PCE
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	ND	ND	ND	ND	ND	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	ppb	5	0.5	0.5	Average	ND	ND	ND	ND	ND	Industrial chemical factory discharges; from fumigants
1,3-Dichloropropene	ppt	500	200	500	Range	ND	ND	ND	ND	ND	Runoff/leaching from nematocide used on croplands
Ethylbenzene	ppb	300	300	0.5	Average	ND	ND	ND	ND	ND	Petroleum refinery discharges; industrial chemical factories

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Methyl-tert-butylether (MTBE) (f,g)	ppb	13	13	3	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Gasoline discharges from watercraft engines
Monochlorobenzene	ppb	70	200	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial, agricultural, and chemical waste discharges, and dry cleaners
Styrene	ppb	100	(100)	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Rubber and plastics factories discharges; landfill leaching
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial, agricultural, and chemical waste discharges; solvent uses
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from factories, dry cleaners and auto shops
Toluene	ppb	150	150	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from petroleum and chemical refineries
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from textile-finishing factories
1,1,1-Trichloroethane	ppb	200	1000	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Metal degreasing site discharges; manufacture of food wrappings
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from industrial chemical factories
Trichloroethylene (TCE)	ppb	5	0.8	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Metal degreasing site discharges and other factories
Trichlorofluoromethane (Freon-11)	ppb	150	700	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial factory discharges; degreasing solvent propellant
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from metal degreasing sites and other factories; dry cleaning solvent; refrigerant
Vinyl Chloride	ppt	500	50	500	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from PVC piping; plastic factory discharges
Xylenes	ppm	1.750	1.8	0.0005	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from petroleum and chemical refineries fuel solvent
INORGANIC CHEMICALS											
Aluminum (f)	ppb	1000	600	50	Range Average	ND-190 ND	ND-58 ND	ND-110 81	ND ND	ND-100 58	Residue from water treatment process natural deposits; erosion
Antimony	ppb	6	20	6	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Petroleum refinery discharges; fire retardants solder; electronics
Arsenic	ppb	10	0.004	2	Range Average	ND-2.4 ND	ND ND	ND ND	ND ND	ND-2.0 ND	Natural deposits erosion, glass and electronics production wastes
Asbestos	MFL	7	7	0.2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Asbestos, cement pipes internal corrosion natural deposits; erosion
Barium	ppb	1000	2000	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Oil and metal refineries discharges; natural deposits erosion
Beryllium	ppb	4	1	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from metal refineries, aerospace and defense industries
Cadmium	ppb	5	0.04	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of galvanized pipes natural deposits erosion
Chromium	ppb	50	(100)	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from steel and pulp mills; natural deposits erosion
Copper (f, h)	ppm	AL=1.3	0.17	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of household pipes; natural deposits erosion
Cyanide	ppb	150	150	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from steel/metal, plastic, and fertilizer factories
Fluoride (naturally-occurring)	ppm	2.0	1	0.1	Range Average	ND-0.15 0.13	0.12-0.18 0.15	0.16-0.22 0.18	0.16-0.23 0.20	ND ND	Erosion of natural deposits; water additives for tooth health
Lead (h)	ppb	AL=15	2	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	House pipes internal corrosion; erosion of natural deposits
Mercury	ppb	2	1.2	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits; factory discharges landfill runoffs
Nickel	ppb	100	12	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits; discharge from metal factories
Nitrate (as N) (i)	ppm	10	10	0.4	Range Average	ND-0.63 0.45	ND-0.68 0.45	ND-0.54 0.47	ND-0.45 ND	ND-0.81 0.54	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrite (as N)	ppm	1	1	0.4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff and leaching from fertilizer use; sewage; natural erosion

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Selenium	ppb	50	(50)	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Refineries, mines, and chemical waste discharges; runoff
Thallium	ppb	2	0.1	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	
RADIOLOGICALS (j)											
Gross Alpha Particle Activity	pCi/L	15	(0)	3.0	Range Average	ND ND	ND-7.2 3.6	ND-4.2 ND	ND ND	ND ND	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	(0)	4.0	Range Average	ND ND	ND-4.7 ND	ND ND	ND ND	ND ND	
Combined Radium (k)	pCi/L	5	(0)	2.0	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits
Strontium-90	pCi/L	8	0.35	2.0	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Decay of natural and man-made deposits
Tritium	pCi/L	20000	400	1000	Range Average	ND ND	ND ND	1.1-1.2 ND	1.5 ND	ND ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1.0	Range Average	ND ND	ND ND	1.1-1.2 1.2	1.5 1.5	ND ND	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (l)											
Total Trihalomethanes (TTHM) (l)	ppb	80	NA	0.5	Range Average	34-63 46	32-59 45	15-50 24	41-69 53	6-38 15	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) (l)	ppb	80	NA	0.5	Highest RAA	Distribution System-wide: 12-73				43	
Haloacetic Acids (five) (HAA5) (l,m)	ppb	60	NA	1	Range Average	13-35 25	12-32 22	5-19 7.9	20-29 25	4.1-9.5 5.7	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (l,m)	ppb	60	NA	1	Range Highest RAA	Distribution System-wide: 5-41				18	By-product of drinking water chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	NA	Range Highest RAA	Distribution System-wide: 1.4-2.8				2.4	Drinking water disinfectant added for treatment
Bromate (n)	ppb	10	(0)	5.0	Range Highest RAA	NA NA	NA NA	3.3-7.2 5.6	NA NA	3.1-10 5.8	By-product of drinking water ozonation
DBP Precursors Control (TOC) (l)	ppm	TT	NA	0.30	Range Average	TT TT	TT TT	TT TT	TT TT	TT TT	Various natural and man-made sources
SECONDARY STANDARDS--Aesthetic Standards											
Aluminum (f)	ppb	200	600	50	Range Average	ND-190 ND	ND-58 ND	ND-110 81	ND ND	ND-100 58	Residue from water treatment process natural deposits erosion
Chloride	ppm	500	NA	NA	Range Average	42-98 61	47-97 66	44-56 50	68-95 78	27-94 46	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Average	1-4 2	1-2 2	1-2 1	1-2 2	1-2 1	Naturally occurring organic materials
Copper (f)	ppm	1.0	0.17	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of household pipes; natura deposits erosion; wood preservatives leaching
Corrosivity (o) (as Saturation Index)	SI	non-corrosive	NA	NA	Range Average	0.04-0.30 0.19	0.07-0.29 0.20	0.02-0.26 0.14	0.17-0.45 0.28	-0.03-0.31 0.14	Elemental balance in water; affectec by temperature, other factors
Foaming Agents (MBAS)	ppb	500	NA	NA	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Municipal and industrial waste discharges
Iron	ppb	300	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	NL = 500	20	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from natural deposits
MTBE (f,g)	ppb	5	13	3	Range Average	ND 2	ND 2	ND 2	ND 2	ND 3	Gasoline discharges from watercraft engines
Odor Threshold (p)	TON	3	NA	1	Range Average	ND 2	ND 2	ND 2	ND 2	ND 3	Naturally-occurring organic materials
Silver	ppb	100	NA	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial discharges

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Specific Conductance	µS/cm	1600	NA	NA	Range	482-829	536-810	411-539	650-880	256-598	Substances that form ions in water seawater influence
					Average	595	652	480	748	362	
Sulfate	ppm	500	NA	0.5	Range	78-162	106-159	55-86	118-184	24-68	Runoff/leaching from natural deposits; industrial wastes
					Average	116	132	69	154	39	
Thiobencarb (f)	ppb	1	70	1	Average	ND	ND	ND	ND	ND	Runoff/leaching from rice herbicide
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range	270-481	307-458	236-304	381-518	140-320	Runoff/leaching from natural deposits; seawater influence
					Average	344	378	273	438	200	
Turbidity (a)	NTU	5	NA	NA	Range	0.05-0.07	0.04-0.06	0.04	0.05-0.08	0.04-0.05	Soil runoff
					Average	0.06	0.05	0.04	0.06	0.05	
Zinc	ppm	5.0	NA	0.05	Range	ND	ND	ND	ND	ND	Runoff/leaching from natural deposits; industrial wastes
					Average	ND	ND	ND	ND	ND	
UNREGULATED CHEMICALS REQUIRING MONITORING											
Boron	ppb	NA	NL = 1000	100	Range	100-150	ND-160	150-210	100-160	ND-150	Runoff/leaching from natural deposits; industrial wastes
					Average	130	130	190	140	120	
Chromium VI (q)	ppb	NA	NA	1	Range	0.07-0.09	0.06-0.10	0.07-0.10	0.04-0.12	0.07-0.12	Industrial waste discharge
					Average	0.08	0.08	0.09	0.08	0.09	
Dichlorodifluoromethane (Freon 12)	ppb	NA	NL = 1000	0.5	Range	ND	ND	ND	ND	ND	Industrial waste discharge
					Average	ND	ND	ND	ND	ND	
Ethyl-tert-butylether (ETBE)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND	Used as gasoline additive
					Average	ND	ND	ND	ND	ND	
Perchlorate (r)	ppb	NA	6	4	Range	ND	ND	ND	ND	ND	Industrial waste discharge
					Average	ND	ND	ND	ND	ND	
tert-Amyl-methylether (TAME)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND	Used as gasoline additive
					Average	ND	ND	ND	ND	ND	
tert-Butyl alcohol (TBA)	ppb	NA	NL = 12	2	Range	ND	ND	ND	ND	ND	MTBE breakdown product; used as gasoline additive
					Average	ND	ND	ND	ND	ND	
Trichloropropane (1,2,3-TCP)	ppt	NA	NL = 5	5	Range	ND	ND	ND	ND	ND	Industrial waste discharge and pesticide use
					Average	ND	ND	ND	ND	ND	
Vanadium	ppb	NA	NL = 50	3	Range	ND-3.4	ND-3.5	ND	ND	ND-4.2	Naturally-occurring; industrial waste discharge
					Average	ND	ND	ND	ND	ND	
ADDITIONAL PARAMETERS											
FEDERAL REGULATED CONTAMINANTS WITH NO MCLs (s)											
List 1 - Assessment Monitoring											
2,4-Dinitrotoluene	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	Used in the production of isocyanate and explosives
					Average	ND	ND	ND	ND	ND	
2,6-Dinitrotoluene	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	Used as a mixture with 2,4-Dinitrotoluene (similar uses)
					Average	ND	ND	ND	ND	ND	
Acetochlor	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	Herbicide used with cabbage, citrus, coffee and corn crops
					Average	ND	ND	ND	ND	ND	
DCPA mono-acid degradate	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	Degradation products of DCPA; runoff from herbicide used on weeds and crops
					Average	ND	ND	ND	ND	ND	
DCPA di-acid degradate	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	Degradation products of DCPA; runoff from herbicide used on weeds & crops
					Average	ND	ND	ND	ND	ND	
Dichlorodiphenyldichloro-ethylene (4,4'-DDE)	ppb	NA	NA	0.8	Range	ND	ND	ND	ND	ND	Degradation product of DDT; residue of banned pesticide
					Average	ND	ND	ND	ND	ND	
s-Ethyl dipropylthio-carbamate (EPTC)	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	Herbicide used on annual grasses, weeds, in potatoes, and corn
					Average	ND	ND	ND	ND	ND	
Molinate	ppb	NA	NA	0.9	Range	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice
					Average	ND	ND	ND	ND	ND	
MTBE	ppb	NA	NA	5	Range	ND	ND	ND	ND	ND	Gasoline discharges from watercraft engines
					Average	ND	ND	ND	ND	ND	
Nitrobenzene	ppb	NA	NA	10	Range	ND	ND	ND	ND	ND	Used in the production of aniline, which is used to make dyes, herbicides, and drugs
					Average	ND	ND-4.1	ND	ND-4.6	ND	
Perchlorate	ppb	NA	NA	4	Range	ND	ND	ND	ND	ND	Industrial waste discharge
					Average	ND	ND	ND	ND	ND	
Terbacil	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	Herbicide used with sugarcane, alfalfa, and some fruits
					Average	ND	ND	ND	ND	ND	

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Effluent					Major Sources in Drinking Water
						Weymouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	
List 2 - Screening Survey											
1,2-Diphenylhydrazine	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of benzidine and anti-inflammatory drugs
2-Methylphenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Released in automobile and diesel exhaust coal tar and petroleum refining, and wood pulp
2,4-Dichlorophenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Chemical intermediate in herbicide production
2,4-Dinitrophenol	ppb	NA	NA	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Released from mines, metal, petroleum and dye plants
2,4,6-Trichlorophenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	By-product of fossil fuel burning; used as bactericide and wood/glue preservative
Diazinon	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with rice, fruit, vineyards, and corn crops
Disulfoton	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with cereal, cotton, tobacco and potato crops
Diuron	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used in grasses in orchards and wheat crops
Fonofos	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Soil insecticide used on worms and centipedes
Linuron	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used with corn, soybean, cotton and wheat crops
Nitrobenzene	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of aniline, which is used to make dyes, herbicides, and drugs
Prometon	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used on annual and perennial weeds and grasses
Terbufos	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with corn, sugar beet, and grain sorghum crops
OTHER PARAMETERS											
Alkalinity	ppm	NA	NA	NA	Range Average	63-85 71	71-84 77	76-87 82	80-100 88	48-68 57	
Calcium	ppm	NA	NA	NA	Range Average	24-42 32	31-43 37	24-29 27	40-55 47	12-19 15	
Chlorate (t)	ppb	NA	NL =800	20	Range	Distribution System-wide: 52-104				By-product of drinking water chlorination; industrial processes	
Corrosivity (u) (as Aggressiveness Index)	AI	NA	NA	NA	Range Average	11.9-12.2 12.0	12.0-12.1 12.0	11.9-12.1 12.0	12.1-12.2 12.1	11.8-12.0 11.9	Elemental balance in water; affected by temperature, other factors
Hardness	ppm	NA	NA	NA	Range Average	114-189 140	134-185 161	110-128 120	174-234 200	58-101 76	
HPC (d)	CFU/mL	TT	NA	NA	Range Average	ND ND	ND ND	ND ND	ND ND	ND-5 ND	Naturally present in the environment
Magnesium	ppm	NA	NA	NA	Range Average	11-20.5 15	13-20 17	11-13 12	18-23.5 20	6-13 9	
N-Nitrosodimethylamine (v) (NDMA)	ppt	NA	3	2	Range	Distribution System-wide: ND-7.5				By-product of drinking water chloramination; industrial processes	
pH	pH Units	NA	NA	NA	Range Average	8.2-8.4 8.3	8.1-8.3 8.2	8.1-8.3 8.2	8.1-8.2 8.1	8.4-8.7 8.6	
Potassium	ppm	NA	NA	NA	Range Average	2.5-4.0 2.9	2.8-3.9 3.2	2.3-2.8 2.6	3.5-4.3 3.7	1.7-3.2 2.2	
Radon (j)	pCi/L	NA	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	
Sodium	ppm	NA	NA	NA	Range Average	48-91 62	52-85 65	39-56 47	62-88 72	27-73 40	
TOC (w)	ppm	TT	NA	0.30	Range Average	1.8-2.7 2.2	1.9-2.7 2.3	2.2-2.8 2.4	2.0-3.1 2.4	1.7-2.6 2.1	Various natural and man-made sources

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Effluent					Major Sources in Drinking Water
						Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	

ABBREVIATIONS AND FOOTNOTES

Abbreviations

AI	Aggressiveness Index	MPN	Most Probable Number	ppm	parts per million or milligrams per liter (mg/L)
AL	Action Level	MRDL	Maximum Residual Disinfectant Level	ppq	parts per quadrillion or picograms per liter (pg/L)
CFU/mL	Colony-Forming Units per Milliliter	MRDLG	Maximum Residual Disinfectant Level Goal	ppt	parts per trillion or nanograms per liter (ng/L)
DCPA	Dimethyl Tetrachloroterephthalate	N	Nitrogen	RAA	Running Annual Average
DBP	Disinfection By-Products	NA	Not Applicable	SI	Saturation Index (Langelier)
DLR	Detection Limits for purposes of Reporting	ND	None Detected	TOC	Total Organic Carbon
HAA5	Haloacetic Acids (five)	NL	Notification Level	TON	Threshold Odor Number
MBAS	Methylene Blue Active Substances	NTU	Nephelometric Turbidity Units	TTHM	Total Trihalomethanes
MCL	Maximum Contaminant Level	pCi/L	picoCuries per Liter	TT	Treatment Technique
MCLG	Maximum Contaminant Level Goal	PHG	Public Health Goal	µS/cm	microSiemen per centimeter;
MFL	Million Fibers per Liter	ppb	parts per billion or micrograms per liter (µg/L)		also equivalent to µmho/cm (micromho per centimeter)

Footnotes

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| <p>(a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTL in 95% of the measurements taken each month and shall not exceed 1 NTL at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.</p> <p>(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2006, 8813 samples were analyzed. The MCL was not violated.</p> <p>(c) Fecal coliform/<i>E.coli</i> MCLs: The occurrence of two (2) consecutive total coliform-positive samples, one of which contains fecal coliform <i>E. coli</i>, constitutes an acute MCL violation. The MCL was not violated in 2006.</p> <p>(d) HPC values were based on the monthly averages of the treatment plant effluent samples. In 2006, all distribution samples collected had detectable total chlorine residuals and no HPC was required. Method detection limit is < 1 CFU/mL.</p> <p>(e) In 2006, the effluent from the five (5) treatment plants had no detectable <i>Cryptosporidium</i>, <i>Giardia</i>, or Total Culturable Viruses. Two hundred (200) liters of water were collected monthly for <i>Cryptosporidium</i> and <i>Giardia</i> analysis. One thousand (1000) liters of water were collected quarterly for Total Culturable Viruses analysis. Reported results ("P" for presence or "A" for absence) were taken from the first three (3) quarters of 2006.</p> <p>(f) Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards.</p> <p>(g) MTBE reporting level is 0.5 ppb.</p> <p>(h) Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The action level, which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.</p> <p>(i) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.</p> <p>(j) Metropolitan conducted four (4) quarters of monitoring from August 2005 to April 2006. Reported results were taken from the first two (2) quarters of 2006. Effective June 11, 2006, the gross beta particle activity MCL is 4 millirem/yea annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.</p> <p>(k) Standard is for Radium-226 and -228 combined.</p> <p>(l) Average and range for the treatment plant effluent were taken from weekly samples for TTHM and monthly samples for HAA5. Distribution system-wide average and range were taken from 47 samples collected quarterly. In 2006 Metropolitan was in compliance with all provisions of the Stage 1 Disinfectants Disinfection By-Products (D/DBP) Rule. The State of California has adopted the D/DBP Rule effective June 2006. TOC provides a medium for the formation of DBPs. Metropolitan was also in compliance with the DBP precursor (TOC) control portion of the Stage 1 D/DBP regulation.</p> | <p>(m) DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.</p> <p>(n) Running annual average was calculated from weekly samples. Bromate reporting level is 3 ppb.</p> <p>(o) SI measures the tendency for a water to precipitate or dissolve calcium carbonate (a natural mineral in water). Positive indices indicate the tendency to precipitate and/or deposit scale on pipes and are assumed to be non-corrosive. Negative indices indicate the tendency to dissolve calcium carbonate and are assumed to be corrosive. Effective September 2006, corrosivity is no longer part of the Secondary Standards for drinking water in the State of California.</p> <p>(p) Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information, contact MWI at (213) 217-6850.</p> <p>(q) Chromium VI reporting level is 0.03 ppb.</p> <p>(r) Both PHG (issued by the Office of Environmental Health Hazard Assessment) and NL (issued by CA Department of Health Services) were set at 6 ppb. Perchlorate reporting level is 2 ppb.</p> <p>(s) Data collected from January 2002 to January 2003. Minimum reporting levels are as stipulated in the Federal Unregulated Contaminants Monitoring Rule (UCMR). List 1 - Assessment Monitoring consists of 12 chemical contaminants for which standard analytical methods were available. List 2 - Screening Survey consists of 16 contaminants for which new analytical methods were used.</p> <p>(t) Ranges for the plant effluent and the distribution system were taken from two (2) quarterly samples. Distribution system samples were taken from three (3) locations.</p> <p>(u) AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. AI ≥ 12.0 indicates non-aggressive water. AI between 10.0 and 11.9 indicates moderately aggressive water.</p> <p>(v) Ranges for the plant effluent were taken from quarterly samples. The distribution system-wide range was taken from 19 samples collected quarterly. The PHG was established at 3 ppt in December 2006. The California NL is 10 ppt.</p> <p>(w) Average and range for TOC were taken from weekly samples collected at the combined filter effluent.</p> |
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						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake		Lake Skinner
Percent State Project Water	%	NA	NA	NA	Range Average	0 0	0 0	100 100	100 100	100 100	43-49 46	42-58 51	
PRIMARY STANDARDS--Mandatory Health-Related Standards													
MICROBIOLOGICAL													
	Oocysts/10 L	TT	(0)	NA	Range Average	NC NC	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Human and animal fecal waste
<i>Cryptosporidium (a)</i>													
	Cysts/10 L	TT	(0)	NA	Range Average	NC NC	ND-1 0.08	ND ND	ND ND	ND ND	ND ND	ND ND	Human and animal fecal waste
<i>Giardia (a)</i>													
ORGANIC CHEMICALS													
Pesticides/PCBs													
Alachlor	ppb	2	4	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used on row crops
Atrazine	ppb	1	0.15	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used on row crops and along highways
Bentazon	ppb	18	200	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from herbicide used on rice, alfalfa, and grapes
Carbofuran	ppb	18	1.7	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching of soil fumigant used on rice, alfalfa, and grapes
Chlordane	ppt	100	30	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Residue of banned insecticide
2,4-D	ppb	70	70	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used on row crops, range land, lawns
Dalapon	ppb	200	790	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used on right-of-way crops, and landscapes
Dibromochloropropane (DBCP)	ppt	200	1.7	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Banned nematocide that may still be present in soils
Dinoseb	ppb	7	14	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used on soybeans, vegetables, and fruits
Diquat	ppb	20	15	4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used for terrestria and aquatic weeds
Endothall	ppb	100	580	45	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide used for terrestria and aquatic weeds
Endrin	ppb	2	1.8	0.1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Residue of banned insecticide and rodenticide
Ethylene Dibromide (EDB)	ppt	50	10	20	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Petroleum refinery discharges; underground gas tank leaks
Glyphosate	ppb	700	1000	25	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from herbicide use
Heptachlor	ppt	10	8	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Residue of banned insecticide
Heptachlor Epoxide	ppt	10	6	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Breakdown product of heptachlor
Lindane	ppt	200	32	200	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from insecticide used on cattle, lumber, and gardens
Methoxychlor	ppb	30	30	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from insecticide uses
Molinate (Ordrum)	ppb	20	NA	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from herbicide used on rice
Oxamyl (Vydate)	ppb	50	50	20	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from insecticide uses
Pentachlorophenol	ppb	1	0.4	0.2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from wood preserving factories; other insecticidal and herbicidal uses
Picloram	ppb	500	500	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide runoff
Polychlorinated Biphenyls (PCBs)	ppt	500	(0)	500	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff from landfills; discharge of waste chemicals
Simazine	ppb	4	4	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide runoff
Thiobencarb	ppb	70	70	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff leaching from rice herbicide
2,4,5-TP (Silvex)	ppb	50	25	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Residue of banned herbicide
Toxaphene	ppb	3	0.03	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from insecticide used on cotton and cattle

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						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake		Lake Skinner
Semi-Volatile Organic Compounds													
Benzo(a)pyrene	ppt	200	4	100	Range	ND	ND	ND	ND	ND	ND	ND	Leaching from water storage tank linings and distribution lines
					Average	ND	ND	ND	ND	ND	ND	ND	
Di(2-ethylhexyl)adipate (DEHA)	ppb	400	200	5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
Di(2-ethylhexyl)phthalate (DEHP)	ppb	4	12	3	Range	ND	ND	ND	ND	ND	ND	ND	Chemical factory discharge; inert ingredient in pesticides
					Average	ND	ND	ND	ND	ND	ND	ND	
Hexachlorobenzene	ppb	1	0.03	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal refineries & agrichemicals factories; wastewater chlorination rxn by-product
					Average	ND	ND	ND	ND	ND	ND	ND	
Hexachloro-cyclopentadiene	ppb	50	50	1	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
2,3,7,8-TCDD (Dioxin)	ppq	30	(0)	5	Range	ND	ND	ND	ND	ND	ND	ND	Waste incineration emissions; chemical factory discharges
					Average	ND	ND	ND	ND	ND	ND	ND	
Volatile Organic Compounds													
Benzene	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Plastics factory discharges; gas tanks and landfill leaching
					Average	ND	ND	ND	ND	ND	ND	ND	
Carbon Tetrachloride	ppt	500	100	500	Range	ND	ND	ND	ND	ND	ND	ND	Chemical plant discharges; other industrial waste discharges
					Average	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	ppb	600	600	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	ppb	5	6	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	ppb	5	3	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Extraction and degreasing solvent; fumigant
					Average	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane	ppt	500	400	500	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethylene	ppb	6	10	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethylene	ppb	6	100	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharges; by-product of TCE and PCE
					Average	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethylene	ppb	10	60	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharges; by-product of TCE and PCE
					Average	ND	ND	ND	ND	ND	ND	ND	
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from pharmaceutical and chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloropropane	ppb	5	0.5	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharges; from fumigants
					Average	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichloropropene	ppt	500	200	500	Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from nematocide used on croplands
					Average	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene	ppb	300	300	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Petroleum refinery discharges; industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
Methyl-tert-butylether (MTBE) (b)	ppb	13	13	3	Range	ND	ND	ND	ND	ND	ND	ND	Gasoline discharges from watercraft engines
					Average	ND	ND	ND	ND	ND	ND	ND	
Monochlorobenzene	ppb	70	200	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial, agricultural, and chemical waste discharges, and dry cleaners
					Average	ND	ND	ND	ND	ND	ND	ND	
Styrene	ppb	100	(100)	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Rubber and plastics factories discharges; landfill leaching
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial, agricultural, and chemical waste discharges; solvent uses
					Average	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from factories, dry cleaners and auto shops
					Average	ND	ND	ND	ND	ND	ND	ND	
Toluene	ppb	150	150	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum and chemical refineries
					Average	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from textile-finishing factories
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	ppb	200	1000	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Metal degreasing site discharges; manufacture of food wrappings
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Average	ND	ND	ND	ND	ND	ND	ND	
Trichloroethylene (TCE)	ppb	5	0.8	0.5	Range	ND	ND	ND	ND	ND	ND	ND	Metal degreasing site discharges and other factories
					Average	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane (Freon-11)	ppb	150	700	5	Range	ND	ND	ND	ND	ND	ND	ND	Industrial factory discharges; degreasing solvent; propellant
					Average	ND	ND	ND	ND	ND	ND	ND	
1,1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and other factories; dry cleaning solvent; refrigerant
					Average	ND	ND	ND	ND	ND	ND	ND	

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						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake		Lake Skinner
Vinyl Chloride	ppt	500	50	500	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from PVC piping; plastic factory discharges
Xylenes	ppm	1.750	1.8	0.0005	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from petroleum and chemical refineries; fuel solvent
INORGANIC CHEMICALS													
Aluminum	ppb	1000	600	50	Range Average	ND-59 ND	ND-52 ND	ND-59 ND	ND-1230 178	ND-55 ND	ND ND	ND-79 ND	Residue from water treatment process; natural deposits; erosion
Antimony	ppb	6	20	6	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Petroleum refinery discharges; fire retardants solder; electronics
Arsenic	ppb	10	0.004	2	Range Average	2.4-2.7 2.6	ND-2.8 2.5	ND-2.0 ND	ND-2.5 ND	ND-2.8 2.3	ND ND	ND-2.7 2.2	Natural deposits erosion, glass and electronics production wastes
Asbestos	MFL	7	7	0.2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Asbestos, cement pipes internal corrosion; natural deposits; erosion
Barium	ppb	1000	2000	100	Range Average	163-181 172	147-176 162	ND ND	ND ND	ND ND	ND ND	ND ND	Oil and metal refineries discharges; natural deposits erosion
Beryllium	ppb	4	1	1	Range Average	ND ND	ND ND	ND ND	ND-1.8 ND	ND ND	ND ND	ND ND	Internal corrosion of galvanized pipes; natural deposits erosion
Cadmium	ppb	5	0.04	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from steel and pulp mills; natural deposits erosion
Chromium	ppb	50	(100)	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of household pipes; natural deposits erosion
Copper (c)	ppm	AL=1.3	0.17	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from steel/metal, plastic, and fertilizer factories
Cyanide	ppb	150	150	100	Range Average	0.32-0.37 0.34	0.32-0.36 0.34	0.17-0.22 0.18	ND-0.12 ND	0.11-0.13 0.12	0.21-0.25 0.22	0.18-0.23 0.21	Erosion of natural deposits; water additives for tooth health
Lead (c)	ppb	AL=15	2	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	House pipes internal corrosion; erosion of natural deposits
Mercury	ppb	2	1.2	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits; factory discharges; landfill runoffs
Nickel	ppb	100	12	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits; discharge from metal factories
Nitrate (as N) (d)	ppm	10	10	0.4	Range Average	ND-0.45 ND	ND ND	ND-0.54 0.47	ND-0.81 0.52	ND ND	ND ND	ND-0.45 ND	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrite (as N)	ppm	1	1	0.4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff and leaching from fertilizer use; sewage; natural erosion
Selenium	ppb	50	(50)	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Refineries, mines, and chemical waste discharges; runoff
Thallium	ppb	2	0.1	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from ore processing; electronics factory discharges
RADIOLOGICALS (e)													
Gross Alpha Particle Activity	pCi/L	15	(0)	3.0	Range Average	ND-3.7 ND	ND-3.3 ND	ND-3.0 ND	ND ND	ND ND	ND-6.1 3.0	ND-4.0 ND	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	(0)	4.0	Range Average	5.2-5.6 5.4	ND-5.3 ND	ND ND	ND ND	ND ND	ND-4.1 ND	4.1-4.3 4.2	Decay of natural and man-made deposits
Combined Radium (f)	pCi/L	5	(0)	2.0	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits
Strontium-90	pCi/L	8	0.35	2.0	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Decay of natural and man-made deposits
Tritium	pCi/L	20000	400	1000	Range Average	ND 3.3-3.5	ND 3.6-3.8	ND 1.2-1.3	ND ND-1.2	ND 1.5	ND 2.0-2.1	ND 2.0-2.6	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1.0	Range Average	3.4 3.4	3.7 3.7	1.2 1.2	ND ND	1.5 1.5	2.0 2.0	2.3 2.3	Erosion of natural deposits
SECONDARY STANDARDS--Aesthetic Standards (g)													
Aluminum	ppb	200	600	50	Range Average	ND-59 ND	ND-52 ND	ND-59 ND	ND-1230 178	ND-55 ND	ND ND	ND-79 ND	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	NA	Range Average	92-96 94	95-100 97	40-52 46	25-88 42	77-89 82	72-77 74	60-88 71	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Average	2-4 3	2-4 3	7-10 8	7-15 12	8-14 11	5-7 6	6-8 7	Naturally occurring organic materials
Copper	ppm	1.0	0.17	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of household pipes; natural deposits erosion; wood preservatives leaching
Corrosivity (h) (as Aggressiveness Index)	AI	NA	NA	NA	Range Average	12.4-12.9 12.6	11.8-12.6 12.3	11.2-11.8 11.5	10.7 - 11.4 11.1	11.3-12.3 11.7	11.4-12.4 12.0	11.9-12.6 12.4	Elemental balance in water; affectec by temperature, other factors

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Water							Major Sources in Drinking Water
						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake	Lake Skinner	
Foaming Agents (MBAS)	ppb	500	NA	NA	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Municipal and industrial waste discharges
Iron	ppb	300	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND-100 ND	ND ND	ND ND	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	500	20	Range Average	ND ND	ND ND	ND ND	ND ND	29 29	ND ND	ND ND	Leaching from natural deposits
MTBE (b)	ppb	5	13	3	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Gasoline discharges from watercraft engines
Odor Threshold (i)	TON	3	NA	1	Range Average	29 29	14 14	8 8	12 12	24 24	35 35	17 17	Naturally-occurring organic materials
Silver	ppb	100	NA	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial discharges
Specific Conductance	µS/cm	1600	NA	NA	Range Average	1050-1100 1080	1060-1100 1080	389-467 436	231-517 320	537-592 557	739-782 764	637-852 720	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	265-277 271	270-280 274	51-60 56	17-37 26	43-50 47	148-161 156	113-174 145	Runoff/leaching from natural deposits; industrial wastes
Thiobencarb	ppb	1	70	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from rice herbicide
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range Average	657-686 672	669-678 673	221-261 245	128-276 177	289-320 304	437-462 453	369-505 426	Runoff/leaching from natural deposits; seawater influence
Turbidity	NTU	5	NA	NA	Range Average	0.30-1.9 0.79	0.79-2.3 1.5	0.44-2.4 1.2	0.95-26 4.1	0.42-3.9 2.0	0.23-1.0 0.48	0.75-2.4 1.3	Soil runoff
Zinc	ppm	5.0	NA	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from natural deposits; industrial wastes
UNREGULATED CHEMICALS													
Boron	ppb	NA	NL = 1000	100	Range Average	120-140 130	110-140 130	150-210 190	ND-150 120	160-220 190	120-150 140	100-150 130	Runoff/leaching from natural deposits; industrial wastes
Chromium VI (j)	ppb	NA	NA	1	Range Average	ND ND	ND ND	0.06-0.07 0.07	0.05-0.06 0.06	ND ND	0.05 0.05	ND-0.04 ND	Industrial waste discharge
Dichlorodifluoromethane (Freon 12)	ppb	NA	NL = 1000	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge
Ethyl-tert-butylether (ETBE)	ppb	NA	NA	3	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used as gasoline additive
Perchlorate (k)	ppb	NA	6	4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge
tert-Amyl-methylether (TAME)	ppb	NA	NA	3	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used as gasoline additive
tert-Butyl alcohol (TBA)	ppb	NA	NL = 12	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	MTBE breakdown product; used as gasoline additive
Trichloropropane (1,2,3-TCP)	ppt	NA	NL = 5	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge and pesticide use
Vanadium	ppb	NA	NL = 50	3	Range Average	ND ND	3.0 3.0	ND ND	ND-4.2 3.2	4.3-4.6 4.5	ND ND	ND-3.6 3.1	Naturally-occurring; industrial waste discharge
ADDITIONAL PARAMETERS													
FEDERAL REGULATED CONTAMINANTS WITH NO MCLs (l)													
List 1 - Assessment Monitoring													
2,4-Dinitrotoluene	ppb	NA	NA	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of isocyanate and explosives
2,6-Dinitrotoluene	ppb	NA	NA	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used as a mixture with 2,4-Dinitrotoluene (similar uses)
Acetochlor	ppb	NA	NA	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used with cabbage, citrus, coffee, and corn crops
DCPA mono-acid degradate	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Degradation products of DCPA; runoff from herbicide used on weeds and crops
DCPA di-acid degradate	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Degradation products of DCPA; runoff from herbicide used on weeds & crops
Dichlorodiphenyldichloroethylene (4,4'-DDE)	ppb	NA	NA	0.8	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Degradation product of DDT; residue of bannecc pesticide
s-Ethyl dipropylthiocarbamate (EPTC)	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used on annual grasses, weeds, in potatoes, and corn
Molinate	ppb	NA	NA	0.9	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from herbicide used on rice
MTBE	ppb	NA	NA	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Gasoline discharges from watercraft engines

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Water						Major Sources in Drinking Water	
						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake		Lake Skinner
Nitrobenzene	ppb	NA	NA	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of aniline, which is used to make dyes, herbicides, and drugs
Perchlorate	ppb	NA	NA	4	Range Average	ND-6.6 4.4	ND-5.8 ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge
Terbacil	ppb	NA	NA	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used with sugarcane, alfalfa, and some fruits
List 2 - Screening Survey													
1,2-Diphenylhydrazine	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of benzidine and anti-inflammatory drugs
2-Methylphenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Released in automobile and diesel exhaust, coal tar and petroleum refining, and wood pulp
2,4-Dichlorophenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Chemical intermediate in herbicide production
2,4-Dinitrophenol	ppb	NA	NA	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Released from mines, metal, petroleum, and dye plants
2,4,6-Trichlorophenol	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	By-product of fossil fuel burning; used as bactericide and wood/glue preservative
Diazinon	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with rice, fruit, vineyards, and corn crops
Disulfoton	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with cereal, cotton, tobacco, and potato crops
Diuron	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used in grasses in orchards and wheat crops
Fonofos	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Soil insecticide used on worms and centipedes
Linuron	ppb	NA	NA	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used with corn, soybean, cotton, and wheat crops
Nitrobenzene	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Used in the production of aniline, which is used to make dyes, herbicides, and drugs
Prometon	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Herbicide used on annual and perennial weeds and grasses
Terbufos	ppb	NA	NA	0.5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Insecticide used with corn, sugar beet, and grain sorghum crops
OTHER PARAMETERS													
Alkalinity	ppm	NA	NA	NA	Range Average	128-138 135	115-133 126	73-85 78	49-74 59	91-103 94	102-106 104	92-114 100	
Calcium	ppm	NA	NA	NA	Range Average	76-83 80	72-77 75	24-28 26	13-19 15	25-28 26	48-52 51	40-55 48	
Hardness	ppm	NA	NA	NA	Range Average	318-332 325	308-323 316	108-126 119	56-101 76	122-134 127	208-220 216	176-236 201	
Magnesium	ppm	NA	NA	NA	Range Average	30-32 31	31-32 31	11-13 12	6-13 9	14-15.5 15	21-22 22	18-24 20	
pH	pH Units	NA	NA	NA	Range Average	7.9-8.5 8.2	7.4-8.2 7.9	7.5-8.1 7.8	7.3-8.0 7.8	7.5-8.5 7.9	7.3-8.3 7.8	7.9-8.6 8.3	
Potassium	ppm	NA	NA	NA	Range Average	5.0-5.3 5.1	5.1-5.4 5.2	2.2-2.8 2.5	1.8-3.3 2.3	3.3-3.7 3.4	4.1-4.3 4.2	3.3-4.2 3.8	
Radon (e)	pCi/L	NA	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
Sodium	ppm	NA	NA	NA	Range Average	98-103 100	101-106 104	34-43 39	22-59 33	57-63 60	68-74 70	58-82 68	
TOC	ppm	TT	NA	0.30	Range Average	2.8-3.3 3.0	2.8-5.3 3.1	2.8-3.0 2.9	2.5-8.0 3.9	3.8-4.4 4.0	2.6-4.4 3.2	2.8-3.9 3.2	Various natural and man-made sources

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Water						Major Sources in Drinking Water	
						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake		Lake Skinner

ABBREVIATIONS AND FOOTNOTES

Abbreviations

AI	Aggressiveness Index	MRDL	Maximum Residual Disinfectant Level	PHG	Public Health Goal
AL	Action Level	MRDLG	Maximum Residual Disinfectant Level Goa	ppb	parts per billion or micrograms per liter (µg/L)
DCPA	Dimethyl Tetrachloroterephthalate	N	Nitrogen	ppm	parts per million or milligrams per liter (mg/L)
DLR	Detection Limits for purposes of Reporting	NA	Not Applicable	ppq	parts per quadrillion or picograms per liter (pg/L)
MBAS	Methylene Blue Active Substances	NC	Not Collected	ppt	parts per trillion or nanograms per liter (ng/L)
MCL	Maximum Contaminant Level	ND	None Detected	TOC	Total Organic Carbon
MCLG	Maximum Contaminant Level Goal	NL	Notification Level	TON	Threshold Odor Number
MFL	Million Fibers per Liter	NTU	Nephelometric Turbidity Units	TT	Treatment Technique
		pCi/L	picoCuries per Liter	µS/cm	microSiemen per centimeter; also equivalent to µmho/cm (micromho per centimeter)

Footnotes

- (a) In 2006, source water samples had no detectable *Cryptosporidium*. A *Giardia* cyst was detected once in Lake Mathews. The value (1 cyst) was divided by 12 months and is reported as an annual average of 0.08 cyst/10 L. Ten (10) liters of water were collected monthly for *Cryptosporidium* and *Giardia* analysis.
- (b) MTBE reporting level is 0.5 ppb.
- (c) Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The action level, which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.
- (d) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.
- (e) Metropolitan conducted four quarters of monitoring from August 2005 to April 2006. Reported results are from the first two quarters of 2006. Effective June 11, 2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
- (f) Standard is for Radium-226 and -228 combined.
- (g) California's Secondary Standards for drinking water amended effective September 27, 2006 apply to water supplied to the public by community water systems; annual monitoring is required for approved surface water sources or distribution system entry points representative of the effluent of source treatment.
- (h) AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive, and would be very corrosive to almost all materials found in a typical water system. AI >12.0 indicates non-aggressive water. Water with AI between 10.0 and 11.9 is moderately aggressive.
- (i) Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information, contact MWD at (213) 217-6850.
- (j) Chromium VI reporting level is 0.03 ppb.
- (k) Both PHG (issued by the Office of Environmental Health Hazard Assessment) and NL (issued by CA Department of Health Services) were set at 6 ppb. Perchlorate reporting level is 2 ppb.
- (l) Data collected from January 2002 to January 2003. Minimum reporting levels are as stipulated in the Federal Unregulated Contaminants Monitoring Rule (UCMR). List 1 - Assessment Monitoring consists of 12 chemical contaminants for which standard analytical methods were available. List 2 - Screening Survey consists of 16 contaminants for which new analytical methods were used.

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Influent					Major Sources in Drinking Water
						Weymouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	
Percent State					Range	60-85	59-71	100	41-59	100	
Project Water	%	NA	NA	NA	Average	73	65	100	51	100	
PRIMARY STANDARDS--Mandatory Health-Related Standards											
MICROBIOLOGICAL											
					Range	1-23	2-7	ND-8	4-17	2-14	
<i>E. coli</i> (a)	CFU/100 mL	NA	(0)	NA	Average	12	5	3	10	6	Human and animal fecal waste
	Oocysts/10 L	TT	(0)	NA	Range	ND	ND	ND	ND	ND	
<i>Cryptosporidium</i> (b)					Average	ND	ND	ND	ND	ND	Human and animal fecal waste
	Cysts/10 L	TT	(0)	NA	Range	ND	ND	ND	ND	ND	
<i>Giardia</i> (b)					Average	ND	ND	ND	ND	ND	Human and animal fecal waste
	P or A/100 L	TT	(0)	NA	Range	A	A	A	A	A	
Total Culturable Viruses (b)					Average	A	A	A	A	A	Human and animal fecal waste
ORGANIC CHEMICALS											
Pesticides/PCBs											
					Range	NC	NC	ND	NC	NC	
Alachlor	ppb	2	4	1	Average	NC	NC	ND	NC	NC	Runoff from herbicide used on row crops
					Range	NC	NC	ND	NC	NC	
Atrazine	ppb	1	0.15	0.5	Average	NC	NC	ND	NC	NC	Runoff from herbicide used on row crops and along highways
					Range	NC	NC	ND	NC	NC	
Bentazon	ppb	18	200	2	Average	NC	NC	ND	NC	NC	Runoff/leaching from herbicide used on rice, alfalfa, and grapes
					Range	NC	NC	ND	NC	NC	
Carbofuran	ppb	18	1.7	5	Average	NC	NC	ND	NC	NC	Leaching of soil fumigant used on rice, alfalfa, and grapes
					Range	NC	NC	ND	NC	NC	
Chlordane	ppt	100	30	100	Average	NC	NC	ND	NC	NC	Residue of banned insecticide
					Range	NC	NC	ND	NC	NC	
2,4-D	ppb	70	70	10	Average	NC	NC	ND	NC	NC	Runoff from herbicide used on row crops, range land, lawns
					Range	NC	NC	ND	NC	NC	
Dalapon	ppb	200	790	10	Average	NC	NC	ND	NC	NC	Runoff from herbicide used on right-of-way, crops, and landscapes
					Range	NC	NC	ND	NC	NC	
Dibromochloropropane (DBCP)	ppt	200	1.7	10	Average	NC	NC	ND	NC	NC	Banned nematocide that may still be present in soils
					Range	NC	NC	ND	NC	NC	
Dinoseb	ppb	7	14	2	Average	NC	NC	ND	NC	NC	Runoff from herbicide used on soybeans, vegetables, and fruits
					Range	NC	NC	ND	NC	NC	
Diquat	ppb	20	15	4	Average	NC	NC	ND	NC	NC	Runoff from herbicide used for terrestrial and aquatic weeds
					Range	NC	NC	ND	NC	NC	
Endothall	ppb	100	580	45	Average	NC	NC	ND	NC	NC	Runoff from herbicide used for terrestrial and aquatic weeds
					Range	NC	NC	ND	NC	NC	
Endrin	ppb	2	1.8	0.1	Average	NC	NC	ND	NC	NC	Residue of banned insecticide and rodenticide
					Range	NC	NC	ND	NC	NC	
Ethylene Dibromide (EDB)	ppt	50	10	20	Average	NC	NC	ND	NC	NC	Petroleum refinery discharges; underground gas tank leaks
					Range	NC	NC	ND	NC	NC	
Glyphosate	ppb	700	1000	25	Average	NC	NC	ND	NC	NC	Runoff from herbicide use
					Range	NC	NC	ND	NC	NC	
Heptachlor	ppt	10	8	10	Average	NC	NC	ND	NC	NC	Residue of banned insecticide
					Range	NC	NC	ND	NC	NC	
Heptachlor Epoxide	ppt	10	6	10	Average	NC	NC	ND	NC	NC	Breakdown product of heptachlor
					Range	NC	NC	ND	NC	NC	
Lindane	ppt	200	32	200	Average	NC	NC	ND	NC	NC	Runoff/leaching from insecticide used on cattle, lumber, and gardens
					Range	NC	NC	ND	NC	NC	
Methoxychlor	ppb	30	30	10	Average	NC	NC	ND	NC	NC	Runoff/leaching from insecticide uses
					Range	NC	NC	ND	NC	NC	
Molinate (Ordram)	ppb	20	NA	2	Average	NC	NC	ND	NC	NC	Runoff/leaching from herbicide used on rice
					Range	NC	NC	ND	NC	NC	
Oxamyl (Vydate)	ppb	50	50	20	Average	NC	NC	ND	NC	NC	Runoff/leaching from insecticide uses

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						Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	
Pentachlorophenol	ppb	1	0.4	0.2	Range	NC	NC	ND	NC	NC	Discharge from wood preserving factories other insecticidal and herbicidal uses
					Average	NC	NC	ND	NC	NC	
Picloram	ppb	500	500	1	Range	NC	NC	ND	NC	NC	Herbicide runoff
					Average	NC	NC	ND	NC	NC	
Polychlorinated Biphenyls (PCBs)	ppt	500	(0)	500	Range	NC	NC	ND	NC	NC	Runoff from landfills; discharge of waste chemicals
					Average	NC	NC	ND	NC	NC	
Simazine	ppb	4	4	1	Range	NC	NC	ND	NC	NC	Herbicide runoff
					Average	NC	NC	ND	NC	NC	
Thiobencarb	ppb	70	70	1	Range	NC	NC	ND	NC	NC	Runoff leaching from rice herbicide
					Average	NC	NC	ND	NC	NC	
2,4,5-TP (Silvex)	ppb	50	25	1	Range	NC	NC	ND	NC	NC	Residue of banned herbicide
					Average	NC	NC	ND	NC	NC	
Toxaphene	ppb	3	0.03	1	Range	NC	NC	ND	NC	NC	Runoff/leaching from insecticide used on cotton and cattle
					Average	NC	NC	ND	NC	NC	
Semi-Volatile Organic Compounds											
Benzo(a)pyrene	ppt	200	4	100	Range	NC	NC	ND	NC	NC	Leaching from water storage tank linings and distribution lines
					Average	NC	NC	ND	NC	NC	
Di(2-ethylhexyl)adipate (DEHA)	ppb	400	200	5	Range	NC	NC	ND	NC	NC	Discharge from chemical factories
					Average	NC	NC	ND	NC	NC	
Di(2-ethylhexyl)phthalate (DEHP)	ppb	4	12	3	Range	NC	NC	ND	NC	NC	Chemical factory discharge; inert ingredient in pesticides
					Average	NC	NC	ND	NC	NC	
Hexachlorobenzene	ppb	1	0.03	0.5	Range	NC	NC	ND	NC	NC	Discharge from metal refineries & agrichemicals factories; wastewater chlorination rxn by-product
					Average	NC	NC	ND	NC	NC	
Hexachloro-cyclopentadiene	ppb	50	50	1	Range	NC	NC	ND	NC	NC	Discharge from chemical factories
					Average	NC	NC	ND	NC	NC	
2,3,7,8-TCDD (Dioxin)	ppq	30	(0)	5	Range	NC	NC	ND	NC	NC	Waste incineration emissions; chemical factory discharges
					Average	NC	NC	ND	NC	NC	
Volatile Organic Compounds											
Benzene	ppb	1	0.15	0.5	Range	NC	NC	ND	NC	NC	Plastics factory discharges; gas tanks and landfill leaching
					Average	NC	NC	ND	NC	NC	
Carbon Tetrachloride	ppt	500	100	500	Range	NC	NC	ND	NC	NC	Chemical plant discharges; other industrial waste discharges
					Average	NC	NC	ND	NC	NC	
1,2-Dichlorobenzene	ppb	600	600	0.5	Range	NC	NC	ND	NC	NC	Discharge from industrial chemical factories
					Average	NC	NC	ND	NC	NC	
1,4-Dichlorobenzene	ppb	5	6	0.5	Range	NC	NC	ND	NC	NC	Discharge from industrial chemical factories
					Average	NC	NC	ND	NC	NC	
1,1-Dichloroethane	ppb	5	3	0.5	Range	NC	NC	ND	NC	NC	Extraction and degreasing solvent; fumigant
					Average	NC	NC	ND	NC	NC	
1,2-Dichloroethane	ppt	500	400	500	Range	NC	NC	ND	NC	NC	Discharge from industrial chemical factories
					Average	NC	NC	ND	NC	NC	
1,1-Dichloroethylene	ppb	6	10	0.5	Range	NC	NC	ND	NC	NC	Discharge from industrial chemical factories
					Average	NC	NC	ND	NC	NC	
cis-1,2-Dichloroethylene	ppb	6	100	0.5	Range	NC	NC	ND	NC	NC	Industrial chemical factory discharges; by-product of TCE and PCE
					Average	NC	NC	ND	NC	NC	
trans-1,2-Dichloroethylene	ppb	10	60	0.5	Range	NC	NC	ND	NC	NC	Industrial chemical factory discharges; by-product of TCE and PCE
					Average	NC	NC	ND	NC	NC	
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	NC	NC	ND	NC	NC	Discharge from pharmaceutical and chemical factories
					Average	NC	NC	ND	NC	NC	
1,2-Dichloropropane	ppb	5	0.5	0.5	Range	NC	NC	ND	NC	NC	Industrial chemical factory discharges; from fumigants
					Average	NC	NC	ND	NC	NC	
1,3-Dichloropropene	ppt	500	200	500	Range	NC	NC	ND	NC	NC	Runoff/leaching from nematocide used on croplands
					Average	NC	NC	ND	NC	NC	
Ethylbenzene	ppb	300	300	0.5	Range	NC	NC	ND	NC	NC	Petroleum refinery discharges; industrial chemical factories
					Average	NC	NC	ND	NC	NC	

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Methyl- <i>tert</i> -butylether (MTBE) (c)	ppb	13	13	3	Range	NC	NC	ND	NC	NC	Gasoline discharges from watercraft engines
					Average	NC	NC	ND	NC	NC	
Monochlorobenzene	ppb	70	200	0.5	Range	NC	NC	ND	NC	NC	Industrial, agricultural, and chemical waste discharges, and dry cleaners
					Average	NC	NC	ND	NC	NC	
Styrene	ppb	100	(100)	0.5	Range	NC	NC	ND	NC	NC	Rubber and plastics factories discharges; landfill leaching
					Average	NC	NC	ND	NC	NC	
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Range	NC	NC	ND	NC	NC	Industrial, agricultural, and chemical waste discharges; solvent uses
					Average	NC	NC	ND	NC	NC	
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range	NC	NC	ND	NC	NC	Discharge from factories, dry cleaners, and auto shops
					Average	NC	NC	ND	NC	NC	
Toluene	ppb	150	150	0.5	Range	NC	NC	ND	NC	NC	Discharge from petroleum and chemical refineries
					Average	NC	NC	ND	NC	NC	
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Range	NC	NC	ND	NC	NC	Discharge from textile-finishing factories
					Average	NC	NC	ND	NC	NC	
1,1,1-Trichloroethane	ppb	200	1000	0.5	Range	NC	NC	ND	NC	NC	Metal degreasing site discharges; manufacture of food wrappings
					Average	NC	NC	ND	NC	NC	
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Range	NC	NC	ND	NC	NC	Discharge from industrial chemical factories
					Average	NC	NC	ND	NC	NC	
Trichloroethylene (TCE)	ppb	5	0.8	0.5	Range	NC	NC	ND	NC	NC	Metal degreasing site discharges and other factories
					Average	NC	NC	ND	NC	NC	
Trichlorofluoromethane (Freon-11)	ppb	150	700	5	Range	NC	NC	ND	NC	NC	Industrial factory discharges; degreasing solvent; propellant
					Average	NC	NC	ND	NC	NC	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Range	NC	NC	ND	NC	NC	Discharge from metal degreasing sites and other factories; dry cleaning solvent; refrigerant
					Average	NC	NC	ND	NC	NC	
Vinyl Chloride	ppt	500	50	500	Range	NC	NC	ND	NC	NC	Leaching from PVC piping; plastic factory discharges
					Average	NC	NC	ND	NC	NC	
Xylenes	ppm	1.750	1.8	0.0005	Range	NC	NC	ND	NC	NC	Discharge from petroleum and chemical refineries; fuel solvent
					Average	NC	NC	ND	NC	NC	
INORGANIC CHEMICALS											
Aluminum	ppb	1000	600	50	Range	ND-190	ND-120	ND-59	ND-79	ND-1140	Residue from water treatment process; natural deposits; erosion
					Average	62	58	ND	ND	163	
Antimony	ppb	6	20	6	Range	ND	ND	ND	ND	ND	Petroleum refinery discharges; fire retardants; solder; electronics
					Average	ND	ND	ND	ND	ND	
Arsenic	ppb	10	0.004	2	Range	ND-2.5	ND-2.6	ND-2.0	ND-2.7	ND-2.5	Natural deposits erosion, glass and electronics production wastes
					Average	2.1	2.1	ND	2.2	ND	
Asbestos	MFL	7	7	0.2	Range	NC	NC	ND	ND	NC	Asbestos, cement pipes internal corrosion; natural deposits; erosion
					Average	NC	NC	ND	ND	NC	
Barium	ppb	1000	2000	100	Range	ND	ND	ND	ND	ND	Oil and metal refineries discharges; natural deposits erosion
					Average	ND	ND	ND	ND	ND	
Beryllium	ppb	4	1	1	Range	ND	ND	ND	ND	ND	Discharge from metal refineries, aerospace, and defense industries
					Average	ND	ND	ND	ND	ND	
Cadmium	ppb	5	0.04	1	Range	ND	ND	ND	ND	ND	Internal corrosion of galvanized pipes; natural deposits erosion
					Average	ND	ND	ND	ND	ND	
Chromium	ppb	50	(100)	10	Range	ND	ND	ND	ND	ND	Discharge from steel and pulp mills; natural deposits erosion
					Average	ND	ND	ND	ND	ND	
Copper (d)	ppm	AL=1.3	0.17	0.05	Range	ND	ND	ND	ND	ND	Internal corrosion of household pipes; natural deposits erosion
					Average	ND	ND	ND	ND	ND	
Cyanide	ppb	150	150	100	Range	NC	NC	ND	ND	NC	Discharge from steel/metal, plastic, and fertilizer factories
					Average	NC	NC	ND	ND	NC	
Fluoride (naturally-occurring)	ppm	2.0	1	0.1	Range	NC	NC	0.17-0.22	0.18-0.23	NC	Erosion of natural deposits; water additives for tooth health
					Average	NC	NC	0.18	0.21	NC	
Lead (d)	ppb	AL=15	2	5	Range	ND	ND	ND	ND	ND	House pipes internal corrosion; erosion of natural deposits
					Average	ND	ND	ND	ND	ND	
Mercury	ppb	2	1.2	1	Range	ND	ND	ND	ND	ND	Erosion of natural deposits; factory discharges; landfill runoff
					Average	ND	ND	ND	ND	ND	

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Nickel	ppb	100	12	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits; discharge from metal factories
Nitrate (as N) (e)	ppm	10	10	0.4	Range Average	NC NC	NC NC	ND-0.54 0.47	ND-0.45 ND	NC NC	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrite (as N)	ppm	1	1	0.4	Range Average	NC NC	NC NC	ND ND	ND ND	NC NC	Runoff and leaching from fertilizer use; sewage; natural erosion
Selenium	ppb	50	(50)	5	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Refineries, mines, and chemical waste discharges; runoff
Thallium	ppb	2	0.1	1	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Leaching from ore processing; electronics factory discharges
RADIOLOGICALS (f)											
Gross Alpha Particle Activity	pCi/L	15	(0)	3.0	Range Average	ND-3.0 ND	ND-3.6 ND	ND-3.0 ND	ND-4.0 ND	ND ND	Erosion of natural deposits
Gross Beta Particle Activity (g)	pCi/L	50	(0)	4.0	Range Average	ND ND	ND ND	ND ND	4.1-4.3 4.2	ND ND	Decay of natural and man-made deposits
Combined Radium (h)	pCi/L	5	(0)	2.0	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Erosion of natural deposits
Strontium-90	pCi/L	8	0.35	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Decay of natural and man-made deposits
Tritium	pCi/L	20000	400	1000	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1.0	Range Average	1.4-2.2 1.8	1.5-2.2 1.8	1.2-1.3 1.2	2.0-2.6 2.3	ND-1.1 ND	Erosion of natural deposits
SECONDARY STANDARDS--Aesthetic Standards (i)											
Aluminum	ppb	200	600	50	Range Average	ND-190 62	ND-120 58	ND-59 ND	ND-79 ND	ND-1140 163	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	NA	Range Average	NC NC	NC NC	40-52 46	60-88 71	NC NC	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Average	NC NC	NC NC	7-10 8	6-8 7	NC NC	Naturally occurring organic materials
Copper	ppm	1.0	0.17	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Internal corrosion of household pipes; natural deposits erosion; wood preservatives leaching
Foaming Agents (MBAS)	ppb	500	NA	NA	Range Average	NC NC	NC NC	ND ND	ND ND	NC NC	Municipal and industrial waste discharges
Iron	ppb	300	NA	100	Range Average	ND-100 ND	ND ND	ND ND	ND ND	ND ND	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	NL = 500	20	Range Average	ND-35 ND	ND ND	ND ND	ND ND	ND ND	Leaching from natural deposits
MTBE (c)	ppb	5	13	3	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Gasoline discharges from watercraft engines
Odor Threshold	TON	3	NA	1	Range Average	NC NC	NC NC	8 8	17 17	NC NC	Naturally-occurring organic materials
Silver	ppb	100	NA	10	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial discharges
Specific Conductance	µS/cm	1600	NA	NA	Range Average	NC NC	NC NC	389-467 436	637-852 720	21-532 319	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	NC NC	NC NC	51-60 56	113-174 145	NC NC	Runoff/leaching from natural deposits; industrial wastes
Thiobencarb	ppb	1	70	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Runoff/leaching from rice herbicide
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range Average	NC NC	NC NC	221-261 245	369-505 426	NC NC	Runoff/leaching from natural deposits; seawater influence
Turbidity	NTU	5	NA	NA	Range Average	0.59-3.5 1.7	0.93-3.1 1.7	0.44-2.4 1.2	0.72-2.0 1.2	0.79-4.0 1.9	Soil runoff
Zinc	ppm	5.0	NA	0.05	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff/leaching from natural deposits; industrial wastes

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UNREGULATED CHEMICALS											
Boron	ppb	NA	NL = 1000	100	Range Average	NC NC	NC NC	150-210 190	100-150 130	NC NC	Runoff/leaching from natural deposits; industrial wastes
Chromium VI (j)	ppb	NA	NA	1	Range Average	0.04-0.06 0.05	0.04-0.05 0.05	0.06-0.07 0.07	ND-0.04 ND	0.06-0.08 0.07	Industrial waste discharge
Dichlorodifluoromethane (Freon 12)	ppb	NA	NL = 1000	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Industrial waste discharge
Ethyl-tert-butylether (ETBE)	ppb	NA	NA	3	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used as gasoline additive
Perchlorate (k)	ppb	NA	6	4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge
tert-Amyl-methylether (TAME)	ppb	NA	NA	3	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used as gasoline additive
tert-Butyl alcohol (TBA)	ppb	NA	NL = 12	2	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	MTBE breakdown product; used as gasoline additive
Trichloropropane (1,2,3-TCP)	ppt	NA	NL = 5	5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Industrial waste discharge and pesticide use
Vanadium	ppb	NA	NL = 50	3	Range Average	ND-4.1 3.2	ND-3.9 3.2	ND ND	ND-3.6 3.1	ND-4.3 3.2	Naturally-occurring; industrial waste discharge
ADDITIONAL PARAMETERS											
MICROBIAL CONTAMINANTS (l)											
Total Coliform Bacteria (m)	MPN/100 mL	NA	NA	NA	Range Average	4-170 35	8-170 45	2-220 33	ND- >1600 130	ND-500 45	Naturally present in the environment
Total Coliform Bacteria (n)	CFU/100 mL	NA	NA	NA	Range Average	77-1900 500	140-4200 900	6-4000 980	220-17000 3900	78-8800 1200	Naturally present in the environment
Fecal Coliform	MPN/100 mL	NA	NA	NA	Range Average	ND-50 5	ND-30 7	ND-50 5	ND-130 14	ND-70 4	Human and animal fecal waste
<i>E. coli</i>	MPN or CFU/100 mL	NA	NA	NA	Range Average	ND-50 4	ND-23 6	ND-22 4	ND-130 10	ND-70 3	Human and animal fecal waste
FEDERAL REGULATED CONTAMINANTS WITH NO MCLs (o)											
List 1 - Assessment Monitoring											
2,4-Dinitrotoluene	ppb	NA	NA	2	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used in the production of isocyanate and explosives
2,6-Dinitrotoluene	ppb	NA	NA	2	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used as a mixture with 2,4-Dinitrotoluene (similar uses)
Acetochlor	ppb	NA	NA	2	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used with cabbage, citrus, coffee, and corn crops
DCPA mono-acid degradate	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Degradation products of DCPA; runoff from herbicide used on weeds and crops
DCPA di-acid degradate	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Degradation products of DCPA; runoff from herbicide used on weeds & crops
Dichlorodiphenyldichloroethylene (4,4'-DDE)	ppb	NA	NA	0.8	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Degradation product of DDT; residue of banned pesticide
s-Ethyl dipropylthio-carbamate (EPTC)	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used on annual grasses, weeds, in potatoes, and corn
Molinate	ppb	NA	NA	0.9	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Runoff/leaching from herbicide used on rice
MTBE	ppb	NA	NA	5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Gasoline discharges from watercraft engines
Nitrobenzene	ppb	NA	NA	10	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used in the production of aniline, which is used to make dyes, herbicides, and drugs

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Perchlorate	ppb	NA	NA	4	Range Average	NC NC	NC NC	ND ND	ND-5.2 ND	NC NC	Industrial waste discharge
Terbacil	ppb	NA	NA	2	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used with sugarcane, alfalfa, and some fruits
List 2 - Screening Survey											
1,2-Diphenylhydrazine	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used in the production of benzidine and anti-inflammatory drugs
2-Methylphenol	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Released in automobile and diesel exhaust, coal tar and petroleum refining, and wood pulp
2,4-Dichlorophenol	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Chemical intermediate in herbicide production
2,4-Dinitrophenol	ppb	NA	NA	5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Released from mines, metal, petroleum, and dye plants
2,4,6-Trichlorophenol	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	By-product of fossil fuel burning; used as bactericide and wood/glue preservative
Diazinon	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Insecticide used with rice, fruit, vineyards, and corn crops
Disulfoton	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Insecticide used with cereal, cotton, tobacco, and potato crops
Diuron	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used in grasses in orchards and wheat crops
Fonofos	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Soil insecticide used on worms and centipedes
Linuron	ppb	NA	NA	1	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used with corn, soybean, cotton, and wheat crops
Nitrobenzene	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Used in the production of aniline, which is used to make dyes, herbicides, and drugs
Prometon	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Herbicide used on annual and perennial weeds and grasses
Terbufos	ppb	NA	NA	0.5	Range Average	NC NC	NC NC	ND ND	NC NC	NC NC	Insecticide used with corn, sugar beet, and grain sorghum crops
OTHER PARAMETERS											
Alkalinity (p)	ppm	NA	NA	NA	Range Average	56-96 77	71-97 83	72-89 80	90-121 99	46-76 59	
Calcium	ppm	NA	NA	NA	Range Average	NC NC	NC NC	24-28 26	40-55 48	NC NC	
Hardness	ppm	NA	NA	NA	Range Average	112-193 141	NC NC	108-126 119	176-236 201	55-104 75	
Magnesium	ppm	NA	NA	NA	Range Average	NC NC	NC NC	11-13 12	18-24 20	NC NC	
N-Nitrosodimethylamine (NDMA) (g)	ppt	NA	3	2	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	By-product of drinking water chlorination; industrial processes
pH	pH Units	NA	NA	NA	Range Average	7.9-8.2 8.0	7.8-8.2 8.0	7.5-8.1 7.8	7.9-8.6 8.3	7.8-8.1 7.9	
Potassium	ppm	NA	NA	NA	Range Average	NC NC	NC NC	2.2-2.8 2.5	3.3-4.2 3.8	NC NC	
Radon (f)	pCi/L	NA	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	
Sodium	ppm	NA	NA	NA	Range Average	NC NC	NC NC	34-43 39	58-82 68	NC NC	
TOC (g)	ppm	TT	NA	0.30	Range Average	2.4-3.8 3.0	2.5-3.8 3.1	2.7-3.1 2.9	2.7-4.2 3.2	2.4-4.0 3.2	Various natural and man-made sources

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ABBREVIATIONS AND FOOTNOTES

Abbreviations

AL	Action Level	MRDL	Maximum Residual Disinfectant Level	PHG	Public Health Goal
CFU/mL	Colony-Forming Units per Milliliter	MRDLG	Maximum Residual Disinfectant Level Goal	ppb	parts per billion or micrograms per liter (µg/L)
DCPA	Dimethyl Tetrachloroterephthalate	N	Nitrogen	ppm	parts per million or milligrams per liter (mg/L)
DLR	Detection Limits for purposes of Reporting	NA	Not Applicable	ppq	parts per quadrillion or picograms per liter (pg/L)
MBAS	Methylene Blue Active Substances	NC	Not Collected	ppt	parts per trillion or nanograms per liter (ng/L)
MCL	Maximum Contaminant Level	ND	None Detected	TON	Threshold Odor Number
MCLG	Maximum Contaminant Level Goal	NL	Notification Level	TOC	Total Organic Carbon
MFL	Million Fibers per Liter	NTU	Nephelometric Turbidity Units	TT	Treatment Technique
MPN	Most Probable Number	pCi/L	picoCuries per Liter	µS/cm	microSiemen per centimeter; also equivalent to µmho/cm (micromho per centimeter)

Footnotes

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| <p>(a) The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) required monitoring of <i>E. coli</i> in plant influent starting October 2006. Results are based on one sample per plant per month.</p> <p>(b) In 2006, the influent to the five (5) treatment plants had no detectable <i>Cryptosporidium</i>, <i>Giardia</i>, or Total Culturable Viruses. Ten (10) liters of water were collected monthly for <i>Cryptosporidium</i> and <i>Giardia</i> analysis. The LT2ESWTR required the monitoring of <i>Cryptosporidium</i> in plant influent starting October 2006. One thousand (1000) liters of water were collected quarterly for Total Culturable Viruses analysis. Reported results ("P" for presence or "A" for absence) were taken from the first three (3) quarters of 2006.</p> <p>(c) MTBE reporting level is 0.5 ppb.</p> <p>(d) Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The action level, which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.</p> <p>(e) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.</p> <p>(f) Metropolitan conducted four (4) quarters of monitoring from August 2005 to April 2006. Reported results were from the first two (2) quarters of 2006.</p> <p>(g) Effective June 11, 2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.</p> <p>(h) Standard is for Radium-226 and -228 combined.</p> <p>(i) California's Secondary Standards for drinking water amended effective September 27, 2006 apply to water supplied to the public by community water systems; annual monitoring is required for approved surface water sources or distribution system entry points representative of the effluent of source treatment.</p> | <p>(j) Chromium VI reporting level is 0.03 ppb.</p> <p>(k) Both PHG (issued by the Office of Environmental Health Hazard Assessment) and NL (issued by CA Department of Health Services) were set at 6 ppb. Perchlorate reporting level is 2 ppb.</p> <p>(l) Samples were collected weekly and values were calculated as annual averages. MTF detection limit is 2 MPN/100mL and MF-MI detection limit is 1 CFU/100mL.</p> <p>(m) Total coliform samples from January to June 2006 were analyzed by Multiple Tube Fermentation (MTF) method (SM 9221).</p> <p>(n) Total coliform samples from July to December 2006 were analyzed by Membrane Filtration on MI agar (MF-MI, EPA 1604). Analysis by MI Agar yields higher numbers of total coliforms than by the MTF method.</p> <p>(o) Data collected from January 2002 to January 2003. Minimum reporting levels are as stipulated in the Federal Unregulated Contaminants Monitoring Rule (UCMR). List 1 - Assessment Monitoring consists of 12 chemical contaminants for which standard analytical methods were available. List 2 - Screening Survey consists of 16 contaminants for which new analytical methods were used.</p> <p>(p) Average and range for the treatment plant influents were taken from weekly samples.</p> <p>(q) One (1) plant influent sample from each of the treatment plants was analyzed quarterly. The PHG was established at 3 ppt in December 2006. The California NL is 10 ppt.</p> |
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