Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ALISO CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.29
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.2
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		80000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		30000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.38
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L		100		10.2
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.16
Nitrate	Comp	0.10	mg/L				5.27
Sulfate	Comp	0.10	mg/L		300		13.4
Alkalinity	Comp	4.00	mg/L				32
Hardness	Comp	2.00	mg/L				55.2
COD	Comp	10.00	mg/L				53.7
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				184.4
Total Dissolved Solids	Comp	2.00	mg/L		1500		128
Turbidity	Comp	0.10	NTU	225a			91
Total Suspended Solids	Comp	2.00	mg/L				102
Volatile Suspended Solids	Comp	1.00	mg/L				12
MBAS	Comp	0.05	mg/L		0.5		0.069
Total Organic Carbon	Comp	1.00	mg/L				12.3
BOD	Comp	2.00	mg/L				17.97
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.378
Total Phosphorus	Comp	0.05	mg/L				0.434
NH3-N	Comp	0.10	mg/L				0.475
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.19
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.347
Kjeldahl-N	Comp	0.10	mg/L				1.182
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		261
Dissolved Antimony	Comp	5.00	ug/l				1.31
Total Antimony	Comp	5.00	ug/l		6		1.31
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		1.66
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.4	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.398
Dissolved Chromium	Comp	5.00	ug/l			109.4	0.88
Total Chromium	Comp	5.00	ug/l		50		1.93
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			5.4	13.3
Total Copper	Comp	5.00	ug/l	12a			22.1
Dissolved Iron	Comp	100.00	ug/l				755
Total Iron	Comp	100.00	ug/l				755
Dissolved Lead	Comp	5.00	ug/l			1.2	0
Total Lead	Comp	5.00	ug/l	8a			4.47
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Dissolved Nickel	Comp	5.00	ug/l			31.5	3.64
Total Nickel	Comp	5.00	ug/l	20a	100		5.14
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			1.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			71.4	66.6
Total Zinc	Comp	50.00	ug/l	80a			117
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#1TRIB_ALISO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ALISO CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			16.4
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.06
Dissolved Oxygen	Grab	1.00	mg/L		> 5		5
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.33
Fecal Streptococcus	Grab	20.00	MPN/100ml				500000
Fecal Enterococcus	Grab		MPN/100ml		104		500000
General							
Chloride	Comp	2.00	mg/L		100		6.68
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.11
Nitrate	Comp	0.10	mg/L				0.91
Sulfate	Comp	0.10	mg/L		300		7.9
Alkalinity	Comp	4.00	mg/L				59
Hardness	Comp	2.00	mg/L				44
COD	Comp	10.00	mg/L				23.1
TPH	Grab	1.00	mg/L				1
Specific Conductance	Comp	1.00	umhos/cm				176.3
Total Dissolved Solids	Comp	2.00	mg/L		1500		118
Turbidity	Comp	0.10	NTU	225a			33.6
Total Suspended Solids	Comp	2.00	mg/L				138
Volatile Suspended Solids	Comp	1.00	mg/L				24
MBAS	Comp	0.05	mg/L		0.5		0.072
Total Organic Carbon	Comp	1.00	mg/L				6.14
BOD	Comp	2.00	mg/L				6.4
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.29
Total Phosphorus	Comp	0.05	mg/L				0.38
NH3-N	Comp	0.10	mg/L				0.137
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.205
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.33
Kjeldahl-N	Comp	0.10	mg/L				0.568
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		175
Dissolved Antimony	Comp	5.00	ug/l				1.17
Total Antimony	Comp	5.00	ug/l		6		1.21
Dissolved Arsenic	Comp	5.00	ug/l			150	1.24
Total Arsenic	Comp	5.00	ug/l	32a	50		1.87
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.2	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			90.9	1.09
Total Chromium	Comp	5.00	ug/l		50		11.2
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			4.4	2.28
Total Copper	Comp	5.00	ug/l	12a			11.9
Dissolved Iron	Comp	100.00	ug/l				296
Total Iron	Comp	100.00	ug/l				417
Dissolved Lead	Comp	5.00	ug/l			0.9	0.62
Total Lead	Comp	5.00	ug/l	8a			1.71
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Dissolved Nickel	Comp	5.00	ug/l			26.0	4.75
Total Nickel	Comp	5.00	ug/l	20a	100		17.8
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			0.8	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			58.9	15
Total Zinc	Comp	50.00	ug/l	80a			48
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_ALISO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ALISO CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.3
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		
Dissolved Oxygen	Grab	1.00	mg/L		> 5	0.07	8.02
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.33
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L		100		29.9
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.28
Nitrate	Comp	0.10	mg/L				0
Sulfate	Comp	0.10	mg/L		300		20.7
Alkalinity	Comp	4.00	mg/L				
Hardness	Comp	2.00	mg/L				103
COD	Comp	10.00	mg/L				359
TPH	Grab	1.00	mg/L				1.7
Specific Conductance	Comp	1.00	umhos/cm				311
Total Dissolved Solids	Comp	2.00	mg/L		1500		212
Turbidity	Comp	0.10	NTU	225a			81.3
Total Suspended Solids	Comp	2.00	mg/L				279
Volatile Suspended Solids	Comp	1.00	mg/L				8.5
MBAS	Comp	0.05	mg/L		0.5		
Total Organic Carbon	Comp	1.00	mg/L				23.3
BOD	Comp	2.00	mg/L				36.1
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				
Total Phosphorus	Comp	0.05	mg/L				
NH3-N	Comp	0.10	mg/L				
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				1.51
Total Antimony	Comp	5.00	ug/l		6		1.57
Dissolved Arsenic	Comp	5.00	ug/l			150	1.35
Total Arsenic	Comp	5.00	ug/l	32a	50		1.52
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.3	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			182.4	4.34
Total Chromium	Comp	5.00	ug/l		50		4.49
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			9.2	6.81
Total Copper	Comp	5.00	ug/l	12a			12.6
Dissolved Iron	Comp	100.00	ug/l				435
Total Iron	Comp	100.00	ug/l				689
Dissolved Lead	Comp	5.00	ug/l			2.6	0.92
Total Lead	Comp	5.00	ug/l	8a			1.58
Dissolved Mercury	Comp	1.00	ug/l				
Total Mercury	Comp	1.00	ug/l	0.16a	2		

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Dissolved Nickel	Comp	5.00	ug/l			53.3	6.68
Total Nickel	Comp	5.00	ug/l	20a	100		9.03
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			3.6	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			121.1	47
Total Zinc	Comp	50.00	ug/l	80a			64
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.23
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_ALISO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ALISO CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.12
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.2
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		34000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.14
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		130000
General							
Chloride	Comp	2.00	mg/L		100		25.3
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.25
Nitrate	Comp	0.10	mg/L				5.45
Sulfate	Comp	0.10	mg/L		300		36.2
Alkalinity	Comp	4.00	mg/L				143
Hardness	Comp	2.00	mg/L				95
COD	Comp	10.00	mg/L				125
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				304
Total Dissolved Solids	Comp	2.00	mg/L		1500		208
Turbidity	Comp	0.10	NTU	225a			36.9
Total Suspended Solids	Comp	2.00	mg/L				1209
Volatile Suspended Solids	Comp	1.00	mg/L				86.2
MBAS	Comp	0.05	mg/L		0.5		
Total Organic Carbon	Comp	1.00	mg/L				26.2
BOD	Comp	2.00	mg/L				51.4
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.354
Total Phosphorus	Comp	0.05	mg/L				0.662
NH3-N	Comp	0.10	mg/L				12.1
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.23
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.93
Kjeldahl-N	Comp	0.10	mg/L				13
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				
Total Aluminum	Comp	100.00	ug/l		1000		
Dissolved Antimony	Comp	5.00	ug/l				
Total Antimony	Comp	5.00	ug/l		6		
Dissolved Arsenic	Comp	5.00	ug/l			150	
Total Arsenic	Comp	5.00	ug/l	32a	50		
Dissolved Berylium	Comp	1.00	ug/l				
Total Beryllium	Comp	1.00	ug/l		4		
Dissolved Cadmium	Comp	1.00	ug/l			2.2	
Total Cadmium	Comp	1.00	ug/l	4a	5		
Dissolved Chromium	Comp	5.00	ug/l			170.7	
Total Chromium	Comp	5.00	ug/l		50		
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			8.6	
Total Copper	Comp	5.00	ug/l	12a			
Dissolved Iron	Comp	100.00	ug/l				
Total Iron	Comp	100.00	ug/l				
Dissolved Lead	Comp	5.00	ug/l			2.4	
Total Lead	Comp	5.00	ug/l	8a			
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			49.8	
Total Nickel	Comp	5.00	ug/l	20a	100		

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Dissolved Selenium	Comp	5.00	ug/l				
Total Selenium	Comp	5.00	ug/l	60a	50		
Dissolved Silver[f]	Comp	1.00	ug/l			3.2	
Total Silver	Comp	1.00	ug/l	2.8a			
Dissolved Thallium	Comp	5.00	ug/l				
Total Thallium	Comp	5.00	ug/l		2		
Dissolved Zinc	Comp	50.00	ug/l			113.1	
Total Zinc	Comp	50.00	ug/l	80a			
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.152
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_ALISO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ALISO CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.07
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.14
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		8000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		500
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.06
Fecal Streptococcus	Grab	20.00	MPN/100ml				5000
Fecal Enterococcus	Grab		MPN/100ml		104		1300
General							
Chloride	Comp	2.00	mg/L		100		90
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.7
Nitrate	Comp	0.10	mg/L				19.1
Sulfate	Comp	0.10	mg/L		300		133
Alkalinity	Comp	4.00	mg/L				165
Hardness	Comp	2.00	mg/L				340
COD	Comp	10.00	mg/L				76.7
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				1026
Total Dissolved Solids	Comp	2.00	mg/L		1500		686
Turbidity	Comp	0.10	NTU	225a			3.63
Total Suspended Solids	Comp	2.00	mg/L				131
Volatile Suspended Solids	Comp	1.00	mg/L				27
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				11.4
BOD	Comp	2.00	mg/L				14.9
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.161
Total Phosphorus	Comp	0.05	mg/L				0.172
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		4.31
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				2.5
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		107
Dissolved Antimony	Comp	5.00	ug/l				1.12
Total Antimony	Comp	5.00	ug/l		6		1.12
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		5.66
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			5.5	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			485.0	0.8
Total Chromium	Comp	5.00	ug/l		50		2.34
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			25.5	15.5
Total Copper	Comp	5.00	ug/l	12a			0.07
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				164
Dissolved Lead	Comp	5.00	ug/l			12.0	0.5
Total Lead	Comp	5.00	ug/l	8a			0.74
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			146.4	4.08

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
Total Nickel	Comp	5.00	ug/l	20a	100		4.68
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			28.3	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			333.2	31
Total Zinc	Comp	50.00	ug/l	80a			39
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Aliso Creek
alpha-BHC	Comp	0.05	ug/l	0.008k			0
beta-BHC	Comp	0.05	ug/l				0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l	0.018k			0
beta-Endosulfan	Comp	0.10	ug/l				0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.072
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataDRYWEATHER#2_ALISO CK

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.16
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.36
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		1700000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		110000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.06
Fecal Streptococcus	Grab	20.00	MPN/100ml				600000
Fecal Enterococcus	Grab		MPN/100ml		104		400000
General							
Chloride	Comp	2.00	mg/L		100		11.8
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.32
Nitrate	Comp	0.10	mg/L				5.32
Sulfate	Comp	0.10	mg/L		300		73.8
Alkalinity	Comp	4.00	mg/L				37
Hardness	Comp	2.00	mg/L				108
COD	Comp	10.00	mg/L				19.9
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				320
Total Dissolved Solids	Comp	2.00	mg/L				222
Turbidity	Comp	0.10	NTU	225a			990
Total Suspended Solids	Comp	2.00	mg/L				625
Volatile Suspended Solids	Comp	1.00	mg/L				30
MBAS	Comp	0.05	mg/L		0.5		0.114
Total Organic Carbon	Comp	1.00	mg/L				12.6
BOD	Comp	2.00	mg/L				27.42
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.162
Total Phosphorus	Comp	0.05	mg/L				0.248
NH3-N	Comp	0.10	mg/L				0.84
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.2
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.161
Kjeldahl-N	Comp	0.10	mg/L				0.908
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		1493
Dissolved Antimony	Comp	5.00	ug/l				1.04
Total Antimony	Comp	5.00	ug/l		6		1.16
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		2.33
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.4	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.86
Dissolved Chromium	Comp	5.00	ug/l			189.6	0.95
Total Chromium	Comp	5.00	ug/l		50		6.06
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			9.6	11.8
Total Copper	Comp	5.00	ug/l	12a			29.7
Dissolved Iron	Comp	100.00	ug/l				1445
Total Iron	Comp	100.00	ug/l				3066
Dissolved Lead	Comp	5.00	ug/l			2.8	0
Total Lead	Comp	5.00	ug/l	8a			9.18
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			55.5	12.7
Total Nickel	Comp	5.00	ug/l	20a	100		18.6

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			3.9	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			126.1	15.4
Total Zinc	Comp	50.00	ug/l	80a			82.5
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
delta-BHC	Comp	0.05	ug/l	0.006k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#1TRIB_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			11.9
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.91
Dissolved Oxygen	Grab	1.00	mg/L		> 5		6.64
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		210000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		140000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1	0.07	0.67
Fecal Streptococcus	Grab	20.00	MPN/100ml				110000
Fecal Enterococcus	Grab		MPN/100ml		104		28000
General							
Chloride	Comp	2.00	mg/L		100		3.65
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.12
Nitrate	Comp	0.10	mg/L				2.06
Sulfate	Comp	0.10	mg/L		300		17.7
Alkalinity	Comp	4.00	mg/L				27
Hardness	Comp	2.00	mg/L				76
COD	Comp	10.00	mg/L				28.5
TPH	Grab	1.00	mg/L				1.3
Specific Conductance	Comp	1.00	umhos/cm				160.5
Total Dissolved Solids	Comp	2.00	mg/L				108
Turbidity	Comp	0.10	NTU	225a			30.9
Total Suspended Solids	Comp	2.00	mg/L				170
Volatile Suspended Solids	Comp	1.00	mg/L				16
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				4.98
BOD	Comp	2.00	mg/L				11.5
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.302
Total Phosphorus	Comp	0.05	mg/L				369
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.627
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				0.156
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		238
Dissolved Antimony	Comp	5.00	ug/l				0.9
Total Antimony	Comp	5.00	ug/l		6		0.93
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			142.2	0
Total Chromium	Comp	5.00	ug/l		50		11.7
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			7.1	2.66
Total Copper	Comp	5.00	ug/l	12a			6.73
Dissolved Iron	Comp	100.00	ug/l				510
Total Iron	Comp	100.00	ug/l				598
Dissolved Lead	Comp	5.00	ug/l			1.8	0.73
Total Lead	Comp	5.00	ug/l	8a			2.02
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Dissolved Nickel	Comp	5.00	ug/l			41.2	2.58
Total Nickel	Comp	5.00	ug/l	20a	100		15.3
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			93.6	19
Total Zinc	Comp	50.00	ug/l	80a			33
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.15
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.85
Indicator Bacteria					0.07		
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		30000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.13
Fecal Streptococcus	Grab	20.00	MPN/100ml				17000
Fecal Enterococcus	Grab		MPN/100ml		104		17000
General							
Chloride	Comp	2.00	mg/L		100		11.6
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.21
Nitrate	Comp	0.10	mg/L				2.13
Sulfate	Comp	0.10	mg/L		300		59
Alkalinity	Comp	4.00	mg/L				16.5
Hardness	Comp	2.00	mg/L				88
COD	Comp	10.00	mg/L				43
TPH	Grab	1.00	mg/L				1.2
Specific Conductance	Comp	1.00	umhos/cm				253
Total Dissolved Solids	Comp	2.00	mg/L				170
Turbidity	Comp	0.10	NTU	225a			654
Total Suspended Solids	Comp	2.00	mg/L				1487
Volatile Suspended Solids	Comp	1.00	mg/L				6.9
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				6.47
BOD	Comp	2.00	mg/L				8.7
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.196
Total Phosphorus	Comp	0.05	mg/L				0.252
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.48
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.06
Kjeldahl-N	Comp	0.10	mg/L				8.18
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				173
Total Aluminum	Comp	100.00	ug/l		1000		173
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.0	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			160.3	2.64
Total Chromium	Comp	5.00	ug/l		50		3.65
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			8.0	5.65
Total Copper	Comp	5.00	ug/l	12a			8.35
Dissolved Iron	Comp	100.00	ug/l				491
Total Iron	Comp	100.00	ug/l				782
Dissolved Lead	Comp	5.00	ug/l			2.1	0.75
Total Lead	Comp	5.00	ug/l	8a			0.96
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			46.7	8.2

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Total Nickel	Comp	5.00	ug/l	20a	100		9.14
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.8	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			106.0	21
Total Zinc	Comp	50.00	ug/l	80a			37
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.198
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.2
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.55
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.37
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		170000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		11000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.06
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		130000
General							
Chloride	Comp	2.00	mg/L		100		4.75
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.27
Nitrate	Comp	0.10	mg/L				3.13
Sulfate	Comp	0.10	mg/L		300		138
Alkalinity	Comp	4.00	mg/L				16.5
Hardness	Comp	2.00	mg/L				145
COD	Comp	10.00	mg/L				54
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				360
Total Dissolved Solids	Comp	2.00	mg/L				254
Turbidity	Comp	0.10	NTU	225a			4220
Total Suspended Solids	Comp	2.00	mg/L				4152
Volatile Suspended Solids	Comp	1.00	mg/L				386
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.6
BOD	Comp	2.00	mg/L				22.2
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0
Total Phosphorus	Comp	0.05	mg/L				0.054
NH3-N	Comp	0.10	mg/L				0.225
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.71
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.1
Kjeldahl-N	Comp	0.10	mg/L				2.44
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		795
Dissolved Antimony	Comp	5.00	ug/l				0.54
Total Antimony	Comp	5.00	ug/l		6		0.58
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.29
Dissolved Chromium	Comp	5.00	ug/l			241.3	0.97
Total Chromium	Comp	5.00	ug/l		50		6.83
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			12.3	3.09
Total Copper	Comp	5.00	ug/l	12a			8.26
Dissolved Iron	Comp	100.00	ug/l				694
Total Iron	Comp	100.00	ug/l				1460
Dissolved Lead	Comp	5.00	ug/l			4.0	0.57
Total Lead	Comp	5.00	ug/l	8a			1.31
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Dissolved Nickel	Comp	5.00	ug/l			71.2	10.7
Total Nickel	Comp	5.00	ug/l	20a	100		15.3
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			6.5	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			161.9	10
Total Zinc	Comp	50.00	ug/l	80a			10
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.04
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.76
Dissolved Oxygen	Grab	1.00	mg/L		> 5		6.57
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		50000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		5000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.10
Fecal Streptococcus	Grab	20.00	MPN/100ml				300000
Fecal Enterococcus	Grab		MPN/100ml		104		300000
General							
Chloride	Comp	2.00	mg/L		100		7.16
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0
Nitrate	Comp	0.10	mg/L				5.28
Sulfate	Comp	0.10	mg/L		300		5.99
Alkalinity	Comp	4.00	mg/L				25.3
Hardness	Comp	2.00	mg/L				76
COD	Comp	10.00	mg/L				15
TPH	Grab	1.00	mg/L				1.2
Specific Conductance	Comp	1.00	umhos/cm				186
Total Dissolved Solids	Comp	2.00	mg/L				112
Turbidity	Comp	0.10	NTU	225a			710
Total Suspended Solids	Comp	2.00	mg/L				1566
Volatile Suspended Solids	Comp	1.00	mg/L				9.4
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				4.07
BOD	Comp	2.00	mg/L				7
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.15
Total Phosphorus	Comp	0.05	mg/L				1.39
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.19
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				2.88
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				130
Total Aluminum	Comp	100.00	ug/l		1000		501
Dissolved Antimony	Comp	5.00	ug/l				0.66
Total Antimony	Comp	5.00	ug/l		6		0.66
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			142.2	2.8
Total Chromium	Comp	5.00	ug/l		50		9.16
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			7.1	2.98
Total Copper	Comp	5.00	ug/l	12a			7.49
Dissolved Iron	Comp	100.00	ug/l				215
Total Iron	Comp	100.00	ug/l				880
Dissolved Lead	Comp	5.00	ug/l			1.8	0
Total Lead	Comp	5.00	ug/l	8a			1.09
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			41.2	6.58

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Total Nickel	Comp	5.00	ug/l	20a	100		10.7
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			161.9	0
Total Zinc	Comp	50.00	ug/l	80a			33
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
delta-BHC	Comp	0.05	ug/l	0.018k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.065
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#5TRIB_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BULL CREEK

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.51
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.87
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		1100
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.07
Fecal Streptococcus	Grab	20.00	MPN/100ml				300
Fecal Enterococcus	Grab		MPN/100ml		104		300
General							
Chloride	Comp	2.00	mg/L		100		73
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.8
Nitrate	Comp	0.10	mg/L				0.14
Sulfate	Comp	0.10	mg/L		300		128
Alkalinity	Comp	4.00	mg/L				165
Hardness	Comp	2.00	mg/L				240
COD	Comp	10.00	mg/L				67.8
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				789
Total Dissolved Solids	Comp	2.00	mg/L				486
Turbidity	Comp	0.10	NTU	225a			1.68
Total Suspended Solids	Comp	2.00	mg/L				17
Volatile Suspended Solids	Comp	1.00	mg/L				9
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				6.45
BOD	Comp	2.00	mg/L				12.3
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.101
Total Phosphorus	Comp	0.05	mg/L				0.11
NH3-N	Comp	0.10	mg/L				0.146
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				0.676
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	1.98
Total Arsenic	Comp	5.00	ug/l	32a	50		5.52
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			4.3	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			364.6	0
Total Chromium	Comp	5.00	ug/l		50		1.74
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			18.9	5.62
Total Copper	Comp	5.00	ug/l	12a			7.56
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				160
Dissolved Lead	Comp	5.00	ug/l			7.7	0
Total Lead	Comp	5.00	ug/l	8a			0
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			109.1	1.87

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
Total Nickel	Comp	5.00	ug/l	20a	100		2.67
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			15.6	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			248.1	25
Total Zinc	Comp	50.00	ug/l	80a			33
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Bull Creek
alpha-BHC	Comp	0.05	ug/l	0.008k			0
beta-BHC	Comp	0.05	ug/l				0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l	0.018k			0
beta-Endosulfan	Comp	0.10	ug/l				0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.023
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataDRYWEATHER#2_BULL

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002 Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.009
pH	Comp	0-14			6.5 < pH < 8.5		7.49
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.19
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		500000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		17000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.03
Fecal Streptococcus	Grab	20.00	MPN/100ml				170000
Fecal Enterococcus	Grab		MPN/100ml		104		170000
General							
Chloride	Comp	2.00	mg/L		100		7.27
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.2
Nitrate	Comp	0.10	mg/L				3.18
Sulfate	Comp	0.10	mg/L		300		8.31
Alkalinity	Comp	4.00	mg/L				113
Hardness	Comp	2.00	mg/L				56
COD	Comp	10.00	mg/L				31
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				161.4
Total Dissolved Solids	Comp	2.00	mg/L				112
Turbidity	Comp	0.10	NTU	225a			34.8
Total Suspended Solids	Comp	2.00	mg/L				199
Volatile Suspended Solids	Comp	1.00	mg/L				51
MBAS	Comp	0.05	mg/L		0.5		0.119
Total Organic Carbon	Comp	1.00	mg/L				16.7
BOD	Comp	2.00	mg/L				26.34
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.476
Total Phosphorus	Comp	0.05	mg/L				0.487
NH3-N	Comp	0.10	mg/L				1.34
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.718
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.228
Kjeldahl-N	Comp	0.10	mg/L				2.78
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		419
Dissolved Antimony	Comp	5.00	ug/l				1.17
Total Antimony	Comp	5.00	ug/l		6		1.23
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		1.14
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.5	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.78
Dissolved Chromium	Comp	5.00	ug/l			110.7	1.21
Total Chromium	Comp	5.00	ug/l		50		3.83
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			5.5	24.7
Total Copper	Comp	5.00	ug/l	12a			103
Dissolved Iron	Comp	100.00	ug/l				954
Total Iron	Comp	100.00	ug/l				954
Dissolved Lead	Comp	5.00	ug/l			1.2	3.83
Total Lead	Comp	5.00	ug/l	8a			23
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			31.8	5.35
Total Nickel	Comp	5.00	ug/l	20a	100		7.51

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002 Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			1.3	0
Total Silver	Comp	1.00	ug/l	2.8a			0.34
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			72.3	100
Total Zinc	Comp	50.00	ug/l	80a			240
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002 Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#1TRIB_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			6.6
Total Phenols	Grab	0.10	mg/L		0.07		0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.83
Dissolved Oxygen	Grab	1.00	mg/L		> 5		3.72
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		130000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.54
Fecal Streptococcus	Grab	20.00	MPN/100ml				50000
Fecal Enterococcus	Grab		MPN/100ml		104		30000
General							
Chloride	Comp	2.00	mg/L		100		11.8
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.16
Nitrate	Comp	0.10	mg/L				0.55
Sulfate	Comp	0.10	mg/L		300		7.59
Alkalinity	Comp	4.00	mg/L				27
Hardness	Comp	2.00	mg/L				48
COD	Comp	10.00	mg/L				34.1
TPH	Grab	1.00	mg/L				1.7
Specific Conductance	Comp	1.00	umhos/cm				181.9
Total Dissolved Solids	Comp	2.00	mg/L				130
Turbidity	Comp	0.10	NTU	225a			34.8
Total Suspended Solids	Comp	2.00	mg/L				132
Volatile Suspended Solids	Comp	1.00	mg/L				33
MBAS	Comp	0.05	mg/L		0.5		0.2
Total Organic Carbon	Comp	1.00	mg/L				12
BOD	Comp	2.00	mg/L				7.3
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				
Total Phosphorus	Comp	0.05	mg/L				
NH3-N	Comp	0.10	mg/L				
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.124
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.453
Kjeldahl-N	Comp	0.10	mg/L				4.82
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				1.92
Total Antimony	Comp	5.00	ug/l		6		1.92
Dissolved Arsenic	Comp	5.00	ug/l			150	1.38
Total Arsenic	Comp	5.00	ug/l	32a	50		2.15
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.3	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.3
Dissolved Chromium	Comp	5.00	ug/l			97.6	1.39
Total Chromium	Comp	5.00	ug/l		50		12.5
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			4.8	6.42
Total Copper	Comp	5.00	ug/l	12a			16.1
Dissolved Iron	Comp	100.00	ug/l				669
Total Iron	Comp	100.00	ug/l				766
Dissolved Lead	Comp	5.00	ug/l			1.0	3.25
Total Lead	Comp	5.00	ug/l	8a			5.15
Dissolved Mercury	Comp	1.00	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			28.0	4.78
Total Nickel	Comp	5.00	ug/l	20a	100		17.7
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			1.0	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			63.4	71
Total Zinc	Comp	50.00	ug/l	80a			73
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				24.4
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				5
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.0055
pH	Comp	0-14			6.5 < pH < 8.5		7.31
Dissolved Oxygen	Grab	1.00	mg/L		> 5	0.07	7.82
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		80000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		17000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.21
Fecal Streptococcus	Grab	20.00	MPN/100ml				80000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L		100		23.8
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.17
Nitrate	Comp	0.10	mg/L				2.74
Sulfate	Comp	0.10	mg/L		300		16.8
Alkalinity	Comp	4.00	mg/L				22
Hardness	Comp	2.00	mg/L				140
COD	Comp	10.00	mg/L				273
TPH	Grab	1.00	mg/L				1
Specific Conductance	Comp	1.00	umhos/cm				245
Total Dissolved Solids	Comp	2.00	mg/L				146
Turbidity	Comp	0.10	NTU	225a			58.7
Total Suspended Solids	Comp	2.00	mg/L				150
Volatile Suspended Solids	Comp	1.00	mg/L				4.2
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				15.2
BOD	Comp	2.00	mg/L				22.3
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.21
Total Phosphorus	Comp	0.05	mg/L				0.549
NH3-N	Comp	0.10	mg/L				0.216
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.62
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.07
Kjeldahl-N	Comp	0.10	mg/L				16
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		102
Dissolved Antimony	Comp	5.00	ug/l				0.99
Total Antimony	Comp	5.00	ug/l		6		1.08
Dissolved Arsenic	Comp	5.00	ug/l			150	1.04
Total Arsenic	Comp	5.00	ug/l	32a	50		1.13
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.9	0.44
Total Cadmium	Comp	1.00	ug/l	4a	5		0.44
Dissolved Chromium	Comp	5.00	ug/l			234.5	3.41
Total Chromium	Comp	5.00	ug/l		50		4.1
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			11.9	21.5
Total Copper	Comp	5.00	ug/l	12a			28.5
Dissolved Iron	Comp	100.00	ug/l				120
Total Iron	Comp	100.00	ug/l				164
Dissolved Lead	Comp	5.00	ug/l			3.9	1.62
Total Lead	Comp	5.00	ug/l	8a			1.62
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			69.1	5.66

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Total Nickel	Comp	5.00	ug/l	20a	100		6.66
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			6.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			157.1	115
Total Zinc	Comp	50.00	ug/l	80a			126
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.19
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.2
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.83
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.76
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		170000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.47
Fecal Streptococcus	Grab	20.00	MPN/100ml				50000
Fecal Enterococcus	Grab		MPN/100ml		104		50000
General							
Chloride	Comp	2.00	mg/L		100		29
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.13
Nitrate	Comp	0.10	mg/L				3.49
Sulfate	Comp	0.10	mg/L		300		21.9
Alkalinity	Comp	4.00	mg/L				60.5
Hardness	Comp	2.00	mg/L				65
COD	Comp	10.00	mg/L				87
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				303
Total Dissolved Solids	Comp	2.00	mg/L				182
Turbidity	Comp	0.10	NTU	225a			58.8
Total Suspended Solids	Comp	2.00	mg/L				252
Volatile Suspended Solids	Comp	1.00	mg/L				21.6
MBAS	Comp	0.05	mg/L		0.5		0.069
Total Organic Carbon	Comp	1.00	mg/L				6.62
BOD	Comp	2.00	mg/L				20.5
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.443
Total Phosphorus	Comp	0.05	mg/L				0.51
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.78
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		1.996
Kjeldahl-N	Comp	0.10	mg/L				6.36
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		4890
Dissolved Antimony	Comp	5.00	ug/l				0.7
Total Antimony	Comp	5.00	ug/l		6		1.57
Dissolved Arsenic	Comp	5.00	ug/l			150	1.19
Total Arsenic	Comp	5.00	ug/l	32a	50		2.26
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.6	0.28
Total Cadmium	Comp	1.00	ug/l	4a	5		1.2
Dissolved Chromium	Comp	5.00	ug/l			125.1	2.01
Total Chromium	Comp	5.00	ug/l		50		16.6
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.2	14.8
Total Copper	Comp	5.00	ug/l	12a			41.8
Dissolved Iron	Comp	100.00	ug/l				222
Total Iron	Comp	100.00	ug/l				7770
Dissolved Lead	Comp	5.00	ug/l			1.5	0.86
Total Lead	Comp	5.00	ug/l	8a			33.5
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			36.1	4.26

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Total Nickel	Comp	5.00	ug/l	20a	100		13.8
Dissolved Selenium	Comp	5.00	ug/l				1.07
Total Selenium	Comp	5.00	ug/l	60a	50		1.21
Dissolved Silver[f]	Comp	1.00	ug/l			1.6	0
Total Silver	Comp	1.00	ug/l	2.8a			3.15
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			82.0	87.5
Total Zinc	Comp	50.00	ug/l	80a			240
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	0.07		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			2.3
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.78
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.49
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		130000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		28000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.22
Fecal Streptococcus	Grab	20.00	MPN/100ml				170000
Fecal Enterococcus	Grab		MPN/100ml		104		170000
General							
Chloride	Comp	2.00	mg/L		100		7.27
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.17
Nitrate	Comp	0.10	mg/L				0.55
Sulfate	Comp	0.10	mg/L		300		19.6
Alkalinity	Comp	4.00	mg/L				22
Hardness	Comp	2.00	mg/L				26
COD	Comp	10.00	mg/L				14
TPH	Grab	1.00	mg/L				1.5
Specific Conductance	Comp	1.00	umhos/cm				99.9
Total Dissolved Solids	Comp	2.00	mg/L				70
Turbidity	Comp	0.10	NTU	225a			65
Total Suspended Solids	Comp	2.00	mg/L				141
Volatile Suspended Solids	Comp	1.00	mg/L				3
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				4.43
BOD	Comp	2.00	mg/L				10.9
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.229
Total Phosphorus	Comp	0.05	mg/L				0.309
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.124
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.0335
Kjeldahl-N	Comp	0.10	mg/L				2.3
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		137
Dissolved Antimony	Comp	5.00	ug/l				0.58
Total Antimony	Comp	5.00	ug/l		6		0.58
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			0.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			59.1	3.31
Total Chromium	Comp	5.00	ug/l		50		9.37
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			2.8	9.46
Total Copper	Comp	5.00	ug/l	12a			13.9
Dissolved Iron	Comp	100.00	ug/l				298
Total Iron	Comp	100.00	ug/l				465
Dissolved Lead	Comp	5.00	ug/l			0.5	0
Total Lead	Comp	5.00	ug/l	8a			1.95
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			16.6	2.62
Total Nickel	Comp	5.00	ug/l	20a	100		5.36

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			0.3	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			82.0	29
Total Zinc	Comp	50.00	ug/l	80a			53
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.066
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#5TRIB_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - BURBANK-WESTERN CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.16
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.84
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		800000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		50000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.06
Fecal Streptococcus	Grab	20.00	MPN/100ml				3000
Fecal Enterococcus	Grab		MPN/100ml		104		2300
General							
Chloride	Comp	2.00	mg/L		100		110
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.4
Nitrate	Comp	0.10	mg/L				24.1
Sulfate	Comp	0.10	mg/L		300		114
Alkalinity	Comp	4.00	mg/L				182
Hardness	Comp	2.00	mg/L				240
COD	Comp	10.00	mg/L				59.3
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				978
Total Dissolved Solids	Comp	2.00	mg/L				602
Turbidity	Comp	0.10	NTU	225a			1.74
Total Suspended Solids	Comp	2.00	mg/L				43
Volatile Suspended Solids	Comp	1.00	mg/L				14
MBAS	Comp	0.05	mg/L		0.5		0.065
Total Organic Carbon	Comp	1.00	mg/L				9.59
BOD	Comp	2.00	mg/L				16.3
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				1.22
Total Phosphorus	Comp	0.05	mg/L				1.46
NH3-N	Comp	0.10	mg/L				0.807
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		5.44
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.1
Kjeldahl-N	Comp	0.10	mg/L				1.41
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			4.3	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			364.6	1.49
Total Chromium	Comp	5.00	ug/l		50		2.97
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			18.9	29.9
Total Copper	Comp	5.00	ug/l	12a			32.4
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				175
Dissolved Lead	Comp	5.00	ug/l			7.7	1.36
Total Lead	Comp	5.00	ug/l	8a			1.68
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			109.1	4.52

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
Total Nickel	Comp	5.00	ug/l	20a	100		5.38
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			15.6	0.73
Total Silver	Comp	1.00	ug/l	2.8a			0.73
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			248.1	102
Total Zinc	Comp	50.00	ug/l	80a			137
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Burbank Western
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.074
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataDRYWEATHER#2_BURBANKWESTERN

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.02
pH	Comp	0-14			6.5 < pH < 8.5		7.69
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.98
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		500000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		130000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.26
Fecal Streptococcus	Grab	20.00	MPN/100ml				170000
Fecal Enterococcus	Grab		MPN/100ml		104		30000
General							
Chloride	Comp	2.00	mg/L		100		10
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.37
Nitrate	Comp	0.10	mg/L				2.08
Sulfate	Comp	0.10	mg/L		300		10.5
Alkalinity	Comp	4.00	mg/L				64
Hardness	Comp	2.00	mg/L				79.2
COD	Comp	10.00	mg/L				46.4
TPH	Grab	1.00	mg/L				1.3
Specific Conductance	Comp	1.00	umhos/cm				215
Total Dissolved Solids	Comp	2.00	mg/L				148
Turbidity	Comp	0.10	NTU	225a			200
Total Suspended Solids	Comp	2.00	mg/L				318
Volatile Suspended Solids	Comp	1.00	mg/L				76
MBAS	Comp	0.05	mg/L		0.5		0.111
Total Organic Carbon	Comp	1.00	mg/L				16.7
BOD	Comp	2.00	mg/L				38.52
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.275
Total Phosphorus	Comp	0.05	mg/L				0.275
NH3-N	Comp	0.10	mg/L				0.826
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.47
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.298
Kjeldahl-N	Comp	0.10	mg/L				1.908
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		415
Dissolved Antimony	Comp	5.00	ug/l				1.35
Total Antimony	Comp	5.00	ug/l		6		1.8
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		1.55
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			3.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.31
Dissolved Chromium	Comp	5.00	ug/l			326.8	0.85
Total Chromium	Comp	5.00	ug/l		50		2.66
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			16.9	16.5
Total Copper	Comp	5.00	ug/l	12a			30.9
Dissolved Iron	Comp	100.00	ug/l				1297
Total Iron	Comp	100.00	ug/l				1430
Dissolved Lead	Comp	5.00	ug/l			6.5	0.89
Total Lead	Comp	5.00	ug/l	8a			15.9
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			97.4	3.74

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Total Nickel	Comp	5.00	ug/l	20a	100		4.86
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			12.4	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			221.5	60.1
Total Zinc	Comp	50.00	ug/l	80a			175
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.51
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

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Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			14.3
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.81
Dissolved Oxygen	Grab	1.00	mg/L		> 5		6.25
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		800000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		300000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.38
Fecal Streptococcus	Grab	20.00	MPN/100ml				2200000
Fecal Enterococcus	Grab		MPN/100ml		104		500000
General							
Chloride	Comp	2.00	mg/L		100		13.6
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.15
Nitrate	Comp	0.10	mg/L				1.03
Sulfate	Comp	0.10	mg/L		300		23.7
Alkalinity	Comp	4.00	mg/L				48
Hardness	Comp	2.00	mg/L				72
COD	Comp	10.00	mg/L				26.3
TPH	Grab	1.00	mg/L				2.3
Specific Conductance	Comp	1.00	umhos/cm				215
Total Dissolved Solids	Comp	2.00	mg/L				458
Turbidity	Comp	0.10	NTU	225a			971
Total Suspended Solids	Comp	2.00	mg/L				581
Volatile Suspended Solids	Comp	1.00	mg/L				35
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				6.67
BOD	Comp	2.00	mg/L				13.7
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.502
Total Phosphorus	Comp	0.05	mg/L				0.589
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.233
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				1.18
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				287
Total Aluminum	Comp	100.00	ug/l		1000		13000
Dissolved Antimony	Comp	5.00	ug/l				0.5
Total Antimony	Comp	5.00	ug/l		6		0.83
Dissolved Arsenic	Comp	5.00	ug/l			150	1.89
Total Arsenic	Comp	5.00	ug/l	32a	50		4.28
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0.5
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.72
Dissolved Chromium	Comp	5.00	ug/l			136.0	0.97
Total Chromium	Comp	5.00	ug/l		50		23.2
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.8	5.73
Total Copper	Comp	5.00	ug/l	12a			26.6
Dissolved Iron	Comp	100.00	ug/l				2100
Total Iron	Comp	100.00	ug/l				18100
Dissolved Lead	Comp	5.00	ug/l			1.7	6
Total Lead	Comp	5.00	ug/l	8a			26.3
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Dissolved Nickel	Comp	5.00	ug/l			39.4	2.9
Total Nickel	Comp	5.00	ug/l	20a	100		22.5
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.0	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			89.4	90
Total Zinc	Comp	50.00	ug/l	80a			147
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_VERDUGO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.9
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.8
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.4
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		300000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		170000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.57
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L		100		9.61
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.13
Nitrate	Comp	0.10	mg/L				1.46
Sulfate	Comp	0.10	mg/L		300		15.4
Alkalinity	Comp	4.00	mg/L				22
Hardness	Comp	2.00	mg/L				72
COD	Comp	10.00	mg/L				93
TPH	Grab	1.00	mg/L				4.3
Specific Conductance	Comp	1.00	umhos/cm				168.9
Total Dissolved Solids	Comp	2.00	mg/L				104
Turbidity	Comp	0.10	NTU	225a			1740
Total Suspended Solids	Comp	2.00	mg/L				1516
Volatile Suspended Solids	Comp	1.00	mg/L				9.4
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.52
BOD	Comp	2.00	mg/L				4.9
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.148
Total Phosphorus	Comp	0.05	mg/L				0.563
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.329
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.14
Kjeldahl-N	Comp	0.10	mg/L				5
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				143
Total Aluminum	Comp	100.00	ug/l		1000		143
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0.55
Dissolved Arsenic	Comp	5.00	ug/l			150	1.7
Total Arsenic	Comp	5.00	ug/l	32a	50		2.27
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			234.5	2.17
Total Chromium	Comp	5.00	ug/l		50		7.41
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			11.9	13.7
Total Copper	Comp	5.00	ug/l	12a			17.5
Dissolved Iron	Comp	100.00	ug/l				1980
Total Iron	Comp	100.00	ug/l				3620
Dissolved Lead	Comp	5.00	ug/l			3.9	7.62
Total Lead	Comp	5.00	ug/l	8a			7.64
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Dissolved Nickel	Comp	5.00	ug/l			69.1	3.95
Total Nickel	Comp	5.00	ug/l	20a	100		6.91
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			6.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			157.1	39
Total Zinc	Comp	50.00	ug/l	80a			52
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
alpha-BHC	Comp	0.05	ug/l			0.07	0
beta-BHC	Comp	0.05	ug/l				0
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.047
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_VERDUGO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.44
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.92
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.33
Fecal Streptococcus	Grab	20.00	MPN/100ml				300000
Fecal Enterococcus	Grab		MPN/100ml		104		24000
General							
Chloride	Comp	2.00	mg/L		100		8.6
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0
Nitrate	Comp	0.10	mg/L				2.49
Sulfate	Comp	0.10	mg/L		300		13.8
Alkalinity	Comp	4.00	mg/L				27.5
Hardness	Comp	2.00	mg/L				45
COD	Comp	10.00	mg/L				58
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				129.5
Total Dissolved Solids	Comp	2.00	mg/L				90
Turbidity	Comp	0.10	NTU	225a			437.5
Total Suspended Solids	Comp	2.00	mg/L				588
Volatile Suspended Solids	Comp	1.00	mg/L				51.7
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.46
BOD	Comp	2.00	mg/L				10.2
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.107
Total Phosphorus	Comp	0.05	mg/L				0.302
NH3-N	Comp	0.10	mg/L				0.154
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.56
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.17
Kjeldahl-N	Comp	0.10	mg/L				1.7
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		7900
Dissolved Antimony	Comp	5.00	ug/l				0.52
Total Antimony	Comp	5.00	ug/l		6		0.96
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		2.27
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.3
Dissolved Chromium	Comp	5.00	ug/l			137.6	1.09
Total Chromium	Comp	5.00	ug/l		50		13.2
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.8	4.43
Total Copper	Comp	5.00	ug/l	12a			22.4
Dissolved Iron	Comp	100.00	ug/l				319
Total Iron	Comp	100.00	ug/l				8800
Dissolved Lead	Comp	5.00	ug/l			1.7	1.07
Total Lead	Comp	5.00	ug/l	8a			17.3
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			39.9	1.44
Total Nickel	Comp	5.00	ug/l	20a	100		11.2

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.0	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			90.5	16.7
Total Zinc	Comp	50.00	ug/l	80a			75
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.077
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_VERDUGO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			9.1
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.48
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.07
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		800000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		220000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.28
Fecal Streptococcus	Grab	20.00	MPN/100ml				2800000
Fecal Enterococcus	Grab		MPN/100ml		104		1400000
General							
Chloride	Comp	2.00	mg/L		100		7.81
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.11
Nitrate	Comp	0.10	mg/L				1.03
Sulfate	Comp	0.10	mg/L		300		9.56
Alkalinity	Comp	4.00	mg/L				41.8
Hardness	Comp	2.00	mg/L				72
COD	Comp	10.00	mg/L				52
TPH	Grab	1.00	mg/L				2.3
Specific Conductance	Comp	1.00	umhos/cm				165.3
Total Dissolved Solids	Comp	2.00	mg/L				114
Turbidity	Comp	0.10	NTU	225a			1700
Total Suspended Solids	Comp	2.00	mg/L				2039
Volatile Suspended Solids	Comp	1.00	mg/L				12.3
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.08
BOD	Comp	2.00	mg/L				10.7
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0
Total Phosphorus	Comp	0.05	mg/L				1.05
NH3-N	Comp	0.10	mg/L				0.40
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.23
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.4534
Kjeldahl-N	Comp	0.10	mg/L				0.544
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		5900
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0.73
Dissolved Arsenic	Comp	5.00	ug/l			150	2.02
Total Arsenic	Comp	5.00	ug/l	32a	50		3.08
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.7	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.32
Dissolved Chromium	Comp	5.00	ug/l			127.3	3.79
Total Chromium	Comp	5.00	ug/l		50		15.2
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.3	3.89
Total Copper	Comp	5.00	ug/l	12a			17.6
Dissolved Iron	Comp	100.00	ug/l				1500
Total Iron	Comp	100.00	ug/l				7510
Dissolved Lead	Comp	5.00	ug/l			1.5	0
Total Lead	Comp	5.00	ug/l	8a			14.3
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			36.8	2.57
Total Nickel	Comp	5.00	ug/l	20a	100		11.1

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			1.7	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			90.5	0
Total Zinc	Comp	50.00	ug/l	80a			71
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
delta-BHC	Comp	0.05	ug/l	0.008k			0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.079
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#5TRIB_VERDUGO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - VERDUGO WASH

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.28
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.53
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		13000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		230
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.02
Fecal Streptococcus	Grab	20.00	MPN/100ml			0.07	5000
Fecal Enterococcus	Grab		MPN/100ml		104		3000
General							
Chloride	Comp	2.00	mg/L		100		100
Fluoride f(temp)[i]	Comp	0.10	mg/L		2		0.3
Nitrate	Comp	0.10	mg/L				3.92
Sulfate	Comp	0.10	mg/L		300		104
Alkalinity	Comp	4.00	mg/L				198
Hardness	Comp	2.00	mg/L				430
COD	Comp	10.00	mg/L				66.4
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				1470
Total Dissolved Solids	Comp	2.00	mg/L				830
Turbidity	Comp	0.10	NTU	225a			3.97
Total Suspended Solids	Comp	2.00	mg/L				32
Volatile Suspended Solids	Comp	1.00	mg/L				17
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				6.04
BOD	Comp	2.00	mg/L				15.5
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.097
Total Phosphorus	Comp	0.05	mg/L				0.101
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.885
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.183
Kjeldahl-N	Comp	0.10	mg/L				0.72
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		180
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			4.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			413.7	0.54
Total Chromium	Comp	5.00	ug/l		50		2.08
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			21.6	5.42
Total Copper	Comp	5.00	ug/l	12a			10.9
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				163
Dissolved Lead	Comp	5.00	ug/l			9.3	0
Total Lead	Comp	5.00	ug/l	8a			0.76
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			124.3	2.22

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
Total Nickel	Comp	5.00	ug/l	20a	100		3.01
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			20.3	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			282.7	38
Total Zinc	Comp	50.00	ug/l	80a			57
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Verdugo Wash
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataDRYWEATHER#2_VERDUGO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.031
pH	Comp	0-14			6.5 < pH < 8.5		7.74
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.7
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		700000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		90000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.13
Fecal Streptococcus	Grab	20.00	MPN/100ml				240000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L				89.8
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.53
Nitrate	Comp	0.10	mg/L				4.11
Sulfate	Comp	0.10	mg/L				89.7
Alkalinity	Comp	4.00	mg/L				117
Hardness	Comp	2.00	mg/L				210
COD	Comp	10.00	mg/L				105.6
TPH	Grab	1.00	mg/L				2
Specific Conductance	Comp	1.00	umhos/cm				766
Total Dissolved Solids	Comp	2.00	mg/L				510
Turbidity	Comp	0.10	NTU	225a			187
Total Suspended Solids	Comp	2.00	mg/L				262
Volatile Suspended Solids	Comp	1.00	mg/L				60
MBAS	Comp	0.05	mg/L		0.5		0.209
Total Organic Carbon	Comp	1.00	mg/L				36.9
BOD	Comp	2.00	mg/L				66.34
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.44
Total Phosphorus	Comp	0.05	mg/L				0.487
NH3-N	Comp	0.10	mg/L				0.921
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.928
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		1.87
Kjeldahl-N	Comp	0.10	mg/L				3.52
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		271
Dissolved Antimony	Comp	5.00	ug/l				2.22
Total Antimony	Comp	5.00	ug/l		6		2.68
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		2.1
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.4
Dissolved Chromium	Comp	5.00	ug/l			147.1	2.68
Total Chromium	Comp	5.00	ug/l		50		2.7
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			7.3	11.5
Total Copper	Comp	5.00	ug/l	12a			34.8
Dissolved Iron	Comp	100.00	ug/l				1168
Total Iron	Comp	100.00	ug/l				1270
Dissolved Lead	Comp	5.00	ug/l			1.9	1.51
Total Lead	Comp	5.00	ug/l	8a			15.4
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Dissolved Nickel	Comp	5.00	ug/l			42.7	8.47
Total Nickel	Comp	5.00	ug/l	20a	100		10.5
Dissolved Selenium	Comp	5.00	ug/l				1.84
Total Selenium	Comp	5.00	ug/l	60a	50		2.2
Dissolved Silver[f]	Comp	1.00	ug/l			2.3	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			97.0	118
Total Zinc	Comp	50.00	ug/l	80a			243
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		3.3
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#1TRIB_ARROYO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			8.1
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5	0.07	7.48
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.65
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		800000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		140000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.18
Fecal Streptococcus	Grab	20.00	MPN/100ml				300000
Fecal Enterococcus	Grab		MPN/100ml		104		240000
General							
Chloride	Comp	2.00	mg/L				46.3
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.15
Nitrate	Comp	0.10	mg/L				9.68
Sulfate	Comp	0.10	mg/L				64.4
Alkalinity	Comp	4.00	mg/L				64
Hardness	Comp	2.00	mg/L				140
COD	Comp	10.00	mg/L				92.1
TPH	Grab	1.00	mg/L				1
Specific Conductance	Comp	1.00	umhos/cm				410
Total Dissolved Solids	Comp	2.00	mg/L				298
Turbidity	Comp	0.10	NTU	225a			148
Total Suspended Solids	Comp	2.00	mg/L				829
Volatile Suspended Solids	Comp	1.00	mg/L				109
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				7.68
BOD	Comp	2.00	mg/L				6.8
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				
Total Phosphorus	Comp	0.05	mg/L				
NH3-N	Comp	0.10	mg/L				0.158
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		2.19
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				0.448
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		8350
Dissolved Antimony	Comp	5.00	ug/l				0.58
Total Antimony	Comp	5.00	ug/l		6		1.16
Dissolved Arsenic	Comp	5.00	ug/l			150	1.24
Total Arsenic	Comp	5.00	ug/l	32a	50		2.71
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.62
Dissolved Chromium	Comp	5.00	ug/l			234.5	0.87
Total Chromium	Comp	5.00	ug/l		50		17.3
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			11.9	6.41
Total Copper	Comp	5.00	ug/l	12a			36.8
Dissolved Iron	Comp	100.00	ug/l				170
Total Iron	Comp	100.00	ug/l				10900
Dissolved Lead	Comp	5.00	ug/l			3.9	0.61
Total Lead	Comp	5.00	ug/l	8a			30.3
Dissolved Mercury	Comp	1.00	ug/l				
Total Mercury	Comp	1.00	ug/l	0.16a	2		

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Dissolved Nickel	Comp	5.00	ug/l			69.1	1.95
Total Nickel	Comp	5.00	ug/l	20a	100		17.5
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			6.2	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			157.1	78
Total Zinc	Comp	50.00	ug/l	80a			258
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls						0.014	
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_ARROYO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.69
Dissolved Oxygen	Grab	1.00	mg/L		> 5		6.55
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		500000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		300000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.07
Fecal Streptococcus	Grab	20.00	MPN/100ml				130000
Fecal Enterococcus	Grab		MPN/100ml		104		130000
General							
Chloride	Comp	2.00	mg/L				29.5
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.36
Nitrate	Comp	0.10	mg/L				0
Sulfate	Comp	0.10	mg/L				35.5
Alkalinity	Comp	4.00	mg/L				126.5
Hardness	Comp	2.00	mg/L				140
COD	Comp	10.00	mg/L				80
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				373
Total Dissolved Solids	Comp	2.00	mg/L				260
Turbidity	Comp	0.10	NTU	225a			131
Total Suspended Solids	Comp	2.00	mg/L				407
Volatile Suspended Solids	Comp	1.00	mg/L				11.5
MBAS	Comp	0.05	mg/L		0.5		0.169
Total Organic Carbon	Comp	1.00	mg/L				22.9
BOD	Comp	2.00	mg/L				33.6
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.718
Total Phosphorus	Comp	0.05	mg/L				0.855
NH3-N	Comp	0.10	mg/L				1.6
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				7.46
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				0.64
Total Antimony	Comp	5.00	ug/l		6		0.76
Dissolved Arsenic	Comp	5.00	ug/l			150	1.12
Total Arsenic	Comp	5.00	ug/l	32a	50		1.2
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			136.0	3.11
Total Chromium	Comp	5.00	ug/l		50		3.66
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.8	5.7
Total Copper	Comp	5.00	ug/l	12a			12.3
Dissolved Iron	Comp	100.00	ug/l				288
Total Iron	Comp	100.00	ug/l				358
Dissolved Lead	Comp	5.00	ug/l			1.7	1.91
Total Lead	Comp	5.00	ug/l	8a			2.54
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Dissolved Nickel	Comp	5.00	ug/l			39.4	6.03
Total Nickel	Comp	5.00	ug/l	20a	100		6.82
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.0	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			89.4	31
Total Zinc	Comp	50.00	ug/l	80a			66
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.063
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		65
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_ARROYO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.3
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.03
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		240000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		130000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.54
Fecal Streptococcus	Grab	20.00	MPN/100ml				220000
Fecal Enterococcus	Grab		MPN/100ml		104		220000
General							
Chloride	Comp	2.00	mg/L				17.8
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0.16
Nitrate	Comp	0.10	mg/L				1.09
Sulfate	Comp	0.10	mg/L				15.7
Alkalinity	Comp	4.00	mg/L				
Hardness	Comp	2.00	mg/L				73
COD	Comp	10.00	mg/L				94
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				192.7
Total Dissolved Solids	Comp	2.00	mg/L				118
Turbidity	Comp	0.10	NTU	225a			36.3
Total Suspended Solids	Comp	2.00	mg/L				
Volatile Suspended Solids	Comp	1.00	mg/L				
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				10.9
BOD	Comp	2.00	mg/L				36.4
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.133
Total Phosphorus	Comp	0.05	mg/L				1.431
NH3-N	Comp	0.10	mg/L				
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.25
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.57
Kjeldahl-N	Comp	0.10	mg/L				2.42
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				
Total Aluminum	Comp	100.00	ug/l		1000		
Dissolved Antimony	Comp	5.00	ug/l				
Total Antimony	Comp	5.00	ug/l		6		
Dissolved Arsenic	Comp	5.00	ug/l			150	
Total Arsenic	Comp	5.00	ug/l	32a	50		
Dissolved Berylium	Comp	1.00	ug/l				
Total Beryllium	Comp	1.00	ug/l		4		
Dissolved Cadmium	Comp	1.00	ug/l			1.2	
Total Cadmium	Comp	1.00	ug/l	4a	5		
Dissolved Chromium	Comp	5.00	ug/l			92.6	
Total Chromium	Comp	5.00	ug/l		50		
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			4.5	
Total Copper	Comp	5.00	ug/l	12a			
Dissolved Iron	Comp	100.00	ug/l				
Total Iron	Comp	100.00	ug/l				
Dissolved Lead	Comp	5.00	ug/l			0.9	
Total Lead	Comp	5.00	ug/l	8a			
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			26.5	
Total Nickel	Comp	5.00	ug/l	20a	100		

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Dissolved Selenium	Comp	5.00	ug/l				
Total Selenium	Comp	5.00	ug/l	60a	50		
Dissolved Silver[f]	Comp	1.00	ug/l			0.9	
Total Silver	Comp	1.00	ug/l	2.8a			
Dissolved Thallium	Comp	5.00	ug/l				
Total Thallium	Comp	5.00	ug/l		2		
Dissolved Zinc	Comp	50.00	ug/l			60.1	
Total Zinc	Comp	50.00	ug/l	80a			
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.092
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_ARROYO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			2.5
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.18
Dissolved Oxygen	Grab	1.00	mg/L		> 5		4.32
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		140000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		70000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.50
Fecal Streptococcus	Grab	20.00	MPN/100ml				50000
Fecal Enterococcus	Grab		MPN/100ml		104		30000
General							
Chloride	Comp	2.00	mg/L				2.84
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0
Nitrate	Comp	0.10	mg/L				4.32
Sulfate	Comp	0.10	mg/L				4.16
Alkalinity	Comp	4.00	mg/L				49.5
Hardness	Comp	2.00	mg/L				66.4
COD	Comp	10.00	mg/L				25
TPH	Grab	1.00	mg/L				1
Specific Conductance	Comp	1.00	umhos/cm				164.3
Total Dissolved Solids	Comp	2.00	mg/L				108
Turbidity	Comp	0.10	NTU	225a			78.3
Total Suspended Solids	Comp	2.00	mg/L				188
Volatile Suspended Solids	Comp	1.00	mg/L				5.1
MBAS	Comp	0.05	mg/L		0.5		0.07
Total Organic Carbon	Comp	1.00	mg/L				6.74
BOD	Comp	2.00	mg/L				24.4
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0
Total Phosphorus	Comp	0.05	mg/L				0.20
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		0.975
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				4.34
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		0
Dissolved Antimony	Comp	5.00	ug/l				0.72
Total Antimony	Comp	5.00	ug/l		6		0.73
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.8	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			136.0	5.67
Total Chromium	Comp	5.00	ug/l		50		8.6
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			6.8	5.82
Total Copper	Comp	5.00	ug/l	12a			10.8
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				254
Dissolved Lead	Comp	5.00	ug/l			1.7	0
Total Lead	Comp	5.00	ug/l	8a			1.94
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			39.4	3.49
Total Nickel	Comp	5.00	ug/l	20a	100		5.9

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			2.0	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			60.1	0
Total Zinc	Comp	50.00	ug/l	80a			40
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.077
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#5TRIB_ARROYO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - ARROYO SECO

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD, RARE

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		8.87
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.59
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		5000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		300
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.06
Fecal Streptococcus	Grab	20.00	MPN/100ml				300
Fecal Enterococcus	Grab		MPN/100ml		104		170
General							
Chloride	Comp	2.00	mg/L				90
Fluoride f(temp)[i]	Comp	0.10	mg/L		1.8		0.3
Nitrate	Comp	0.10	mg/L				8.57
Sulfate	Comp	0.10	mg/L				121
Alkalinity	Comp	4.00	mg/L				49.5
Hardness	Comp	2.00	mg/L				280
COD	Comp	10.00	mg/L				62.4
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				1128
Total Dissolved Solids	Comp	2.00	mg/L				622
Turbidity	Comp	0.10	NTU	225a			0.44
Total Suspended Solids	Comp	2.00	mg/L				7
Volatile Suspended Solids	Comp	1.00	mg/L				7
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.02
BOD	Comp	2.00	mg/L				31
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0
Total Phosphorus	Comp	0.05	mg/L				0
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.94
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				0.39
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		117
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			6.6	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			587.8	0
Total Chromium	Comp	5.00	ug/l		50		9.08
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			31.1	3.63
Total Copper	Comp	5.00	ug/l	12a			12.4
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				194
Dissolved Lead	Comp	5.00	ug/l			16.1	0
Total Lead	Comp	5.00	ug/l	8a			0.86
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			178.6	1.69

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
Total Nickel	Comp	5.00	ug/l	20a	100		2.91
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l			42.4	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			406.6	41
Total Zinc	Comp	50.00	ug/l	80a			60
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Arroyo Seco
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.026
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataDRYWEATHER#2_ARROYOSECO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.043
pH	Comp	0-14			6.5 < pH < 8.5		7.67
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.6
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		1300000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		300000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.23
Fecal Streptococcus	Grab	20.00	MPN/100ml				500000
Fecal Enterococcus	Grab		MPN/100ml		104		300000
General							
Chloride	Comp	2.00	mg/L				15.7
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.33
Nitrate	Comp	0.10	mg/L				7.03
Sulfate	Comp	0.10	mg/L				20.2
Alkalinity	Comp	4.00	mg/L				75
Hardness	Comp	2.00	mg/L				110
COD	Comp	10.00	mg/L				101.1
TPH	Grab	1.00	mg/L				1.1
Specific Conductance	Comp	1.00	umhos/cm				395
Total Dissolved Solids	Comp	2.00	mg/L		750		224
Turbidity	Comp	0.10	NTU	225a			244
Total Suspended Solids	Comp	2.00	mg/L				266
Volatile Suspended Solids	Comp	1.00	mg/L				64
MBAS	Comp	0.05	mg/L		0.5		0.156
Total Organic Carbon	Comp	1.00	mg/L				27.9
BOD	Comp	2.00	mg/L				66.08
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.471
Total Phosphorus	Comp	0.05	mg/L				0.59
NH3-N	Comp	0.10	mg/L				1.02
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.59
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.816
Kjeldahl-N	Comp	0.10	mg/L				1.81
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		335
Dissolved Antimony	Comp	5.00	ug/l				2.53
Total Antimony	Comp	5.00	ug/l		6		2.7
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		2.41
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.4	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0.33
Dissolved Chromium	Comp	5.00	ug/l			192.5	1.42
Total Chromium	Comp	5.00	ug/l		50		3.25
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			9.7	19.9
Total Copper	Comp	5.00	ug/l	12a			34
Dissolved Iron	Comp	100.00	ug/l				1070
Total Iron	Comp	100.00	ug/l				1070
Dissolved Lead	Comp	5.00	ug/l			2.8	2.25
Total Lead	Comp	5.00	ug/l	8a			20
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Dissolved Nickel	Comp	5.00	ug/l			56.4	7.55
Total Nickel	Comp	5.00	ug/l	20a	100		8.04
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		1.27
Dissolved Silver[f]	Comp	1.00	ug/l		4.1	4.1	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			128.1	61.3
Total Zinc	Comp	50.00	ug/l	80a			128
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				
Acenaphthylene	Comp	0.05	ug/l				
Anthracene	Comp	0.05	ug/l				
Benzidine	Comp	3.00	ug/l				
1,2 Benzanthracene	Comp	0.10	ug/l				
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		
Benzo(k)flouranthene	Comp	0.10	ug/l				
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				
Butyl benzyl phthalate	Comp	0.30	ug/l				
2-Chloronaphthalene	Comp	0.10	ug/l				
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				
Chrysene	Comp	0.10	ug/l				
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				
1,3-Dichlorobenzene	Comp	0.05	ug/l				
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		
3,3-Dichlorobenzidine	Comp	3.00	ug/l				
Diethyl phthalate	Comp	0.50	ug/l				
Dimethyl phthalate	Comp	0.50	ug/l				
di-n-Butyl phthalate	Comp	1.00	ug/l				
2,4-Dinitrotoluene	Comp	0.05	ug/l				
2,6-Dinitrotoluene	Comp	0.05	ug/l				
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				
1,2-Diphenylhydrazine	Comp	3.00	ug/l				
di-n-Octyl phthalate	Comp	1.00	ug/l				
Fluoranthene	Comp	0.10	ug/l				
Fluorene	Comp	0.10	ug/l				
Hexachlorobenzene	Comp	0.50	ug/l		1		
Hexachlorobutadiene	Comp	1.00	ug/l				
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		
Hexachloroethane	Comp	1.00	ug/l				
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				
Isophorone	Comp	0.05	ug/l				
Naphthalene	Comp	0.05	ug/l				
Nitrobenzene	Comp	0.05	ug/l				
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				
Phenanthrene	Comp	0.05	ug/l				
Pyrene	Comp	0.05	ug/l				
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm # I (11/08/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.54
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#1TRIB_RIOHONDO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			12
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.95
Dissolved Oxygen	Grab	1.00	mg/L		> 5		8.3
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		170000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.47
Fecal Streptococcus	Grab	20.00	MPN/100ml				300000
Fecal Enterococcus	Grab		MPN/100ml		104		80000
General							
Chloride	Comp	2.00	mg/L				4.56
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.11
Nitrate	Comp	0.10	mg/L				4.79
Sulfate	Comp	0.10	mg/L				9.17
Alkalinity	Comp	4.00	mg/L				16
Hardness	Comp	2.00	mg/L				40
COD	Comp	10.00	mg/L				29.9
TPH	Grab	1.00	mg/L				1.2
Specific Conductance	Comp	1.00	umhos/cm				122.3
Total Dissolved Solids	Comp	2.00	mg/L		750		86
Turbidity	Comp	0.10	NTU	225a			82.5
Total Suspended Solids	Comp	2.00	mg/L				72
Volatile Suspended Solids	Comp	1.00	mg/L				11
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				5.11
BOD	Comp	2.00	mg/L				11.3
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.393
Total Phosphorus	Comp	0.05	mg/L				0.443
NH3-N	Comp	0.10	mg/L				0.124
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.08
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				0.322
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		182
Dissolved Antimony	Comp	5.00	ug/l				0.89
Total Antimony	Comp	5.00	ug/l		6		0.91
Dissolved Arsenic	Comp	5.00	ug/l			150	1.26
Total Arsenic	Comp	5.00	ug/l	32a	50		1.34
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.1	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			84.0	0.83
Total Chromium	Comp	5.00	ug/l		50		11.8
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			4.1	4.43
Total Copper	Comp	5.00	ug/l	12a			10.7
Dissolved Iron	Comp	100.00	ug/l				181
Total Iron	Comp	100.00	ug/l				401
Dissolved Lead	Comp	5.00	ug/l			0.8	1.46
Total Lead	Comp	5.00	ug/l	8a			2.48
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			24.0	1.63

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Total Nickel	Comp	5.00	ug/l	20a	100		14.9
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l		0.7	0.7	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			54.4	29
Total Zinc	Comp	50.00	ug/l	80a			86
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #2: (12/16/2002) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#2TRIB_RIOHONDO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.009
pH	Comp	0-14			6.5 < pH < 8.5		7.64
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.83
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		500000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		300000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.60
Fecal Streptococcus	Grab	20.00	MPN/100ml				240000
Fecal Enterococcus	Grab		MPN/100ml		104		130000
General							
Chloride	Comp	2.00	mg/L				17.5
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.2		0.21
Nitrate	Comp	0.10	mg/L				5.04
Sulfate	Comp	0.10	mg/L				17.5
Alkalinity	Comp	4.00	mg/L				44
Hardness	Comp	2.00	mg/L				119
COD	Comp	10.00	mg/L				113
TPH	Grab	1.00	mg/L				1.1
Specific Conductance	Comp	1.00	umhos/cm				209
Total Dissolved Solids	Comp	2.00	mg/L		750		116
Turbidity	Comp	0.10	NTU	225a			36.5
Total Suspended Solids	Comp	2.00	mg/L				79
Volatile Suspended Solids	Comp	1.00	mg/L				4.9
MBAS	Comp	0.05	mg/L		0.5		0.056
Total Organic Carbon	Comp	1.00	mg/L				8.79
BOD	Comp	2.00	mg/L				11.8
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.264
Total Phosphorus	Comp	0.05	mg/L				0.276
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.14
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.12
Kjeldahl-N	Comp	0.10	mg/L				1.58
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		123
Dissolved Antimony	Comp	5.00	ug/l				1.16
Total Antimony	Comp	5.00	ug/l		6		1.2
Dissolved Arsenic	Comp	5.00	ug/l			150	1.11
Total Arsenic	Comp	5.00	ug/l	32a	50		1.19
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			2.5	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			205.3	2.23
Total Chromium	Comp	5.00	ug/l		50		6.05
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			10.4	12.3
Total Copper	Comp	5.00	ug/l	12a			19.3
Dissolved Iron	Comp	100.00	ug/l				283
Total Iron	Comp	100.00	ug/l				392
Dissolved Lead	Comp	5.00	ug/l			3.1	2.74
Total Lead	Comp	5.00	ug/l	8a			2.82
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Dissolved Nickel	Comp	5.00	ug/l			60.3	4.05
Total Nickel	Comp	5.00	ug/l	20a	100		9.26
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l		4.7	4.7	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			136.9	55
Total Zinc	Comp	50.00	ug/l	80a			0.07
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm#3: (2/11/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.49
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#3TRIB_RIOHONDO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.3
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		7.37
Dissolved Oxygen	Grab	1.00	mg/L		> 5		9.58
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		170000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.47
Fecal Streptococcus	Grab	20.00	MPN/100ml				90000
Fecal Enterococcus	Grab		MPN/100ml		104		90000
General							
Chloride	Comp	2.00	mg/L				759
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0
Nitrate	Comp	0.10	mg/L				7.06
Sulfate	Comp	0.10	mg/L				12.8
Alkalinity	Comp	4.00	mg/L				27.5
Hardness	Comp	2.00	mg/L				40
COD	Comp	10.00	mg/L				117
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				160
Total Dissolved Solids	Comp	2.00	mg/L		750		98
Turbidity	Comp	0.10	NTU	225a			47.3
Total Suspended Solids	Comp	2.00	mg/L				305
Volatile Suspended Solids	Comp	1.00	mg/L				26
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				4.39
BOD	Comp	2.00	mg/L				16
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.253
Total Phosphorus	Comp	0.05	mg/L				0.4
NH3-N	Comp	0.10	mg/L				0
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		1.29
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				3.46
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		140
Dissolved Antimony	Comp	5.00	ug/l				0.64
Total Antimony	Comp	5.00	ug/l		6		0.65
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			1.1	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			84.0	1.33
Total Chromium	Comp	5.00	ug/l		50		5.81
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			4.1	4.78
Total Copper	Comp	5.00	ug/l	12a			11.6
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				564
Dissolved Lead	Comp	5.00	ug/l			0.8	0
Total Lead	Comp	5.00	ug/l	8a			3.14
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			24.0	2.05
Total Nickel	Comp	5.00	ug/l	20a	100		5.89
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Dissolved Silver[f]	Comp	1.00	ug/l		0.7	0.7	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			54.4	15
Total Zinc	Comp	50.00	ug/l	80a			39
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
4,4'-DDT	Comp	0.10	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #4: (2/25/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.042
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#4TRIB_RIOHONDO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			1.6
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0
pH	Comp	0-14			6.5 < pH < 8.5		6.57
Dissolved Oxygen	Grab	1.00	mg/L		> 5		7.29
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		130000
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		80000
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.62
Fecal Streptococcus	Grab	20.00	MPN/100ml				300000
Fecal Enterococcus	Grab		MPN/100ml		104		130000
General							
Chloride	Comp	2.00	mg/L				27.2
Fluoride f(temp)[i]	Comp	0.10	mg/L		2.4		0
Nitrate	Comp	0.10	mg/L				23.7
Sulfate	Comp	0.10	mg/L				12.1
Alkalinity	Comp	4.00	mg/L				16.5
Hardness	Comp	2.00	mg/L				20.8
COD	Comp	10.00	mg/L				25
TPH	Grab	1.00	mg/L				1.2
Specific Conductance	Comp	1.00	umhos/cm				93.3
Total Dissolved Solids	Comp	2.00	mg/L		750		64
Turbidity	Comp	0.10	NTU	225a			58.3
Total Suspended Solids	Comp	2.00	mg/L				109
Volatile Suspended Solids	Comp	1.00	mg/L				1
MBAS	Comp	0.05	mg/L		0.5		0
Total Organic Carbon	Comp	1.00	mg/L				4.74
BOD	Comp	2.00	mg/L				31.5
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				
Total Phosphorus	Comp	0.05	mg/L				
NH3-N	Comp	0.10	mg/L				
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		5.352
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0
Kjeldahl-N	Comp	0.10	mg/L				4.08
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		484
Dissolved Antimony	Comp	5.00	ug/l				0.6
Total Antimony	Comp	5.00	ug/l		6		0.66
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			0.7	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			49.2	2.17
Total Chromium	Comp	5.00	ug/l		50		9.44
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			2.3	5.9
Total Copper	Comp	5.00	ug/l	12a			12.1
Dissolved Iron	Comp	100.00	ug/l				218
Total Iron	Comp	100.00	ug/l				620
Dissolved Lead	Comp	5.00	ug/l			0.3	0
Total Lead	Comp	5.00	ug/l	8a			3.85
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			13.8	1.51
Total Nickel	Comp	5.00	ug/l	20a	100		5.2
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l		0.2	0.2	0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			54.4	19
Total Zinc	Comp	50.00	ug/l	80a			53
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0
alpha-BHC	Comp	0.05	ug/l				0
beta-BHC	Comp	0.05	ug/l	0.008k			0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Storm #5: (3/15/2003) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l				0
beta-Endosulfan	Comp	0.10	ug/l	0.018k			0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l				0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l		0.03k		0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0.065
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

File: wq_dataSTORM#5TRIB_RIOHONDO

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

TRIBUTARY WATERSHED MONITORING - RIO HONDO CHANNEL

Beneficial Uses[j]: MUN, GWR, REC-1, REC-2, WARM, WILD

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Conventional							
Oil and Grease	Grab	1.00	mg/L	75a			0
Total Phenols	Grab	0.10	mg/L				0
Cyanide	Grab	0.01	mg/L	0.004a	0.2	0.0052	0.009
pH	Comp	0-14			6.5 < pH < 8.5		9.36
Dissolved Oxygen	Grab	1.00	mg/L		> 5		16.57
Indicator Bacteria							
Total Coliform	Grab	20.00	MPN/100ml	10000	10,000 (Instantaneous)		2300
Fecal Coliform	Grab	20.00	MPN/100ml	400l	400 (Instantaneous)		40
Ratio Fecal Coliform/Total Coliform					Total coliform density 1,000 if the ratio of fecal-to-total coliform exceeds 0.1		0.02
Fecal Streptococcus	Grab	20.00	MPN/100ml				40
Fecal Enterococcus	Grab		MPN/100ml		104		40
General							
Chloride	Comp	2.00	mg/L				90
Fluoride f(temp)[i]	Comp	0.10	mg/L		1.6		0.3
Nitrate	Comp	0.10	mg/L				14.2
Sulfate	Comp	0.10	mg/L				87
Alkalinity	Comp	4.00	mg/L				77
Hardness	Comp	2.00	mg/L				210
COD	Comp	10.00	mg/L				67.9
TPH	Grab	1.00	mg/L				0
Specific Conductance	Comp	1.00	umhos/cm				912
Total Dissolved Solids	Comp	2.00	mg/L		750		556
Turbidity	Comp	0.10	NTU	225a			0.72
Total Suspended Solids	Comp	2.00	mg/L				7
Volatile Suspended Solids	Comp	1.00	mg/L				7
MBAS	Comp	0.05	mg/L		0.5		0.055
Total Organic Carbon	Comp	1.00	mg/L				5.89
BOD	Comp	2.00	mg/L				76.1
Nutrients							
Dissolved Phosphorus	Comp	0.05	mg/L				0.057
Total Phosphorus	Comp	0.05	mg/L				0.065
NH3-N	Comp	0.10	mg/L				0.181
Nitrate-N	Comp	0.50	mg/L		10 and also must not exceed 10 when added to Nitrite-N		3.21
Nitrite-N	Comp	0.03	mg/L		1 and also must not exceed 10 when added to Nitrate-N		0.213
Kjeldahl-N	Comp	0.10	mg/L				0.98
Metals							
Dissolved Aluminum	Comp	100.00	ug/l				0
Total Aluminum	Comp	100.00	ug/l		1000		117
Dissolved Antimony	Comp	5.00	ug/l				0
Total Antimony	Comp	5.00	ug/l		6		0
Dissolved Arsenic	Comp	5.00	ug/l			150	0
Total Arsenic	Comp	5.00	ug/l	32a	50		0
Dissolved Berylium	Comp	1.00	ug/l				0
Total Beryllium	Comp	1.00	ug/l		4		0
Dissolved Cadmium	Comp	1.00	ug/l			3.9	0
Total Cadmium	Comp	1.00	ug/l	4a	5		0
Dissolved Chromium	Comp	5.00	ug/l			326.8	0.66
Total Chromium	Comp	5.00	ug/l		50		2.15
Dissolved Chromium +6	Comp	10.00	ug/l				0
Total Chromium +6	Comp	10.00	ug/l	8a			0
Dissolved Copper	Comp	5.00	ug/l			16.9	3.51
Total Copper	Comp	5.00	ug/l	12a			5.58
Dissolved Iron	Comp	100.00	ug/l				0
Total Iron	Comp	100.00	ug/l				131
Dissolved Lead	Comp	5.00	ug/l			6.5	0
Total Lead	Comp	5.00	ug/l	8a			0.71
Dissolved Mercury	Comp	1.00	ug/l				0
Total Mercury	Comp	1.00	ug/l	0.16a	2		0
Dissolved Nickel	Comp	5.00	ug/l			97.4	3.76

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
Total Nickel	Comp	5.00	ug/l	20a	100		4.75
Dissolved Selenium	Comp	5.00	ug/l				0
Total Selenium	Comp	5.00	ug/l	60a	50		0
Dissolved Silver[f]	Comp	1.00	ug/l		12.4	12.4	0
Total Silver	Comp	1.00	ug/l	2.8a			0
Dissolved Thallium	Comp	5.00	ug/l				0
Total Thallium	Comp	5.00	ug/l		2		0
Dissolved Zinc	Comp	50.00	ug/l			221.5	66
Total Zinc	Comp	50.00	ug/l	80a			76
Semi-Volatiles Organics (EPA 625)							
2- Chlorophenol	Comp	2.00	ug/l				0
2,4-dichlorophenol	Comp	2.00	ug/l				0
2,4-dimethylphenol	Comp	2.00	ug/l				0
2,4-dinitrophenol	Comp	3.00	ug/l				0
2-nitrophenol	Comp	3.00	ug/l				0
4-nitrophenol	Comp	3.00	ug/l				0
4-chloro_3_methylphenol	Comp	3.00	ug/l				0
Pentachlorophenol	Comp	2.00	ug/l				0
Phenol	Comp	1.00	ug/l				0
2,4,6-trichlophenol	Comp	1.00	ug/l				0
Base/Neutral							
Acenaphthene	Comp	0.05	ug/l				0
Acenaphthylene	Comp	0.05	ug/l				0
Anthracene	Comp	0.05	ug/l				0
Benzidine	Comp	3.00	ug/l				0
1,2 Benzanthracene	Comp	0.10	ug/l				0
Benzo(a)pyrene	Comp	0.10	ug/l		0.2		0
Benzo(k)flouranthene	Comp	0.10	ug/l				0
Bis(2-Chloroethoxy) methane	Comp	0.10	ug/l				0
Bis(2-Chloroisopropyl) ether	Comp	1.00	ug/l				0
Bis(2-Chloroethyl) ether	Comp	0.10	ug/l				0
Bis(2-Ethylhexl) phthalate	Comp	1.00	ug/l				0
4-Bromophenyl phenyl ether	Comp	1.00	ug/l				0
Butyl benzyl phthalate	Comp	0.30	ug/l				0
2-Chloronaphthalene	Comp	0.10	ug/l				0
4-Chlorophenyl phenyl ether	Comp	0.10	ug/l				0
Chrysene	Comp	0.10	ug/l				0
Dibenzo(a,h)anthracene	Comp	0.10	ug/l				0
1,3-Dichlorobenzene	Comp	0.05	ug/l				0
1,4-Dichlorobenzene	Comp	0.05	ug/l		5		0
1,2-Dichlorobenzene	Comp	0.05	ug/l		600		0
3,3-Dichlorobenzidine	Comp	3.00	ug/l				0
Diethyl phthalate	Comp	0.50	ug/l				0
Dimethyl phthalate	Comp	0.50	ug/l				0
di-n-Butyl phthalate	Comp	1.00	ug/l				0
2,4-Dinitrotoluene	Comp	0.05	ug/l				0
2,6-Dinitrotoluene	Comp	0.05	ug/l				0
4,6 Dinitro-2-methylphenol	Comp	3.00	ug/l				0
1,2-Diphenylhydrazine	Comp	3.00	ug/l				0
di-n-Octyl phthalate	Comp	1.00	ug/l				0
Fluoranthene	Comp	0.10	ug/l				0
Fluorene	Comp	0.10	ug/l				0
Hexachlorobenzene	Comp	0.50	ug/l		1		0
Hexachlorobutadiene	Comp	1.00	ug/l				0
Hexachloro-cyclopentadiene	Comp	3.00	ug/l		50		0
Hexachloroethane	Comp	1.00	ug/l				0
Indeno(1,2,3-cd)pyrene	Comp	0.10	ug/l				0
Isophorone	Comp	0.05	ug/l				0
Naphthalene	Comp	0.05	ug/l				0
Nitrobenzene	Comp	0.05	ug/l				0
N-Nitroso-dimethyl amine	Comp	0.30	ug/l				0
N-Nitroso-diphenyl amine	Comp	0.30	ug/l				0
N-Nitroso-di-n-propyl amine	Comp	0.30	ug/l				0
Phenanthrene	Comp	0.05	ug/l				0
Pyrene	Comp	0.05	ug/l				0
1,2,4-Trichlorobenzene	Comp	0.50	ug/l				0
Chlorinated Pesticides							
Aldrin	Comp	0.05	ug/l				0

Table 4-5. Comparison of 2002-2003 Tributary Results with Standards

Class Constituent	Sample Type	PQL[c]	Units	Guidelines and Standards			Dry Weather #2: (4/30/03) Water Quality Data
				Ocean Plan	Basin Plan	California Toxics Rule (freshwater)[d]	Rio Hondo Channel
alpha-BHC	Comp	0.05	ug/l	0.008k			0
beta-BHC	Comp	0.05	ug/l				0
delta-BHC	Comp	0.05	ug/l				0
gamma-BHC (lindane)	Comp	0.05	ug/l		0.2		0
alpha-chlordane	Comp	0.05	ug/l				0
gamma-chlordane	Comp	0.05	ug/l				0
4,4'-DDD	Comp	0.10	ug/l				0
4,4'-DDE	Comp	0.10	ug/l				0
4,4'-DDT	Comp	0.10	ug/l				0
Dieldrin	Comp	0.10	ug/l				0
alpha-Endosulfan	Comp	0.10	ug/l	0.018k			0
beta-Endosulfan	Comp	0.10	ug/l				0
Endosulfan sulfate	Comp	0.10	ug/l				0
Endrin	Comp	0.10	ug/l	0.004	2		0
Endrin aldehyde	Comp	0.10	ug/l				0
Heptachlor	Comp	0.05	ug/l		0.01		0
Heptachlor Epoxide	Comp	0.05	ug/l		0.01		0
Toxaphene	Comp	1.00	ug/l		3		0
Polychlorinated Biphenyls							
Aroclor-1016	Comp	0.50	ug/l		0.03k		0
Aroclor-1221	Comp	0.50	ug/l				0
Aroclor-1232	Comp	0.50	ug/l				0
Aroclor-1242	Comp	0.50	ug/l				0
Aroclor-1248	Comp	0.50	ug/l				0
Aroclor-1254	Comp	0.50	ug/l				0
Aroclor-1260	Comp	0.50	ug/l				0
Organohosphate Pesticides							
Chlorpyrifos	Comp	0.05	ug/l		0.07b		0
Diazinon	Comp	0.01	ug/l		0.08b		0
Prometryn	Comp	2.00	ug/l				0
Atrazine	Comp	2.00	ug/l		3		0
Simazine	Comp	2.00	ug/l				0
Cyanazine	Comp	2.00	ug/l				0
Malathion	Comp	2.00	ug/l				0
Herbicides							
Glyphosate	Comp	25.00	ug/l		700		0
2,4-D	Comp	10.00	ug/l		70		0
2,4,5-TP-SILVEX	Comp	1.00	ug/l		50		0
Note:							
1) blank cell indicates sample was not analyzed							
2) 0 indicates level not detected							

a) Criteria based on daily maximum
b) Based on the freshwater acute criteria set by the Department of Fish and Game.
c) PQL = minimum level
d) Criteria continuous concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for an extended period time (4 days) without deleterious effects.
f) Criteria maximum concentration which equals the highest concentration of pollutant to which aquatic life can be exposed for a short period time without deleterious effects.
i) This constituent is a function of the parameter(s) in parentheses.
j) Beneficial uses are defined as follows: MUN - Municipal and Domestic Supply, IND - Industrial Service Supply, PROC - Industrial Process Supply, GWR - Ground Water Recharge, REC1 - Water Contact Recreation, REC2 - Non-Contact Water Recreation, WARM - Warm Freshwater Habitat, COLD - Cold Freshwater Habitat, WILD - Wildlife Habitat, RARE - Rare, Threatened, or Endangered Species, MIGR - Migration of Aquatic Organisms, SPWN - Spawning, Reproduction, and/or Early Development, WET - Wetland Habitat
k) The sum of these constituents must be less than the standard shown.
l) The fecal coliform density standard is based on a minimum of not less than five samples for any 30-day period, where not more than 10 percent of the total samples exceed this objective during any 60-day period.

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