# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

**TENTATIVE ORDER** 

ORDER NO. R4-2004-0099

NPDES PERMIT NO. CA0053619

# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY POMONA WATER RECLAMATION PLANT

# TABLE OF CONTENTS

PURPO	SE OF ORDER	1
FACILIT	Y AND TREATMENT PROCESS DESCRIPTION	1
DISCHA	ARGE OUTFALL AND RECEIVING WATER DESCRIPTION	3
DISCHA	ARGE QUALITY DESCRIPTION	4
APPLIC	ABLE LAWS, PLANS, POLICIES AND REGULATIONS	8
F	Federal Clean Water Act	8
E	Basin Plan	8
5	Sources of Drinking Water Policy	9
F	Potential Municipal and Domestic Supply (P* MUN)	10
S	State Implementation Policy (SIP) and California Toxics Rule (CTR)	10
A	Alaska Rule	11
E	Beneficial Uses	11
Т	Title 22 of the California Code of Regulations	12
A	Antidegradation Policy	14
V	Watershed Approach	14
REGUL	ATORY BASES FOR EFFLUENT AND DISCHARGE REQUIREMENTS	15
V	Water Quality Objectives and Effluent Limits	15
Ν	Mass and Concentration Limits	16
Ν	Maximum Daily effluent Limitations	16
F	Pretreatment	16
5	Sludge Disposal	17
5	Storm Water Management	17
C	Clean Water Act Effluent Limitations	17

Antibacksliding Policies	- 17
Applicable Water Quality Objectives	- 17
Types of Pollutants	- 18
Technology-Based Limits for Municipal Facilities (POTWs)	- 18
Water Quality Based Effluent Limits (WQBELs)	- 18
Water Quality Based Effluent Limitations for Toxic Pollutants	- 18
Basis for Effluent Limits for 303(d) Listed Pollutants	- 19
303(d) Listed pollutants	- 19
Relevant Total Maximum Daily Loads	- 20
Mixing Zones and Dilution Credits	- 20
REASONABLE POTENTIAL ANALYSIS	- 21
N-Nitrosodimethylamine	- 25
POLLUTION MINIMIZATION PROGRAM	- 26
INTERIM REQUIREMENTS	- 27
PUBLIC NOTIFICATION AND CEQA COMPLIANCE	- 28
DISCHARGE REQUIREMENTS	- 29
EFFLUENT LIMITATIONS	- 29
RECEIVING WATER LIMITATIONS	- 35
SLUDGE REQUIREMENTS	- 38
PRETREATMENT REQUIREMENTS	- 39
REQUIREMENTS AND PROVISIONS	- 40
REOPENERS AND MODIFICATIONS	- 45
EXPIRATION DATE	- 46

RESCISSION 46
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# ATTACHMENTS:

1.	FIGURE 1 - Vicinity Map	47
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- 3. FIGURE 3 Receiving Water Monitoring Station Map...... 49
- A. Stormwater Pollution Prevention Plan Requirements
- B. Biosolids Use and Disposal Requirements
- C. Generic Toxicity Reduction Evaluation (TRE) Workplan for POTWs
- F. Fact Sheet including:
  - Table A1: Temperature, pH, Ammonia-N, Nitrate + Nitrate N Data
  - Table D1: Effluent Data for Priority Pollutants, Chronic Toxicity, and MBAS
  - Table R1: Reasonable Potential Analyses (RPA) using SIP Methodology
  - Table R2: RPA using Technical Support Document (TSD) Methodology
  - Table R3: Total Recoverable Metal Criteria
- H. Ammonia Tables
- N. Standard Provisions
- P. Requirements for Pretreatment Annual Report
- T. Monitoring and Reporting Period

# State of California CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

# ORDER NO. R4-2004-0099

# NPDES NO. CA0053619

# WASTE DISCHARGE REQUIREMENTS FOR COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY (Pomona Water Reclamation Plant)

The California Regional Water Quality Control Board, Los Angeles Region (hereafter Regional Board), finds:

# PURPOSE OF ORDER

- 1. County Sanitation Districts of Los Angeles County (hereinafter CSDLAC or Discharger) discharges tertiary-treated wastewater, from its Pomona Water Reclamation Plant (Pomona WRP) under waste discharge requirements contained in Order No. 95-078, adopted by this Regional Board on June 12, 1995. Order No. 95-078 also serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0053619), which regulates the discharge of treated wastewater to San Jose Creek, a water of the State of California and of the United States.
- 2. Order No. 95-078 has an expiration date of May 10, 2000. Section 122.6 of Title 40, Code of Federal Regulations (40 CFR) and Section 2235.4 of Title 23, California Code of Regulations (CCR), state that an expired permit continues in force until the effective date of a new permit, provided that the permittee has made a timely submittal of a complete application for a new permit. On November 10, 1999, CSDLAC filed a report of waste discharge (ROWD) and applied to the Regional Water Quality Control Board (Regional Board) for reissuance of waste discharge requirements (WDRs) and an NPDES permit to discharge tertiary-treated wastewater. Therefore, the Discharger's permit has been administratively extended until the Regional Board acts on the new WDR and permit.
- 3. This Order is the reissuance of WDRs that serves as an NPDES permit for the Pomona WRP.

# FACILITY AND TREATMENT PROCESS DESCRIPTION

4. The Pomona WRP is one of eleven publicly owned treatment works (POTWs) (Saugus, Valencia, Whittier Narrows, Pomona, La Cañada, Long Beach, Los Coyotes, San Jose Creek, Lancaster, Palmdale, and Joint Water Pollution Control Plant) owned and operated by CSDLAC. The Pomona WRP is a tertiary treatment facility located at 295

1

Humane Way, Pomona, California. The plant has a dry weather average design capacity of 15 million gallons per day (mgd), but only discharges an average of 1.89 mgd (the Year 2002) of tertiary treated municipal wastewater to San Jose Creek, at Pomona, California. The Pomona WRP is a part of CSDLAC's regional system, known as the Joint Outfall System (JOS), which includes seven treatment plants. The upstream treatment plants (Whittier Narrows, Pomona, La Cañada, Long Beach, Los Coyotes, and San Jose Creek) are connected to the Joint Water Pollution Control Plant (JWPCP) located in Carson. This system allows biosolids, solids, and excess flows from the Pomona WRP to be diverted to the JWPCP for treatment and disposal. Figure 1 shows the vicinity map for the Pomona WRP.

- 5. The Pomona WRP serves a population of approximately 113,100 people. Flow to the plant consists of domestic, commercial and industrial wastewater. According to CSDLAC's *Preliminary Local Limits Evaluation*, prepared on November 8, 1996, industrial wastewater represents approximately 4.7% of the total flow to the plant. Discharges to the collection system from industry include discharges from metal finishers (40 CFR Part 433), pulp, paper, and paper board manufacturers (40 CFR Parts 430 and 431), textile mills (40 CFR Parts 410), aluminum forming (40 CFR Part 467), and electroplaters (40 CFR Part 413).
- 6. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified the Pomona WRP as a major discharger. It has a Threat to Water Quality and Complexity rating of 1-A pursuant to Section 2200, Title 23, CCR.
- 7. Pursuant to 40 CFR, Part 403, the Pomona WRP developed, and has been implementing, an industrial wastewater Pretreatment Program, which has been approved by USEPA and the Regional Board.
- 8. Treatment at the Pomona WRP currently consists of primary sedimentation, nitrification/ denitrification (NDN) activated sludge biological treatment, secondary sedimentation, coagulation, inert media filtration, chlorination, and dechlorination (sodium bisulfite). No facilities are provided for solids processing at the plant. Sewage solids separated from the wastewater are returned to the JOS trunk sewer for conveyance to JWPCP for treatment and disposal. Figure 2 depicts the schematic of wastewater flow.

In order to achieve compliance with the ammonia Basin Plan objectives, CSDLAC retrofitted the activated sludge treatment units at the Pomona WRP for NDN treatment. The NDN modifications were completed on June 11, 2003.

However, recent scientific investigations have found that the disinfection of the filtered activated sludge NDN effluent and increased polymer dosing generates nnitrosodimethylamine (NDMA) as a byproduct. To date, ultra violet (UV) oxydation is the only available technology capable of destroying NDMA in wastewater. Currently, CSDLAC is conducting a UV disinfection pilot project at the Whittier Narrows WRP in an effort to eliminate in-plant generation of NDMA. Pending the outcome of this pilot study, the disinfection process at the Pomona WRP, and other CSDLAC WRPs, may be changed from chlorination to UV. The purpose of installing and operating the UV disinfection systems, will be to restore NDMA concentrations to their pre-NDN levels, for the continued protection of local groundwater, and to prevent the formation of other chlorination disinfection byproducts, such as cyanide and trihalomethanes.

 Water Recycling Facility. The treated effluent is also regulated under Water Recycling Requirements (WRRs) contained in Order No. 81-34, adopted by this Board on July 27, 1981. The WRRs were re-adopted on May 12, 1997, by Board Order No. 97-072. In 2002, an average of 7.14 mgd of treated effluent was recycled.

Recycled water is used for irrigation of landscapes, impoundments and agricultural crops, for fire protection, livestock watering, dust control, in cooling towers, and in paper manufacturing. The Los Angeles County Department of Public Works uses the recycled water for groundwater recharge at the San Gabriel River Spreading Grounds and the Rio Hondo Spreading Grounds. As described in subsequent findings, the recharge is regulated under a separate permit (Regional Board Order No. 91-100). CSDLAC is promoting additional reuse options for the treated effluent.

10. **Storm Water Management.** CSDLAC does not treat storm water runoff at the Pomona WRP, except for stormwater infiltration and inflows in the sewer and stormwater that traverses the treatment tanks. It has developed a Storm Water Pollution Prevention Plan (SWPPP) for storm water that does not enter the treatment system.

# DISCHARGE OUTFALL AND RECEIVING WATER DESCRIPTION

- 11. The Pomona WRP discharges tertiary-treated municipal and industrial wastewater to the South Fork of San Jose Creek, through Discharge Serial No. 001 (approximate coordinates: Latitude 34° 03' 18", Longitude 11° 47' 43"). The South ForkSan Jose Creek is tributary to the San Jose Creek and thence to the San Gabriel River, a water of the United States, at a point near the interchange of the Pomona Freeway and the San Gabriel River, above the estuary, within San Gabriel River Watershed.
- 12. During dry weather (May 1 October 31), the primary sources of water flow in the receiving waters, downstream of the discharge point, are the Pomona WRP effluent and other NPDES-permitted discharges, including urban runoff conveyed through the municipal separate storm sewer system (MS4). Storm water and urban runoff from MS4 are regulated under an NPDES permit, *Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the County of Los Angeles* (LA Municipal Permit), NPDES Permit No. CAS004001.
- 13. The Los Angeles County Flood Control District channelized portions of the San Gabriel River and San Jose Creek to convey and control floodwater, and to prevent damage to homes located adjacent to the river. Although not their main purpose, the San Gabriel River and San Jose Creek convey treated wastewater along with floodwater, and urban runoff. The South Fork of San Jose Creek is concrete-lined at the point of discharge, however, further downstream before its confluence with the San Gabriel River, San Jose Creek is unlined, near receiving water station R-D. Groundwater recharge occurs both

incidentally and through separate WRRs for groundwater recharge, in these unlined areas of the San Gabriel River where the underlying sediments are highly transmissive to water as well as pollutants. The Water Replenishment District of Southern California recharges the Rio Hondo and San Gabriel Spreading Grounds, located in the Montebello Forebay, with water purchased from CSDLAC's Whittier Narrows, Pomona, and San Jose Creek WRPs, under WRR Order No. 91-100, adopted by the Board on September 9, 1991.

Notwithstanding that segments located further downstream of the discharge are concretelined, the watershed supports a diversity of wildlife, particularly an abundance of avian species such as the *Least Bell's Vireo, Tricolored Blackbird, and California Gnatcatcher.* Aquatic life, such as fish, invertebrates, and algae exist in the San Gabriel River Watershed.

# DISCHARGE QUALITY

- 14. From June 1995 to December 2003, the Discharger's discharge monitoring reports showed the following:
  - A. treated wastewater average annual flow rate of 2.51 mgd;
  - B. average annual removal rate of 97.6% and >99%, of BOD and total suspended solids, respectively; and,
  - C. 7-day median and daily maximum coliform values as <1 CFU/100 ml in the treated wastewater.
- 15. Based on data submitted in the 2002 Annual Summary Report, Table 1 represents the characteristics of the effluent discharged. (The "<" symbol indicates that the pollutant was not detected (ND) at that concentration level.) Attachment D contains more extensive statistical analyses of the effluent priority pollutants data from July 1995 to December 2003.

CTR#	Constituent	Unit	Average or Range	Maximum	Minimum
	Flow	mgd	1.89	4.49	0.2
	рН	pH units	7.3	7.5	7.3
	Temperature- (Nov. – April)	°F	72 winter	75	71
	(May – Oct.)	°F	80 summer	83	75
	BOD <sub>5</sub> 20°C	mg/L	4	6	<3
	Suspended solids		1	2	<1
	Settleable solids		<0.1	<0.1	<0.1
	Total dissolved solids	mg/L	545	573	489
	Chloride	mg/L	139	158	117
	Sulfate	mg/L	69	86	58

#### Table 1 Effluent Characteristics

CTR#	Constituent	Unit	Average or Range	Maximum	Minimum
	Boron	mg/L	0.47	0.52	0.43
	Total Phosphate	mg/L	1.2	1.4	0.9
	Turbidity	NTU	1.4	1.7	0.9
	Oil and grease	mg/L	<4 -<5	<5	<4
	Fluoride	mg/L	0.37	0.45	0.31
	MBAS	mg/L	0.14	0.3	0.07
	Ammonia-N	mg/L	13.9	19.3	7.35
	Organic-N	mg/L	2.0	4.8	0.7
	Nitrate-N	mg/L	1.15	4.9	0.1
	Nitrite-N	mg/L	1.89	3.75	0.22
	Total Nitrogen	mg/L	19.03	22.03	15.29
	Total residual chlorine	mg/L	<0.52	0.69	<0.07
1	Antimony	μg/L	<0.5 – 1.3	1.3	<0.5
2	Arsenic	μg/L	<1 – 2.4	2.4	<1
3	Beryllium	μg/L	<0.5	<0.5	<0.5
4	Cadmium	μg/L	<0.4	<0.4	<0.4
5a	Chromium III				
5b	Chromium VI				
	Total Chromium	μg/L	<10	<10	<10
6	Copper	μg/L	<8 14	14	<8
	Iron	μg/L	<50	<50	<50
7	Lead	μg/L	<2 - 2	2	<2
8	Mercury	μg/L	<0.04 -<0.1	<0.04	<0.1
9	Nickel	μg/L	<20	<20	<20
10	Selenium	μg/L	<1	<1	<1
11	Silver	μg/L	< 0.24 - 0.49	0.49	<0.24
12	Thallium	μg/L	<1	<1	<1
13	Zinc	μg/L	60	80	50
14	Cyanide	μg/L	<5 - <10	<10	<5
16	2,3,7,8-TCDD (Dioxin)	μg/L	<3.8 - <3.9	<3.8	<3.9
17	Acrolein	μg/L	<2 - <10	<10	<2
18	Acrylonitrile	μg/L	<2 - <5	<5	<2
19	Benzene	μg/L	<0.5	<0.5	<0.5
20	Bromoform	μg/L	<0.5 – 0.6	0.6	<0.5
21	Carbon tetrachloride	μg/L	<0.5	<0.5	<0.5
22	Chlorobenzene	μg/L	<0.5	<0.5	<0.5
23	Dibromochloromethane	μg/L	< 0.5 - 0.5	0.5	<0.5
24	Chloroethane	μg/L	<0.5	<0.5	<0.5
25	2-Chloroethylvinyl ether	μg/L	<0.5	<0.5	<0.5
26	Chloroform	μg/L	5	10	2.5
27	Bromodichloromethane	μg/L	<0.5 – 1.5	1.5	<0.5
28	1,1-Dichloroethane	μg/L	<0.5	<0.5	<0.5
29	1,2-Dichloroethane	μg/L	<0.5	<0.5	<0.5
30	1,1-Dichloroethylene	μg/L	<0.5	<0.5	<0.5

CTR#	Constituent	Unit	Average or Range	Maximum	Minimum
31	1,2-Dichloropropane	μg/L	<0.5	<0.5	<0.5
32	1,3-Dichloropropylene	μg/L	<0.5	<0.5	<0.5
33	Ethylbenzene	μg/L	<0.5	<0.5	<0.5
34	Methyl bromide (Bromomethane)	μg/L	<0.5 - <1	<1	<0.5
35	Methyl chloride (Chloromethane)	μg/L	<0.5	<0.5	<0.5
36	Methylene chloride	μg/L	<1 - <0.5	<1	<0.5
37	1,1,2,2-Tetrachloroethane	μg/L	<0.5	<0.5	<0.5
38	Tetrachloroethylene	μg/L	<0.5	<0.5	<0.5
39	Toluene	μg/L	<0.5	<0.5	<0.5
40	1,2-Trans-dichloroethylene	μg/L	<0.5	<0.5	<0.5
41	1,1,1-Trichloroethane	μg/L	<0.5	<0.5	<0.5
42	1,1,2-Trichloroethane	μg/L	<0.5	<0.5	<0.5
43	Trichloroethylene	μg/L	<0.5	<0.5	<0.5
44	Vinyl chloride	μg/L	<0.5	<0.5	<0.5
45	2-Chlorophenol	μg/L	<1 - <5	<5	<1
46	2,4-Dichlorophenol	μg/L	<1 - <5	<5	<1
47	2,4-Dimethylphenol	μg/L	<2	<2	<2
48	2-Methyl-4,6-dinitrophenol	μg/L	<5	<5	<5
49	2,4-Dinitrophenol	μg/L	<5	<5	<5
50	2-Nitrophenol	μg/L	<1 - <10	<10	<1
51	4-Nitrophenol	μg/L	<1 - <10	<10	<1
52	3-Methyl-4-chlorophenol	μg/L	<1	<1	<1
53	Pentachlorophenol	μg/L	<1 - <5	<5	<1
54	Phenol	μg/L	<1	<1	<1
55	2,4,6-Trichlorophenol	μg/L	<1 - <10	<10	<1
56	Acenaphthene	μg/L	<1	<1	<1
57	Acenaphthylene	μg/L	<1 - <10	<10	<1
58	Anthracene	μg/L	<1 - <10	<10	<1
59	Benzidine	μg/L	<5	<5	<5
60	Benzo(a)anthracene	μg/L	<1 - <5	<5	<1
61	Benzo(a)pyrene	μg/L	<0.0031	<0.0031	<0.0031
62	Benzo(b)fluoranthene	μg/L	<0.0031-0.014	<0.014	<0.0031
63	Benzo(g,h,i)perylene	μg/L	<1 - <5	<5	<1
64	Benzo(k)fluoranthene	μg/L	<0.0031- 0.01	0.01	<0.0031
65	Bis(2-chloroethoxy)methane	μg/L	<1 - <5	<5	<1
66	Bis(2-chloroethyl)ether	μg/L	<1	<1	<1
67	Bis(2-chloroisopropyl)ether	μg/L	<1 - <2	<2	<1
68	Bis(2-ethylhexyl)phthalate	μg/L	<1 - <5	<5	<1
69	4-Bromophenyl phenyl ether	μg/L	<1 - <5	<5	<1
70	Butylbenzyl phthalate	μg/L	<1 - <10	<10	<1
71	2-Chloronaphthalene	μg/L	<1 - <10	<10	<1
72	4-Chlorophenyl phenyl ether	μg/L	<1 - <5	<5	<1
73	Chrysene	μg/L	<0.0031 - 0.0049	0.0049	<0.003
74	Dibenzo(a,h)anthracene	μg/L	< 0.006 - 0.007	0.007	<0.006

CTR#	Constituent	Unit	Average or Range	Maximum	Minimum
75	1,2-Dichlorobenzene	μg/L	<1 - <2	<2	<1
76	1,3-Dichlorobenzene	μg/L	<1	<1	<1
77	1,4-Dichlorobenzene	μg/L	<1 – 1.1	1.1	<1
78	3,3'-Dichlorobenzidine	μg/L	<5	<5	<5
79	Diethyl phthalate	μg/L	<1 - <2	<2	<1
80	Dimethyl phthalate	μg/L	<1 - <2	<2	<1
81	Di-n-butyl phthalate	μg/L	<1 - <10	<10	<1
82	2,4-Dinitrotoluene	μg/L	<1 - <5	<5	<1
83	2,6-Dinitrotoluene	μg/L	<1 - <5	<5	<1
84	Di-n-octyl phthalate	μg/L	<1 - <10	<10	<1
85	1,2-Diphenylhydrazine	μg/L	<1	<1	<1
86	Fluoranthene	μg/L	<1	<1	<1
87	Fluorene	μg/L	<1 - <10	<10	<1
88	Hexachlorobenzene	μg/L	<1	<1	<1
89	Hexachlorobutadiene	μg/L	<1	<1	<1
90	Hexachlorocyclopentadiene	μg/L	<5	<5	<5
91	Hexachloroethane	μg/L	<1	<1	<1
92	Indeno(1,2,3-cd)pyrene	μg/L	0.006 - 0.014	0.014	0.006
93	Isophrone	μg/L	<1	<1	<1
94	Naphthalene	μg/L	<1	<1	<1
95	Nitrobenzene	μg/L	<1	<1	<1
96	N-Nitrosodimethylamine (NDMA)	μg/L	<1 - <5	<5	<1
97	N-Nitrosodi-n-propylamine		<1 - <5	<5	<1
98	N-Nitrosodiphenylamine	μg/L μg/L	<1	<1	<1
99	Phenanthrene	μg/L	<1 - <5	<5	<1
100	Pyrene	μg/L	<1 - <10	<10	<1
101	1,2,4-Trichlorobenzene	μg/L	<1 - <5	<5	<1
102	Aldrin	μg/L	<0.01	<0.01	<0.01
103	alpha-BHC	μg/L	<0.01	<0.01	<0.01
104	beta-BHC	μg/L	<0.01	<0.01	<0.01
105	gamma-BHC (Lindane)	μg/L	<0.01 - 0.01	0.01	<0.01
106	delta-BHC	μg/L	<0.01	<0.01	<0.01
107	Chlordane	μg/L	<0.05	<0.05	< 0.05
108	4,4'-DDT	μg/L	<0.01	<0.01	<0.01
109	4,4'-DDE	μg/L	<0.01	<0.01	<0.01
110	4,4- DDD	μg/L	<0.01	<0.01	<0.01
111	Dieldrin	μg/L	<0.01	<0.01	<0.01
112	alpha-Endosulfan	μg/L	<0.01	<0.01	<0.01
113	beta-Endosulfan	μg/L	<0.01	<0.01	<0.01
114	Endosulfan sulfate	μg/L	<0.1	<0.1	<0.1
115	Endrin	μg/L	<0.01	<0.01	<0.01
116	Endrin aldehyde	μg/L	<0.04	<0.04	< 0.04
117	Heptachlor	μg/L	<0.01	<0.01	<0.01
118	Heptachlor epoxide	μg/L	<0.01	<0.01	<0.01

CTR#	Constituent	Unit	Average or Range	Maximum	Minimum
	Polychlorinated biphenyls (PCBs)				
119	Aroclor 1016	μg/L	<0.1	<0.1	<0.1
120	Aroclor 1221	μg/L	<0.1	<0.1	<0.1
121	Aroclor 1232	μg/L	<0.1	<0.1	<0.1
122	Aroclor 1242	μg/L	<0.1	<0.1	<0.1
123	Aroclor 1248	μg/L	<0.1	<0.1	<0.1
124	Aroclor 1254	μg/L	<0.05	<0.05	<0.05
125	Aroclor 1260	μg/L	<0.1	<0.1	<0.1
126	Toxaphene	μg/L	<0.5	<0.5	<0.5
	MTBE	μg/L	<0.5 – 1.5	1.5	<0.5

16. The Discharger's effluent demonstrated chronic toxicity during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause toxicity in the receiving water. However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were reviewed by the State Water Resources Control Board (State Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Board adopted Order No. WQO 2003-0012, deferring the issue of numeric chronic toxicity effluent limitations until Phase II of the SIP is adopted. In the mean time, the State Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar chronic toxicity effluent limitation. This Order also contains a reopener to allow the Regional Board to modify the permit, if necessary, consistent with any new policy, law, or regulation.

# APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

- 17. *Federal Clean Water Act* Section 301(a) of the federal Clean Water Act (CWA) requires that point source discharges of pollutants to a water of the United States must be done in conformance with a NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality. CWA section 402 authorizes the USEPA or States with an approved NPDES program to issue NPDES permits. The State of California has an approved NPDES program.
- 18. Basin Plan The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994, and amended by various Regional Board resolutions. This updated and consolidated plan represents the Board's master quality control planning document and regulations. The State Board and the State of California Office of Administrative Law (OAL) approved the revised Basin Plan on November 17, 1994, and February 23, 1995, respectively. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (P\* MUN) designated surface waters, which is not applicable to this discharge.

Ammonia Water Quality Objective (WQO). The 1994 Basin Plan contained water quality

objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board, with the adoption of Resolution No. 2002-011, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life. Resolution No. 2002-011 was approved by the State Board, the OAL, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and are now in effect. The final effluent limitations for ammonia prescribed in this Order are based on the revised ammonia criteria (see Attachment H) and apply at the end of pipe.

<u>Chloride WQO.</u> The 1994 Basin Plan contained water quality objectives for chloride in Table 3-8. However, the chloride objectives for some waterbodies were revised on January 27, 1997, by the Regional Board, with the adoption of Resolution No. 97-02, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters*. Resolution No. 97-02 was approved by the State Board, OAL, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and are now in effect. The chloride WQO was revised from 150 mg/L to 180 mg/L, for the San Gabriel River (between Valley Boulevard and Firestone Boulevard – including Whittier Narrows Flood Control Basin and San Jose Creek, downstream of the 71 Freeway only). The final effluent limitations for chloride prescribed in this Order are based on the revised chloride WQOs and apply at the end of pipe.

The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The 1994 Basin Plan was prepared to be consistent with all State and Regional Board plans and policies. This Order implements the plans, policies, and provisions of the Board's Basin Plan.

- Sources of Drinking Water Policy On May 19, 1988, State Board adopted Resolution No. 88-63, Sources of Drinking Water (SODW) Policy, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Board's SODW policy, on March 27, 1989, the Regional Board adopted Resolution No. 89-03, Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B).
- 20. **Potential Municipal and Domestic Supply (P\* MUN)**. Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, in 1994 the Regional Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation

provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Board's enabling resolution] until the Regional Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

- 21. State Implementation Plan (SIP) and California Toxics Rule (CTR) The State Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (also known as the State Implementation Plan or SIP) on March 2, 2000. The SIP was amended by Resolution No. 2000-30, on April 26, 2000, and the Office of Administrative Law approved the SIP on April 28, 2000. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California which are subject to regulation under the State's Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) and the CWA. This policy also establishes the following:
  - A. Implementation provisions for priority pollutant criteria promulgated by USEPA through the CTR and for priority pollutant objectives established by Regional Boards in their Basin Plans;
  - B. Monitoring requirements for priority pollutants with insufficient data to determine reasonable potential;
  - C. Monitoring requirements for 2, 3, 7, 8 TCDD equivalents; and,
  - D. Chronic toxicity control provisions.

The CTR became effective on May 18, 2000 (codified as 40 CFR, Part 131.38). Toxic pollutant limits are prescribed in this Order to implement the CTR and Basin Plan. In the CTR, USEPA promulgated criteria that protects the general population at an incremental cancer risk level of one in a million (10<sup>-6</sup>), for all priority toxic pollutants regulated as carcinogens. USEPA recognizes that adoption of a different risk factor is outside of the scope of the CTR. However, states have the discretion to adopt water quality criteria that result in a higher risk level, if it can demonstrate that the chosen risk level is adequately protective of the most highly exposed subpopulation, and has completed all necessary public participation. This demonstration has not happened in California. Further, the information that is available on highly exposed subpopulations in California supports the need to protect the general population at the 10<sup>-6</sup> level. The Discharger may undertake a study, in accordance with the procedures set forth in Chapter 3 of USEPA's Water Quality Standards Handbook: Second Edition (EPA-823-B-005a, August 1994) to demonstrate

that a different risk factor is more appropriate. Upon completion of the study, the State Board will review the results and determine if the risk factor needs to be changed. In the mean time, the State will continue using a  $10^{-6}$  risk level, as it has done historically, to protect the population against carcinogenic pollutants.

- 22. **Alaska Rule**. On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the *Alaska rule*), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.
- 23. **Beneficial Uses**. The designated beneficial uses in the Basin Plan for the San Gabriel River, San Jose Creek, and its contiguous waters are:

Son Jose Creek - Hydrologia Unit 405 41					
	San Jose Creek - Hydrologic Unit 405.41				
Existing:	wildlife habitat.				
Intermittent:	groundwater recharge, non-contact water recreation, warm freshwater habitat.				
Potential:	water contact <sup>1</sup> recreation and municipal and domestic water supply (MUN <sup>2</sup> ).				
	San Gabriel River - Hydrologic Unit 405.41				
Existing:	wildlife habitat.				
Intermittent:	groundwater recharge, water contact recreation <sup>1</sup> , non-contact water				
	recreation, warm freshwater habitat.				
Potential:	MUN <sup>2</sup> .				
San Gab	riel River: Whittier Narrows to Firestone Boulevard - Hydrologic Unit 405.15				
Existing:	water contact <sup>1</sup> recreation and non-contact water recreation; wildlife habitat;				
	and rare, threatened, or endangered species.				
Intermittent:	groundwater recharge and warm freshwater habitat.				
Potential:					
San G	San Gabriel River: Firestone Boulevard to the Estuary - Hydrologic Unit 405.15				
Existing:	Existing: water contact <sup>1</sup> recreation and non-contact water recreation.				
Potential:	Potential: MUN <sup>2</sup> ; warm freshwater habitat; and wildlife habitat.				
	San Gabriel River Estuary - Hydrologic Unit 405.15				

A. The beneficial uses of the receiving water are:

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- Although the Los Angeles County Department of Public Works posted signs prohibiting access to San Jose Creek, San Gabriel River, and its tributaries, the public has been observed fishing and wading across sections of the river. There is public access to the San Gabriel River and its tributaries through the bike trails that run parallel to the river. Since there is public contact in the receiving water downstream of the discharge, the quality of wastewater discharged to San Jose Creek, San Gabriel River, and its tributaries must be such that no public health hazard is created.
- <sup>2</sup> The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

Existing:	industrial service supply; navigation; water contact <sup>1</sup> recreation and non- contact water recreation; commercial and sport fishing; estuarine habitat; marine habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development.
	development.
Potential:	shellfish harvesting.

B. The beneficial uses of the groundwater are:

	San Gabriel Valley (Puente Basin) - DWR Basin No. 4-13		
Existing:	tisting: municipal and domestic supply, industrial service supply; industrial process		
	supply; and, agricultural supply.		
L	Los Angeles Coastal Plain (Central Basin) – DWR Basin No. 4-11		
Existing:	Existing: municipal and domestic supply, industrial service supply, industrial		
_	process supply, and agricultural supply		

- C. The requirements in this Order are intended to protect designated beneficial uses and enhance the water quality of the watershed. Effluent limits must protect both existing and potential beneficial uses.
- D. Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, all inland surface waters in Table 2-1 of the 1994 Basin Plan are designated existing, intermittent, or potential for MUN.
- 24. **Title 22 of the California Code of Regulations**. The California Department of Health Services established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22, California Code of Regulations (Title 22). The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore the secondary MCLs, which are limits based on aesthetic, organoleptic standards, are also incorporated into this permit to protect groundwater quality.

Action Levels (ALs). DHS also establishes Action levels (ALs), or health-based advisory levels, for chemicals in drinking water that lack MCLs. An AL is the concentration of a chemical in drinking water that is considered not to pose a significant health risk to people ingesting that water on a daily basis. ALs may be established by DHS for non-regulated chemical contaminants when one of the following occurs:

1. A chemical is found in an actual or proposed drinking water source, or

2. A chemical is in proximity to a drinking water source, and guidance is needed, should it reach the source.

An AL is calculated using standard risk assessment methods for non-cancer and cancer endpoints, and typical exposure assumptions, including a 2-liter per day ingestion rate, a 70-kilogram adult body weight, and a 70-year lifetime. For chemicals that are considered carcinogens, the AL is considered to pose "*de minimis*" risk, i.e., a theoretical lifetime risk of up to one excess case of cancer in a population of 1,000,000 people—the 10<sup>-6</sup> risk level. (In that population, approximately 250,000-300,000 cases of cancer would be anticipated to occur naturally.) On occasion, the chemical may not be detectable as low as the action level by usual laboratory analytical methods. In this case, detectability prevails, and DHS' approach is to consider a detectable quantity as over the action level until a more sensitive method is available. ALs may be revised from time to time to reflect new risk assessment information. Chemicals for which ALs are established may eventually be regulated by MCLs, depending on the extent of contamination, the levels observed, and the risk to human health. A number of the contaminants for which action levels were originally established now have MCLs.

In April 1998, DHS established an action level of 0.002  $\mu$ g/L for NDMA, based on a deminimus cancer risk level. The AL was later revised by DHS, once in November 1999 to 0.02  $\mu$ g/L, and once in March 2002 to 0.01  $\mu$ g/L or 10 ng/L (the current AL). The AL for NDMA is based on an evaluation conducted by CalEPA's Office of Environmental Health Hazard Assessment. NDMA is classified as a possible human carcinogen on USEPA's Integrated Risk Information System (IRIS), based on the development of tumors, at multiple sites, in both rodent and non-rodent mammals exposed to NDMA by various routes.

The primary routes of potential human exposure to NDMA are ingestion, inhalation, and dermal contact. The general population may be exposed to unknown quantities of NDMA present in foods, beverages, tobacco smoke, herbicides, pesticides, drinking water, and industrial pollution. The National Institute for Occupational Safety and Health (NIOSH) lists the following symptoms experienced depending upon the route of exposure to NDMA:

Route of Exposure	Symptoms
Inhalation	Nausea, vomiting, diarrhea
Skin adsorption	Abdominal cramps, headaches
Ingestion	Fever, enlarged liver
Skin and/or eye contact	Jaundice, decreased organ function of the liver, kidney, and lungs

Although DHS only uses ALs as advisory levels, the Regional Board, exercising its best professional judgement, in the review of the best available science, has in the past considered and used ALs when deemed appropriate to establish effluent limitations in WDR and NPDES permits adopted by this Board. The need for a revised limit for NDMA, for the protection of the GWR beneficial use, will be assessed three years after the

effective date of this Order, following the conclusion of the studies mentioned in Finding 47, and in accordance with Section V.H - *Reopeners and Modifications*.

<u>Groundwater Recharge</u>. Sections of San Jose Creek, located downstream of the Pomona WRP discharge point, are designated as GWR. Surface water from the San Jose Creek enters the San Gabriel Valley Basin and the Central Los Angeles Coastal Plain Groundwater Basin. Since ground water from these basins is used to provide drinking water to over one million people, Title 22-based limits are needed to protect that drinking water supply where there is reasonable potential for the contaminant to be present in the discharge. By limiting the contaminants in the Pomona WRP discharges, the amount of pollutants entering the surface waters and groundwater basins are correspondingly reduced. Once groundwater basins are contaminated, it may take years to clean up, depending on the pollutant. Compared to surface water pollution, investigations and remediation of groundwater are often more difficult, costly, and extremely slow.

- 25. **Antidegradation Policy** On October 28, 1968, the State Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Boards. The State Board has, in State Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR, Section 131.12) require that all permitting actions be consistent with the federal antidegradation policy. Together, the State and Federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The provisions of this Order are consistent with the antidegradation policies.
- 26. *Watershed Approach* This Regional Board has been implementing a Watershed Management Approach (WMA), to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about the San Gabriel River Watershed and other watersheds in the region can be obtained from the Regional Board's web site at *http://www.swrcb.ca.gov/rwqcb4/* and clicking on the word "Watersheds".

Pursuant to this Regional Board's watershed initiative framework, the San Gabriel River Watershed Management Area was the targeted watershed for fiscal year 1999-2000. However, the NPDES permit renewals were re-scheduled so that provisions of the CTR and SIP could be incorporated into the permits.

# **REGULATORY BASIS FOR EFFLUENT LIMITS AND DISCHARGE REQUIREMENTS**

- 27. *Water Quality Objectives and Effluent Limits Water* Quality Objectives (WQOs) and effluent limitations in this permit are based on:
  - A. Applicable State Regulations/Policies/Guidances

- a. The plans, policies and water quality standards (beneficial uses + objectives + antidegradation policy) contained in the 1994 *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, as amended, including chemical constituent limitations established by incorporating the California Code of Regulations,Title 22, maximum contaminant levels designed to protect the existing drinking water use of the receiving groundwaters;
- b. California Toxics Rule (40 CFR 131.38);
- c. The State Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (the State Implementation Plan or SIP); and,
- d. Administrative Procedures Manual and Administrative Procedure Updates;
- B. Applicable Federal Regulations/Policies/Guidances
  - a. Federal Clean Water Act;
  - b. 40 CFR, Parts 122, 131, among others;
  - c. Best professional judgment (pursuant to 40 CFR 122.44);
  - d. USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;
  - e. USEPA Whole Effluent Toxicity (WET) Control Policy July 1994;
  - f. Inspectors Guide for Evaluation of Municipal Wastewater Treatment Plants, April 1979 (EPA/430/9-79-010);
  - g. Fate of Priority Pollutants in Publicly Owned Treatment Works Pilot Study October 1979 (EPA-440/1-79-300);
  - h. *Technical Support Document for Water Quality Based Toxics Control,* March 1991 (EPA-505/ 2-90-001);
  - i. U.S. EPA NPDES Permit Writers' Manual, December 1996 (EPA-833-B-96-003); and,
  - j. USEPA's *National Recommended Water Quality Criteria: 2002*, November 2002 (EPA-822-R-02-047)

Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR, Part 122.44(d) specifies that water quality based effluent limits may be set based on

USEPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

28. **Mass and Concentration Limits.** 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents; however, the mass-based limits are inappropriate during wet weather flows when plant flows may exceed design capacity. Therefore, during storm events, when flows exceed design capacity, only concentration-based limits are applicable.

- 29. **Maximum Daily Effluent Limitations.** Pursuant to 40 CFR section 122.45(d)(2), for a POTW's continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to only include average weekly and average monthly effluent limitations for certain pollutants in the permit, because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of certain pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR section 122.45(d)(1), are included in the permit for certain constituents as discussed in the Fact Sheet accompanying this Order.
- 30. **Pretreatment.** Pursuant to 40 CFR Part 403, CSDLAC developed and has implemented an approved industrial wastewater Pretreatment Program. This Order requires implementation of the approved Pretreatment Program.
- 31. **Sludge Disposal.** To implement CWA Section 405(d), on February 19, 1993, the USEPA promulgated 40 CFR, Part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the CSDLAC to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.
- 32. Storm Water. CWA section 402(p), as amended by the Water Quality Act of 1987,

requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR section 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Board issued a statewide general permit, General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities. This permit was amended in September 1992 and reissued on April 17, 1997 in State Board Order No. 97-03-DWQ.

General NPDES permit No. CAS000001 is applicable to storm water discharges from the Pomona WRP's premises. On June 4, 1992, CSDLAC filed a Notice of Intent to comply with the requirements of the general permit. CSDLAC developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Board's Order No. 97-03-DWQ.

- 33. *Clean Water Act Effluent Limitations.* Numeric and narrative effluent limitations are established pursuant to Section 301 (Effluent Limitations), Section 302 (Water Quality-Related Effluent Limitations), Section 303 (Water Quality Standards and Implementation Plans), Section 304 (Information and Guidelines [Effluent]), Section 305 (Water Quality Inventory), Section 307 (Toxic and Pretreatment Effluent Standards), and Section 402 (NPDES) of the CWA. The CWA and amendments thereto are applicable to the discharges herein.
- 34. **Antibacksliding.** Antibacksliding provisions are contained in Sections 303(d)(4) and 402(o) of the CWA and in 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions. Section 402(o)(2) outlines six exceptions where effluent limitations may be relaxed.
- 35. **Applicable Water Quality Objectives.** 40 CFR section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial use.

The Basin Plan includes narrative and numeric WQOs. The CTR promulgates numeric aquatic life criteria for 23 toxic pollutants and numeric human health criteria for 57 toxic pollutants. A compliance schedule provision in the CTR and the SIP authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal CTR criteria when certain conditions are met. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

36. **Types of Pollutants.** For CWA regulatory purposes, pollutants are grouped into three general categories under the NPDES program: conventional, toxic, and non-conventional. By definition, there are five conventional pollutants (listed in 40 CFR section 401.16): 5-day biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. Toxic or "priority" pollutants are those defined in Section 307(a)(1) of the CWA

(and listed in 40 CFR section 401.15 and 40 CFR Part 423, Appendix A) and include metals and organic compounds. Non-conventional pollutants are those which do not fall under either of the two previously described categories and include such parameters as ammonia, phosphorous, chemical oxygen demand, whole effluent toxicity, etc.

- 37. **Technology-Based Limits for Municipal Facilities (POTWs).** Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment"--that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that EPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, EPA developed national secondary treatment regulations which are specified in 40 CFR Part 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.
- 38. Water Quality Based Effluent Limits (WQBELs). Water quality-based effluent limits are designed to protect the quality of the receiving water by ensuring that State water quality standards are met by discharges from an industrial/municipal point source. If, after technology-based effluent limits are applied, a point source discharge will cause, have the reasonable potential to cause, or contribute to an exceedance of an applicable water quality criterion, then 40 CFR section 122.44(d)(1) requires that the permit contain a WQBEL. Although the CWA establishes explicit technology-based requirements for POTWs, Congress did not exempt POTWs from additional regulation to protect water quality standards. As a result, POTWs are also subject to WQBELs. Applicable water contained in the Basin Plan and CTR, as described in previous findings.
- 39. Water Quality Based Effluent Limitations for Toxic Pollutants. Toxic substances are regulated in this permit by WQBELs derived from the 1994 Basin Plan, the CTR, and/or best professional judgment (BPJ) pursuant to 40 CFR section 122.44. If a discharge causes, has a reasonable potential to cause, or contribute to a receiving water excursion above a narrative or numeric objective within a State water quality standard, federal law and regulations, as specified in 40 CFR section 122.44(d)(1)(i), and in part, the SIP, require the establishment of WQBELs that will protect water quality. As documented in Table R and the fact sheet, pollutants exhibiting reasonable potential in the discharge, authorized in this Order, are identified in the Reasonable Potential Analysis (RPA) section and have final effluent limits. Because ambient receiving water data are not available, reasonable potential was not triggered for some of the 126 priority pollutants and final limits cannot be determined at this time. The discharger is required to gather the appropriate data and the Regional Board will determine if final effluent limits are needed. If final limits are needed, the permit will be reopened and limits will be included in the permit.

- 40. **Basis for Effluent Limits for 303(d) Listed Pollutants.** For 303(d) listed pollutants, the Regional Board plans to develop and adopt Total Maximum Daily Loads (TMDLs) which will specify wasteload allocations (WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued, and where appropriate, reopened to include effluent limits consistent with the assumptions of the TMDL, based on applicable WLAs. In the absence of a TMDL, the permits will include water quality-based effluent limitations derived as provided in the CTR and SIP (if applicable). These effluent limits are based on criteria applied end-of-pipe.
- 41. **303(d)** Listed Pollutants On July 25, 2003, USEPA approved the State's most recent list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with Section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.

The San Gabriel River (SGR) and its tributaries are on the 303(d) List for the following pollutants/stressors, from point and non-point sources:

San Jose Creek Reach 2 (Temple to I-10 at White Ave.) -- Hydrologic Unit 405.51:

- algae, and high coliform count;

San Jose Creek Reach 1 (SGR confluence to Temple St.)—Hydrologic Unit 405.41:

- algae, and high coliform count;

San Gabriel River Reach 3 (Whittier Narrows to Ramona) -- Hydrologic Unit 405.41 - toxicity

San Gabriel River Reach 2 (Firestone to Whittier N. Dam) -- Hydrologic Unit 405.15:

- copper (dissolved), high coliform count, lead, and zinc (dissolved);

San Gabriel River Reach 1 (Estuary to Firestone) -- Hydrologic Unit 405.15

- abnormal fish histology, algae, high coliform count, and toxicity; and,

# San Gabriel River Estuary -- Hydrologic unit 405.15

- abnormal fish histology.

The Regional Board revised the 303(d) list in 2002 and submitted the draft to the State Board for approval. The State Board had scheduled the draft 303(d) list, dated October 15, 2002, for approval at two of its meetings, however the item was postponed to hold additional workshops and to allow more time for the public to submit comments. The draft 303(d) list dated October 15, 2002, was revised on January 13, 2003, based on comments received. The draft 303(d) list, dated January 13, 2003, was adopted by the State Board at its February 4, 2003 meeting. The adopted 303(d) list was approved by USEPA on July 25, 2003.

- 42. Relevant Total Maximum Daily Loads (TMDLs). A TMDL is a determination of the amount of a pollutant, from point, non-point, and natural background sources, including a margin of safety, which may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR, Part 130.7. TMDLs must be developed for the pollutants of concern. which impact the water quality of water bodies on the 303(d) list. Under the federal consent decree, the San Gabriel River was listed for toxicity, algae, coliform, and metals. The ammonia listing was removed on the 2002 303(d) list because the POTWs were scheduled to implement nitrification/denitrification. Under the federal consent decree, USEPA was to establish TMDLs for algae and pollutants causing toxicity by March 22, 2004. USEPA has requested a multi-year extension of the consent decree deadline for the nutrient TMDL from the litigants. The approval of the extension is currently under review, and USEPA has been given a temporary 60-day extension (until May 21, 2004) while the litigants review the request for more time. Under the federal consent decree the, the San Gabriel River metals TMDL is scheduled to be adopted by the Regional Board by March 22, 2006.
- 43. *Mixing Zones and Dilution Credits* Mixing zones, dilution credits, and attenuation factors are not allowed in this Order. Allowance of a mixing zone is in the Regional Board's discretion under Section 1.4.2 of the SIP and under the Basin Plan (Basin Plan Chapter 4, page 30). If the Discharger subsequently conducts appropriate mixing zone and dilution credit studies, the Regional Board can evaluate the propriety of granting a mixing zone or establishing dilution credits. The Regional Board has concluded mixing zones and dilution credits would be inappropriate to grant, at this time, in light of the following factors:
  - A. The Pomona WRP discharge contributes the largest flow (effluent dominated) into the South Fork San Jose Creek, within the San Gabriel River watershed, in the vicinity of the discharge point where it overwhelms the receiving water providing very limited mixing and dilution;
  - B. Even in the absence of the Pomona WRP discharge, the receiving water primarily consists of nuisance flows and other effluents, limiting its assimilative capacity;
  - C. Several reaches of the San Gabriel River [including those subject to this Order] are 303(d) listed (i.e., impaired) for certain constituents;
  - D. Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;
  - E. For the protection of the beneficial uses listed in Finding 23;
  - F. Consistent with Antidegradation Policies;
  - G. Because a mixing zone study has not been conducted;

- H. Because hydrologic models of the discharge and the receiving waters have not been conducted;
- I. Because there has been no Site-specific Soil Attenuation Study nor Fate and Transportation Modeling performed.
- 44. Specific effluent limitations for each constituent contained in this order were developed in accordance with the foregoing laws, regulations, plans, policies, and guidance. The specific methodology and example calculations are documented in the fact sheet prepared by Regional Board staff that accompanies this Order.

#### REASONABLE POTENTIAL ANALYSIS

- 45. As specified in 40 CFR, Part 122.44(d)(1)(i), permits are required to include limits for all pollutants "which the Director (defined as the Regional Administrator, State Director, or authorized representative in 40 CFR, Part 122.2) determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard."
  - A. Using the method described in the TSD, the Regional Board has conducted Reasonable Potential Analysis (RPA) for:
    - 1. <u>Chronic Toxicity</u> - RPA was conducted for Chronic Toxicity (Table R2 of the accompanying Fact Sheet) using the discharger's effluent data from their ROWD and annual self monitoring reports. Chronic Toxicity effluent data is summarized in Table D1 of the accompanying Fact Sheet. The RPA compares the effluent data with USEPA's 1 TUc water quality criteria. The Discharger's effluent demonstrated Chronic Toxicity during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause toxicity in the receiving water and, consistent with SIP section 4, the Order contains a narrative effluent limitation for Chronic Toxicity. The circumstances warranting a numeric Chronic Toxicity effluent limitation were reviewed by the State Board in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, the State Board adopted Order No. WQO 2003-0012, deferring the numeric chronic toxicity effluent limitation issue until the adoption of Phase II of the SIP, and replaced the numeric chronic toxicity effluent limitation with a narrative effluent limitation for the time being.
    - 2. <u>Ammonia-N, other Nitrogen Species, and MBAS</u> RPA was conducted for Ammonia, Nitrate plus Nitrite as Nitrogen, Nitrite Nitrogen, and MBAS (Table **R2** of the accompanying Fact Sheet) using the Discharger's effluent data from their self monitoring reports. Ammonia, Nitrate plus Nitrite as Nitrogen, and Nitrite Nitrogen effluent data is summarized in Table A1 of the accompanying Fact Sheet. Temperature and pH effluent data is summarized in Table A1 of the accompanying Fact Sheet. The RPA

compares the effluent data with the Basin Plan WQOs. The Discharger's effluent exceeded the Basin Plan WQOs for Ammonia, Nitrate plus Nitrite as Nitrogen, and Nitrite Nitrogen, during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause or contribute to an exceedance of the Basin Plan WQOs and, consistent with 40 CFR 122.44(d), the Order contains numeric effluent limitations for Ammonia, Nitrate plus Nitrite as Nitrogen, and Nitrite Nitrogen.

- B. Using the method described in the SIP, the Regional Board has conducted RPA for priority pollutants using the discharger's effluent data contained in Table D1. The RPA compares the effluent data with water quality objectives in the Basin Plan and CTR.
  - 1. **Reasonable Potential Determination -** The RPA (per the SIP) involves identifying the observed maximum pollutant concentration in the effluent (MEC) for each constituent based on the effluent concentration data. There are three tiers to determining reasonable potential. If any of the following three tiers is triggered, then reasonable potential exists:
    - a. For the first tier, the MEC is compared with the lowest applicable Water Quality Objective (WQO), which has been adjusted for pH, hardness and translator data, if appropriate. If the MEC is greater than the (adjusted) WQO, then there is reasonable potential for the constituent to cause or contribute to an excursion above the WQO and a WQBEL is required. However, if the pollutant was not detected in any of the effluent samples and all of the reported detection limits are greater than or equal to the WQO, proceed with Tier 2. The Regional Board exercised its discretion in identifying all available, valid, relevant, representative data and information in accordance with SIP Section 1.2 (page 8).
    - b. For the second tier, if the MEC is less than the adjusted WQO, then the observed maximum ambient background concentration (B) for the pollutant is compared with the adjusted WQO. If B is greater than the adjusted WQO, then a WQBEL is required. If B is less than the WQO, then a limit is only required under certain circumstances to protect beneficial uses. If a constituent was not detected in any of the effluent samples and all of the detection limits are greater than or equal to the adjusted WQO, then the ambient background water quality concentration is compared with the adjusted WQO. The Regional Board exercised its discretion in identifying all available, applicable ambient background data in accordance with SIP Section 1.4.3 (page 16).
    - c. For the third tier, other information is used to determine RPA, such as the current CWA 303(d) List. Section 1.3 of the SIP describes

the type of information that can be considered in Tier 3.

For all parameters that have reasonable potential to cause or contribute to an exceedance of a WQO/criteria, numeric WQBELs are required. Section 1.4, Step 5 of the SIP (Page 8) states that MDELs shall be used for POTWs in place of average weekly limitations. WQBELs are based on CTR, USEPA water quality criteria, and Basin Plan objectives.

If the data are unavailable or insufficient to conduct the RPA for the pollutant, or if all reported detection limits of the pollutant in the effluent are greater than or equal to the WQO, the Regional Board shall establish interim requirements, in accordance with Section 2.2.2. of the SIP, that require additional monitoring for the pollutant in place of a WQBEL. The effluent monitoring data from July 1995 to December 2003 indicate that the following constituents were not detected and their lowest detection limits were greater than their corresponding CTR WQO: 2,3,7,8-TCDD, benzidine, benzo(a)anthracene, 3,3'-dichlorobenzidine, 1,2-diphenylhydrazine, hexachlorobenzene, aldrin, chlordane, 44'-DDD, dieldrin, heptachlor, heptachlor epoxide, PCBs, and toxaphene.

Therefore these constituents require interim requirements. Section 2.4.5 of the SIP discusses how compliance will be determined in those cases. The Discharger should work with the laboratory to lower detection levels to meet applicable and reliable detection limits; follow procedures set forth in 40 CFR Part 136; and, report the status of their findings in the annual report. During the term of the permit, if and when monitoring with lowered detection limits shows any of the priority pollutants at levels exceeding the applicable WQOs, the Discharger will be required to initiate source identification and control for the particular pollutant. Appendix 4 of the SIP lists the minimum levels and laboratory techniques for each constituent.

Upon completion of the required monitoring, the Regional Board shall use the gathered data to conduct RPA and determine if a WQBEL is required. However, if Tier 1 or Tier 3 triggered reasonable potential for a pollutant, then the lack of receiving water data for Tier 2 evaluation would not prohibit the establishing of WQBELs in the permit.

A numerical limit has not been prescribed for a toxic constituent if it has been determined that it has no reasonable potential to cause or contribute to excursions of water quality standards. However, if the constituent had a limit in the previous permit, and if none of the Antibacksliding exceptions apply, then the limit will be retained. A narrative limit to comply with all water quality objectives is provided in *Standard Provisions* for the priority pollutants, which have no available numeric criteria.

2. **RPA Data -** The RPA was based on effluent monitoring data for July 1995 through November 2003, including interim monitoring results from July

2001 to December 2002. Table R1 of the fact sheet summarizes the RPA, lists the constituents, and where available, the lowest, adjusted WQO, the MEC, the "Reasonable Potential" result, and the limits from the previous permit.

- Metals Water Quality Objective For metals, the lowest a. applicable WQO was expressed as total recoverable, and where applicable, adjusted for hardness. A spreadsheet (Table R3) was used to calculate the total recoverable CTR criteria. Hardness values from samples collected in the receiving water upstream of the discharge point are typically averaged and used to determine the appropriate CTR WQO for those hardness-dependent metals. However, there was no receiving water data upstream of the discharge point. Therefore, the average effluent hardness values were used to determine the appropriate CTR WQO for hardness-Individual harness values greater than 400 dependent metals. mg/L were capped at 400 prior to calculating the average hardness. This is consistent with the preamble to the CTR, contained in Federal Register Section E.f. Hardness (p.31692), 40 CFR Part 131.
- b. Interim Monitoring Requirements - In accordance with the SIP, the Regional Board may impose interim monitoring requirements upon the Discharger, so that the Discharger obtains adequate ambient, background water data for priority pollutants upstream of the discharge point as well as suitable effluent data. The Executive Officer directed the Discharger to begin an interim monitoring program for the duration of 18 months, beginning July 2001. The Discharger collected the eighteen required samples and reported the results quarterly to the Regional Board. After additional information is gathered, Regional Board staff will conduct RPA once again, to determine if additional numeric limitations are necessary. Section 1.3, Step 8, of the SIP authorizes the Regional Board to use the gathered data to conduct RPA, as outlined in Steps 1 through 7, and determine if a water guality-based effluent limitation is required.

A reopener provision is included in this Order that allows the permit to be reopened to allow the inclusion of new numeric limitations for any constituent that exhibits reasonable potential to cause or contribute to exceedance of applicable water quality objectives.

C. The numeric limitations contained in this Order are intended to protect and maintain existing and potential beneficial uses of the receiving waters. Environmental benefits provided by these limitations are reasonable and necessary.

- D. Regional Board staff have determined that lead, mercury, cyanide, and acrylonitrile showed the potential to exceed respective CTR objectives, and, therefore, require CTR-based effluent limitations.
- 46. The Order is consistent with State and Federal antidegradation policies in that it does not authorize a change in the quantity of treated wastewater discharged by the facility, nor does it authorize a change or relaxation in the manner or level of treatment. As a result, both the quantity and quality of the discharge are expected to remain the same consistent with antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show a reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the permit will be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for potential and existing uses and conforms with antidegradation policies and antibacksliding provisions.

### 47. **N-Nitrosodimethylamine (NDMA)**

- A. NDMA is a by-product found in the effluent of POTWs, which use chlorination as a primary form of disinfection. There was RPA (Tier 3) for the Pomona WRP effluent to exceed the CTR human health organisms only criteria, therefore a CTR-based effluent limitation was included in this Order. NDMA has been detected every month in the final effluent since July 2000, when DHS directed the Discharger to initiate monthly NDMA sampling. The highest detected concentration of NDMA at the Pomona WRP was 1266 ng/L (on February 11, 2002). This concentration exceed DHS' Action Level of 10 ng/L for drinking water by a factor of up to 120.
- B. In addition to the recharge of effluent that occurs in unlined portions of the San Gabriel River and San Jose Creek, the Water Replenishment District recharges the Rio Hondo and San Gabriel Spreading Grounds, located in the Montebello Forebay, with effluent purchased from CSDLAC's Pomona, Whittier Narrows and San Jose Creek WRPs, under WRRs (Order No. 91-100), adopted by the Regional Board on September 9, 1991. Although there were data presented to both the Regional Board and DHS that there is significant attenuation by both soil and sunlight in the spreading basins located approximately 20 miles away from the Pomona WRP, recent data from monitoring wells located at the Rio Hondo Speading Ground have detected increasing NDMA concentrations below the AL. Monitoring wells located at the San Gabriel Spreading Grounds have detected increasing concentrations of NDMA above the AL (up to 460 ng/L, on 10/23/03).
- C. There has not been any site-specific groundwater monitoring data (for those areas underlying the reaches of the San Jose Creek and San Gabriel River recharged by the Pomona WRP's effluent) submitted to the Regional Board to determine if an attenuation factor should be applied. Groundwater is thought to occur at approximately 60 feet below ground surface.
- D. On April 15, 2004, CSDLAC submitted information to the Regional Board detailing the measures they have taken and plan to take to address NDMA. The following

table summarizes the major efforts:

Project	Timeline
Source Control/Pollution Prevention	1980's - ongoing
Study NDMA formation process in POTWs	2000 - ongoing
Divert filter backwash water to the JWPCP Plant	June 2002 - ongoing
Optimize chlorination disinfection chemical usage	March 2004
Obtain laboratory equipment more sensitive analytical	June 2004
detection levels	
Optimize polymer usage	June 2004
Conduct site specific hydrologic modeling and study	June 2004 – June 2007
attenuation of NDMA in GW basins through Soil Aquifer	
Treatment	
Study destruction of NDMA by photolysis at Long Beach WRP	Fall 2004
UV Pilot Project at Whittier Narrows WRP	
Preliminary Investigation	Oct. 2003 – April 2004
Research	Jan. 2004 – Feb. 2005
UV Equipment procurement	June 2004 – Oct. 2005
Design of UV facilities	April 2004 – July 2005
Construction	July 2005 – Aug. 2006
Full scale evaluation	June 2006 – June 2007
Collaborative Studies	
Removal/destruction of NDMA and its precursors in WTPs	Jan. 2001 – Sept. 2004
Low cost analytical methods for measuring NDMA	Nov. 2002 – Aug. 2004
Fate and transport of NDMA in irrigation reuse water	April 2003 – Oct. 2005

- 48. **Pollutant Minimization Program -** The Discharger shall be required to conduct a Pollutant Minimization Program (PMP), in accordance with Section 2.4.5.1. of the SIP, when there is evidence that the priority pollutant is present in the effluent above an effluent limitation.
- 49. The Discharger shall propose a plan with a logical sequence of actions to achieve full compliance with the limits in this Order. The first phase of the plan is to investigate the sources of the high levels of contaminants in the collection system. If the sources can be identified, source reduction measures (including, when appropriate, Pollution Minimization Plans) will be instituted. At the time this Order is considered, the Discharger is unsure whether or not all sources contributing to the high contaminant levels can be identified. Therefore, a parallel effort will be made to evaluate the appropriateness of Site Specific Objectives (SSO) and, where appropriate, Use Attainability Analyses (UAA), and modifications to and/or construction of treatment facilities. If it is determined that a SSO or UAA is necessary and appropriate, the Discharger will submit a written request for a SSO study, accompanied by a preliminary commitment to fund the study, to the Regional Board. The Discharger will then develop a workplan and submit it to the Regional Board for approval prior to the initiation of the studies.

#### **INTERIM REQUIREMENTS**

- 50. Lead, Mercury, Cyanide, Acrylonitrile, and Bis(2-ethylhexyl)phthalate. Data submitted in previous self-monitoring reports indicated that these constituents have been detected in the effluent/receiving water, at least once, at a concentration greater than the limits prescribed in this Order. The Pomona WRP, therefore, may not be able to achieve consistent compliance with the limit for these constituents. CSDLAC has the option to conduct studies to obtain the necessary data to develop site-specific objectives for Lead, Mercury, Cyanide, Acrylonitrile, and Bis(2-ethylhexyl)phthalate. Accordingly, CSDLAC shall prepare and submit a draft workplan to the Regional Board for review and approval, prior to implementing the study, if they have optioned to conduct the study.
- 51. 40 CFR, Section 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued, but the current Basin Plan only allows the inclusion of interim limits and compliance schedules in NPDES permits for effluent limits under special circumstances. The SIP allows inclusion of interim limits in NPDES permits for CTR-based priority pollutants. The CTR provides for a five-year maximum compliance schedule, while the SIP allows for longer, TMDL-based compliance schedule. However, the USEPA has yet to approve the longer compliance schedules. Therefore, this Order includes interim limits and compliance schedules for CTR-based priority pollutants limits for a maximum of five years, when the Discharger has been determined to have problems in meeting the new limits. This Order also includes a reopener to allow the Regional Board to grant TMDL-based compliance schedules if the USEPA approves the longer compliance schedule provisions of the SIP. For non-CTR-based limits (bis(2ethylhexyl)phthalate) prescribed in this Order based on Basin Plan's WQO, for which the Discharger will not be able to meet immediately, interim limits and compliance dates are provided in the accompanying Time Schedule Order.

On January 30, 2003, the Regional Board adopted Resolution No. 2003-001, *Resolution Amending the Water Quality Control Plan for the Los Angeles Region to Incorporate Language Authorizing Compliance Schedules in NPDES Permits (Compliance Schedule Resolution)*. Resolution No. 2003-001 was approved by State Board, OAL, and USEPA on June 18, 2003, August 18, 2003, and February 10, 2004, respectively, and is now in effect. The *Compliance Schedule Resolution* allows compliance schedules in NPDES permits for effluent limits that implement new, revised or newly interpreted water quality standards, or for effluent limits that implement TMDLs for new, revised or newly interpreted water quality standards. However, since the limit for bis(2-ethylhexyl)phthalate is neither new nor a newly interpreted water quality standard, the Basin Plan Amendment for compliance schedules does not apply to this pollutant.

52. In conformance with the CTR and the relevant provisions of SIP Section 2.1, the Discharger has submitted documentation regarding the efforts they have made to quantify pollutant levels in the discharge and the sources of the pollutants entering the POTW. In addition, the Discharger already has in place a source control and pollutant minimization approach through its existing pollutant minimization strategies and through the pretreatment program. The duration of interim requirements established in this Order was developed in coordination with Regional Board staff and the Discharger, and the proposed schedule is as

short as practicable. The five-year compliance schedule is based on the maximum allowable compliance schedule. However, the Discharger anticipates it may take longer than five years to achieve some of the final limits.

#### PUBLIC NOTIFICATION AND CEQA COMPLIANCE

- 53. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code §21100, et. seq.) in accordance with California Water Code §13389.
- 54. The Regional Board has notified the Discharger and interested agencies and persons of its intent to renew waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.
- 55. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
- 56. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and is effective 50 days (July 30, 2004) from the date of its adoption because of significant public comment, in accordance with federal law, provided the Regional Administrator, USEPA has no objections.
- 57. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

**IT IS HEREBY ORDERED** that the County Sanitation Districts of Los Angeles County, as operator of the Pomona Water Reclamation Plant, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

# I. <u>DISCHARGE REQUIREMENTS</u>

- A. <u>Effluent Limitations</u>
  - 1. Wastes discharged shall be limited to treated municipal and industrial wastewater, groundwater from dewatering activities, and dry weather urban runoff only, discharged from Serial No. 001, as proposed in the ROWD.
  - 2. The discharge of an effluent with constituents in excess of the following

limits is prohibited:

(a) Conventional and non-conventional pollutants:

		Discharge Limitations		
Constituent	Units	Daily Maximum <sup>[2]</sup>	Weekly Average <sup>[1]</sup>	Monthly Average <sup>[1]</sup>
BOD <sub>5</sub> 20°C	mg/L	45	30	20
	lbs/day <sup>[3]</sup>	5,600	3,800	2,500
Suspended solids	mg/L	45	40	15
· · ·	lbs/day <sup>[3]</sup>	5,600	5,000	1,900
Settleable solids	ml/L	0.3		0.1
Oil and grease	mg/L	15		10
	lbs/day <sup>[3]</sup>	1,900		1,200
Total residual chlorine	mg/L	0.1 <sup>[4]</sup>		
Total dissolved solids	mg/L			750
	lbs/day <sup>[3]</sup>			94,000
Chloride	mg/L			180 <sup>[5]</sup>
	lbs/day <sup>[3]</sup>			23,000
Sulfate	mg/L			300
	lbs/day <sup>[3]</sup>			38,000
Boron	mg/L			1.0
	lbs/day <sup>[3]</sup>			130
Fluoride	mg/L			1.6 <sup>[6]</sup>
	lbs/day <sup>[3]</sup>			200
Detergents (as MBAS) <sup>[7]</sup>	mg/L			0.5
	lbs/day <sup>[3]</sup>			63
Nitrite-N (as N)	mg/L			1.0
	lbs/day <sup>[3]</sup>			130
Total inorganic nitrogen	mg/L			8
(nitrate + nitrite as nitrogen)	lbs/day <sup>[3]</sup>			1000
Total ammonia as nitrogen	mg/L	[8]		[9]
	lbs/day	[3]		[3]

[1] Average Monthly Discharge Limitation means the highest allowable average of daily discharge over a calendar month, calculated as the sum of all daily discharges measured during that month divided by the number of days on which monitoring was performed.

Average Weekly Discharge Limitation means the highest allowable average of daily discharge over a calendar week, calculated as the sum of all daily discharges measured during that week divided by the number of days on which monitoring was performed.

[2] The daily maximum effluent concentration limit shall apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring and Reporting Program.

- [3] The mass emission rates are based on the plant design flow rate of 15 mgd, and calculated as follows: Flow (MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.
- [4] For the determination of compliance with total residual chlorine limit, one of the following applies:
  - a. Total residual chlorine concentration excursions of up to 0.3 mg/L, at the point in treatment train immediately following dechlorination, shall not be considered violations of this requirement provided the total duration of such excursions do not exceed 15 minutes during any calendar day. Peaks in excess of 0.3 mg/L lasting less than one minute shall not be considered a violation of this requirement; or
  - b. For continuous total residual chlorine recording devices that require greater than one minute to level off after the detection of a spike: if it can be demonstrated that a stoichiometrically appropriate amount of dechlorination chemical has been added to effectively dechlorinate the effluent to 0.1 mg/L or less, then the exceedance over one minute, but not for more than five minutes, will not be considered to be a violation.
- [5] The limit for chloride (180 mg/L) is based on Resolution 97-02, Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters, adopted by the Regional Board on January 27, 1997.
- [6] The 1.6 mg/L limit for fluoride is based on Basin Plan Table 3-6, Air Temperature and Fluoride Water Quality Objectives at the corresponding average air temperature of 63.5°F. The average temperature was calculated by taking the arithmetic mean of the average daily temperature readings over the past 30 years in the City of Pomona. However, if the CSDLAC provides data showing that the average air temperature differs from 63.5°F, then the permit may be reopened to revise the fluoride limit, if necessary.
- [7] Unlined reaches of San Jose Creek and the San Gabriel River, downstream of the discharge point, are designated with the beneficial use of groundwater recharge (GWR) in the Basin Plan. In order to protect the underlying drinking water basins, this Title 22-based limit is prescribed.
- [8] The Discharger must comply with the updated ammonia water quality objectives in the Basin Plan, Table 3-1 (Attachment H) which resulted from Resolution No. 2002-011 adopted by the Regional Board on April 25, 2002.

For compliance with Criteria Maximum Concentration (CMC) in the Attachment H, the pH sample collected in the receiving water downstream of the discharge and the ammonia nitrogen sample collected in the effluent, shall be taken and reported at the same time. Should there be no receiving water present, the pH of the effluent at the end of pipe shall be determined and reported. However, the Discharger has the option of using average effluent pH and temperature, as approved by the Executive Officer.

[9] The Discharger must comply with the updated ammonia water quality objectives in the Basin Plan, Table 3-3 (Attachment H) which resulted from Resolution No. 2002-011 adopted by the Regional Board on April 25, 2002.

For compliance with Criteria Continuous Concentration (CCC) in the Attachment H, the pH and temperature samples collected in the receiving water downstream of the discharge and the ammonia nitrogen sample collected in the effluent, shall be taken and reported at the same time. Shall there be no receiving water present, the pH and temperature of the effluent at the end of pipe shall be determined and reported. However, the Discharger has the option of using average effluent pH and temperature, as approved by the Executive Officer.

(b) Toxic pollutants:

CTR # <sup>[1]</sup>	Constituent	Units	Monthly Average <sup>[2]</sup>	Daily Maximum
4	Cadmium	μg/L	5	
		lbs/day <sup>[4]</sup>	0.6	
7	Lead <sup>[3]</sup>	μg/L	6.6 <sup>[5], [6]</sup>	13 <sup>[5], [6]</sup>
		lbs/day <sup>[4]</sup>	0.83 [6]	1.6 <sup>[6]</sup>
8	Mercury	ua/L	0.051 <sup>[5], [6]</sup>	0.10 [5], [6]
		lbs/day <sup>[4]</sup>	0.0064 <sup>[6]</sup>	0.013 <sup>[6]</sup>
14	Cyanide	μg/L	4.2 <sup>[5], [6]</sup>	8.5 <sup>[5], [6]</sup>
		lbs/day <sup>[4]</sup>	0.53 <sup>[6]</sup>	1.1 [6]
18	Acrylonitrile	μg/L	0.66 [5], [6]	1.3 <sup>[5], [6]</sup>
		lbs/day <sup>[4]</sup>	0.083 <sup>[6]</sup>	0.16 [6]
38	Tetrachloroethylene	μg/L	5	
		lbs/day <sup>[4]</sup>	0.6	
68	Bis(2-Ethylhexyl)Phthalate	μg/L	4 <sup>[7]</sup>	
		lbs/day <sup>[4]</sup>	0.5 <sup>[7]</sup>	
77	1,4-Dichlorobenzene	µg/L	5	
	(p-Dichlorobenzene)	lbs/day <sup>[4]</sup>	0.6	
96	N-Nitrosodimethylamine (NDMA)	µg/L	8.1	16
		lbs/day <sup>[4]</sup>	1.0	2.0

- [1] This number corresponds to the compound number found in Table 1 of CTR. It is simply the order in which the 126 priority pollutants were listed in 40 CFR section 131.38 (b)(1).
- [2] Use the requirements in Section IV.E.2 Compliance Determination.
- [3] Concentration expressed as total recoverable.
- [4] The mass emission rates are based on the plant design flow rate of 15 mgd, and calculated as follows: Flow (MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.
- [5] For priority pollutants, Section 2.4.5 of CTR *Compliance Determination*, reads, "Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML."
- [6] This effluent limitation will not be in effect until May 10, 2009, and until that time the Discharger shall comply with the interim limits established in I.A.(9) below.
- [7] This effluent limitation will not be in effect until May 10, 2009, and until that time the Discharger shall comply with the interim limits established in the Time Schedule Order No. R4-2004-0100.

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- 3. The pH of wastes discharged shall at all times be within the range of 6.5 to 8.5.
- 4. The temperature of wastes discharged shall not exceed 86°F.
- 5. Pursuant to 40 CFR sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal by weight for BOD and total suspended solids shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations.
- 6. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions.
- 7. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and the disinfection processes.
- 8. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 2 Nephelometric turbidity units (NTUs); and (b) 5 NTUs more than 5 percent of the time (72 minutes) during any 24 hour period.
- 9. <u>Interim Effluent Limitations</u>
  - a. The Discharger shall comply immediately with the following interim effluent limit until May 10, 2009. Thereafter, the Discharger shall comply with the limitations specified in Section I.A.2.b. of this Order:

CTR#	Constituent	Units	Monthly Average *
7	Lead	μg/L	10
8	Mercury	μg/L	0.1
14	Cyanide	μg/L	19
18	Acrylonitrile	μg/L	1.4

Interim effluent limits were derived statistically at 95% confidence level for monthly

averages and at the 99% confidence level for the daily maximum interim limits. Effluent performance data from July 1995 through December 2001 and the *Plimit*<sup>TM</sup> program, which is based on Appendix E of the TSD, were used to calculate the interim limits. Effluent values ( $x_i$ ) are assumed to be lognormally distributed for data sets\_containing all detects, and delta log-normally distributed for data sets containing detects and non-detects. If there were insufficient data to calculate an interim limit, the monthly average interim limit was set as the maximum effluent concentration detected, in accordance with SIP section 2.2.1 which reads, "Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent."

- b. The Discharger shall submit quarterly progress reports (January 15, April 15, July 15 and October 15) to describe the progress of studies and/or actions undertaken to reduce these compounds in the effluent, and to achieve compliance with the limits in this Order by the above-mentioned deadline. The first progress report shall be received at the Regional board by October 15, 2004.
- 10. To protect underlying ground water basins, pollutants shall not be present in the wastes discharged at levels that pose a threat to ground water quality.
- 11. Acute Toxicity Effluent Limitation:
  - a. The acute toxicity of the effluent shall be expressed and reported as percent survival.
  - b. The acute toxicity of the effluent shall be such that:
    - the average survival in the undiluted effluent for any three (3) consecutive 96-hour static, static-renewal\*, or continuous flow bioassay tests shall be at least 90%, and
    - (ii) no single test producing less than 70% survival.
    - \* Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method, for measuring acute toxicity.
  - c. If either of the above requirements (11.b.i or 11.b.ii) is not met, the Discharger shall conduct six additional tests over a six-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 3 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable

steps to reduce toxicity to meet the limitation.

- d. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.
- e. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (MRP) No. 0755.
- 12. Chronic Toxicity Effluent Limitation and Requirements:
  - a. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

- b. There shall be no chronic toxicity in the effluent discharge.
- c. If the chronic toxicity of the effluent exceeds the monthly median of 1.0 TU<sub>c</sub>, the Discharger shall immediately implement accelerated chronic toxicity testing according to MRP No.0755, Section VI.4.B.d. If any three out of the initial test and the six accelerated tests results exceed 1.0 TU<sub>c</sub>, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in the following section of this Order (Section I.A.13).
- d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 0755.
- e. This permit may be reopened to include effluent limitations for pollutants found to be causing chronic toxicity and to include numeric chronic toxicity effluent limitations based on direction from the State Water Resources Control Board or failure of the District to comply fully with the TRE/TIE requirements.
- 13. <u>Preparation of an Initial Investigation TRE Workplan</u>

The Discharger shall submit a detailed copy of the Discharger's Initial Investigation TRE Workplan to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. The Discharger shall use EPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment C. This Workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- b. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and,
- c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section VI.4.D. for guidance manuals.

#### B. <u>Receiving Water Limitations</u>

- 1. For waters designated with a warm freshwater habitat (WARM) beneficial use, the temperature of the receiving water at any time or place and within any given 24-hour period shall not be altered by more than 5°F above the natural temperature (or above 70°F if the ambient receiving water temperature is less than 60°F) due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.
- 2. The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of wastes discharged. Natural conditions shall be determined on a case-by-case basis.
- 3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.
- 4. The fecal coliform concentration in the receiving water shall not exceed a log mean of fecal coliform concentration in the receiving water shall not exceed the following, as a result of wastes discharged:
  - a. Geometric Mean Limits
    - i. E.coli density shall not exceed 126/100 mL.
    - ii. Fecal coliform density shall not exceed 200/100 mL.
  - b. Single Sample Limits
    - i. E.coli density shall not exceed 235/100 mL.

- ii. Fecal coliform density shall not exceed 400/100 mL.
- 5. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits, as a result of wastes discharged:
  - a. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%, and
  - b. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.
- 6. The wastes discharged shall not produce concentrations of toxic substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.
- 7. The wastes discharged shall not cause concentrations of contaminants to occur at levels that are harmful to human health in waters which are existing or potential sources of drinking water.
- 8. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.
- 9. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.
- 10. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
- 11. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
- 12. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.
- 13. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.
- 14. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.
- 15. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically

undesirable discoloration of the receiving waters.

- 16. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.
- 17. The wastes discharged shall not contain radionuclides in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in accumulation of radionuclides in the food web to an extent that present a hazard to human, plant, animal, or aquatic life.
- 18. <u>Acute Toxicity Receiving Water Quality Objective</u>
  - a. There shall be no acute toxicity in ambient waters as a result of wastes discharged.
  - b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
  - c. The acute toxicity of the receiving water, at the station located immediately downstream of the discharge, R-A, including mixing zone shall be such that: (i) the average survival in the undiluted receiving water for any three (3) consecutive 96-hour static, static-renewal\*, or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.
    - \* Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method, for measuring acute toxicity.
- 19. <u>Chronic Toxicity Receiving Water Quality Objective</u>
  - a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.
  - b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
  - c. If the chronic toxicity of the receiving water, at the station located immediately downstream of the discharge, R-A, exceeds a monthly median of 1.0 TU<sub>c</sub> in a critical life stage test and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall immediately implement an accelerated chronic toxicity testing according to Monitoring and Reporting Program CI 0755, section VI.4.B.d. If two of the six tests exceed 1.0 TU<sub>c</sub>, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in

Section I.A.13 of this Order.

d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 0755.

#### II. SLUDGE REQUIREMENTS

- A. The Discharger shall comply with the requirements of 40 CFR, Part 503, in general, and in particular the requirements in Attachment B of this Order, [*Biosolids Use and Disposal Requirements*]. These requirements are enforceable the USEPA.
- B. The Discharger shall comply, if applicable, with the requirements in State issued statewide general Waste Discharge Requirements (WDRs) Order No. 2000-10-DWQ, tilted "General waste Discharge Requirements for the Discharge of Biosolids to Land for use as a soil Amendment in Agricultural, Silvicultural and Horticultural and Land Reclamation Activities" adopted in August 2000.
- C. The Discharger shall comply, if applicable, with WDRs issued by other Regional Boards to which jurisdiction the Pomona WRP's biosolids are transported and applied.

D. The Discharger shall furnish this Regional Board with a copy of any report submitted to USEPA, State Board or other regional board with respect to municipal sludge or biosolids.

### III. <u>PRETREATMENT REQUIREMENTS</u>

- A. This Order includes the Discharger's approved Pretreatment Program as an enforceable condition. The Discharger is required to implement and enforce the pretreatment program in its entire service area, including the contributing jurisdictions.
- B. The Discharger shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order. As described in finding 4 of this Order, the Pomona WRP is part of the JOS, consisting of the Joint Water Pollution Control Plant (JWPCP) and the upstream plants. In the reevaluation of the local limits, the Discharger shall consider the effluent limitations contained in this Order, the contributions from the upstream WRPs in the JOS, and other relevant factors due to the interconnection of the Districts' WRPs within the JOS. The Discharger shall submit to the Regional Board revised local limits, as necessary, for Regional Board approval based on the schedule specified in the NPDES Permit issued to the JWPCP. In addition, the Discharger shall consider collection system overflow protection from such constituents as oil and grease, etc. Lack of adequate local limits shall not be a defense against liability for violations of effluent limitations and overflow prevention requirements contained in this Order.
- C. Any substantial modifications to the approved Pretreatment Program, as defined in 40 CFR 403.18(b), shall be submitted in writing to the Regional Board and shall not become effective until Regional Board approval is obtained.
- D. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Federal Clean Water Act with timely, appropriate, and effective enforcement actions. The Discharger shall require industrial users to comply with Federal Categorical Standards and shall initiate enforcement actions against those users who do not comply with the standards. The Discharger shall require industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.
- E. The Discharger shall perform the pretreatment functions as required in Federal Regulations 40 CFR, Part 403 including, but not limited to:
  - 1. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
  - 2. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

- 3. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and,
- 4. Provide the requisite funding and personnel to implement the Pretreatment Program as provided in 40 CFR 403.8(f)(3).
- F. The Discharger shall submit semiannual and annual reports to the Regional Board, and USEPA, Region 9, describing the Discharger's pretreatment activities over the period. The annual and semiannual reports (and quarterly reports, if required) shall contain, but not be limited to, the information required in the attached Pretreatment Reporting Requirements (Attachment P), or an approved revised version thereof. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.
- G. The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 CFR, Part 403, including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

# IV. REQUIREMENTS AND PROVISIONS

- A. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
- B. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic and pretreatment effluent standards, and all federal regulations established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 316, 403 and 405 of the Federal Clean Water Act and amendments thereto.
- C. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (*Standard Provisions*) (Attachment N). If there is any conflict between provisions stated herein and the Standard Provisions, those provisions stated herein prevail. Conditions pertaining to bypass are contained in Standard Provisions sections B.13, B.20, and B.23, G.1. The bypass or overflow of untreated or partially treated wastewater to waters of the State is prohibited, except as allowed under conditions stated in 40 CFR sections 122.41(m)(2),

(m)(4), and (n). Consistent with those provisions, during periods of elevated, wetweather flows, the operational diversion of secondarily treated wastewater around the tertiary filters is allowable provided that the combined discharge of fully treated and partially treated wastewater complies with the effluent and receiving water limitations in this Order.

- D. This Order includes the attached *Monitoring and Reporting Program* (Attachment T). If there is any conflict between provisions stated in Monitoring and Reporting Program and the "Standard Provisions" (Attachment N), those provisions stated in the former prevail.
- E. Compliance Determination
  - 1. Compliance with single constituent effluent limitation If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement III. A. of MRP), then the Discharger is out of compliance.
  - 2. Compliance with monthly average limitations In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:
    - a. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the monthly average limit for that constituent, the Discharger has demonstrated compliance with the monthly average limit for that month.
    - b. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals. All analytical results shall be reported in the monitoring report for that month, or the subsequent month.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement III. A. of MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement III. D. of *M&RP*), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

c. In the event of noncompliance with a monthly average effluent

limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.

- d. If only one sample was obtained for the month or more than a monthly period and the result exceeds the monthly average, then the Discharger is in violation of the monthly average limit.
- 3. Compliance with effluent limitations expressed as a sum of several constituents If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.
- 4. Compliance with effluent limitations expressed as a median in determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and
  - a. If the number of measurements (n) is odd, then the median will be calculated as =  $X_{(n+1)/2}$ , or
  - b. If the number of measurements (n) is even, then the median will be calculated as =  $[X_{n/2} + X_{(n/2)+1}]$ , i.e. the midpoint between the n/2 and n/2+1 data points.

Consecutive exceedances of the coliform 7-day median effluent limitation, which take place within a calendar week and result from a single operational upset, shall be treated as a single violation.

- 5. Compliance with the receiving water temperature limitation If the receiving water temperature, downstream of the discharge, exceeds 80 °F as a result of:
  - i. high temperature in the ambient air, or
  - ii. high temperature in the receiving water upstream of the discharge,

then the exceedance shall not be considered a violation.

F. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with section II.E.3., if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

- G. Pollutant Minimization Program (PMP)
  - 1. The goal of the PMP is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures, in order to maintain the effluent concentration at or below the effluent limitation.

Pollution prevention measures may be particularly appropriate for persistent biocumulative priority pollutants where there is evidence that beneficial uses are being impacted. The completion and implementation of a Pollution Prevention Plan, required in accordance with California Water Code Section 13263.3 (d) shall fulfill the PMP requirements in this section.

- 2. The Discharger shall develop a PMP if all of the following conditions are true, and shall submit the PMP to the Regional Board within 120 days of determining the conditions are true:
  - a. The calculated effluent limitation is less than the reported minimum level;
  - b. The concentration of the pollutant is reported as "Detected, but Not Quantified", DNQ;
  - c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
- 3. The Discharger shall also develop a PMP if all of the following conditions are true, and shall submit the PMP to the Regional Board within 120 days of determining the conditions are true:
  - a. The calculated effluent limitation is less than the method detection limit;
  - b. The concentration of the pollutant is reported as "Not-Detected", ND;
  - c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
- 4. The Discharger shall consider the following in determining whether the pollutant is present in the effluent at levels above the calculated effluent limitation:
  - a. health advisories for fish consumption;

- b. presence of whole effluent toxicity;
- c. results of benthic or aquatic organism tissue sampling;
- d. sample results from analytical methods more sensitive than methods included in the permit;
- e. the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the method detection limit.
- 5. Elements of a PMP. The PMP shall include actions and submittals acceptable to the Regional Board including, but not limited to, the following:
  - a. An annual review and semi-annual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
  - b. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
  - c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;
  - d. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,
  - e. An annual status report that shall be sent to the Regional Board including:
    - i. All PMP monitoring results for the previous year;
    - ii. A list of potential sources of the reportable pollutant;
    - iii. A summary of all action taken in accordance with control strategy; and,
    - iv. A description of actions to be taken in the following year.

- H. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.
- I. The Discharger shall protect the facility from inundation, which could occur as a result of a flood having a predicted frequency of once in 100 years.
- J. The Discharger shall comply with the requirements of the State Board's General NPDES Permit No. CAS000001 and *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* (Order No. 97-03-DWQ) by continuing to implement a SWPPP and conducting the required monitoring.
- K. The Discharger may plan to conduct studies to obtain data in support of developing site-specific objectives (SSOs) for mercury, acrylonitrile, or bis(2-ethylhexyl)phthalate for the protection of human health from the consumption of organisms, or an SSO for lead, or cyanide for protection of aquatic life. In such event, the Discharger shall submit to Regional Board staff a detailed work plan for these studies within one year of adoption of this permit. The work plan shall provide a schedule consistent with Effluent Limitation I.A.9.a for development and adoption of site-specific objectives for these constituents.
- L. The Discharger shall submit a summary report to this Regional Board, by March 31, 2005, on the management and maintenance of the Discharger collection system. This report shall describe plans to upgrade the collection system, include a schedule and timeline of the major milestones of the upgrade, include maps of the Discharger collection system and any collection system not owned and operated by the Discharger, and include both current and future programs in relation to maintenance of the collection system.

# V. <u>REOPENERS AND MODIFICATIONS</u>

- A. This Order may be reopened and modified, in accordance with SIP section 2.2.2.A to incorporate the results of revised reasonable potential analyses to be conducted upon receipt of additional data.
- B. This Order may be modified, in accordance with the provisions set forth in 40 CFR, Parts 122 and 124 to include requirements for the implementation of the watershed protection management approach.
- C. The Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.

- D. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR, Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the District for an Order modification, revocation and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- E. This Order may be modified, in accordance with the provisions set forth in 40 CFR, Parts 122 to 124, to include new MLs.
- F. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, or the adoption of a TMDL for the San Gabriel River Watershed.
- G. This Order may be reopened and modified to revise the chronic toxicity effluent limitation, to the extent necessary, to be consistent with State Board precedential decisions, new policies, new laws, or new regulations.
- H. This Order will be reopened three years from the effective date of this Order, to reevaluate and possibly modify final effluent limits for NDMA, based on the results of the studies conducted by the Discharger. At that time, the Regional Board will determine if dilution credits, attenuation factors, or metal translators are warranted.
- I. This Order may be reopened and modified if there is a legal opinion by staff council that final limits removed pursuant to a reasonable potential analysis may nonetheless be restored or retained. Such reopener shall be brought to the Regional Board at the earliest opportunity thereafter.

# VI. <u>EXPIRATION DATE</u>

This Order expires on May 10, 2009.

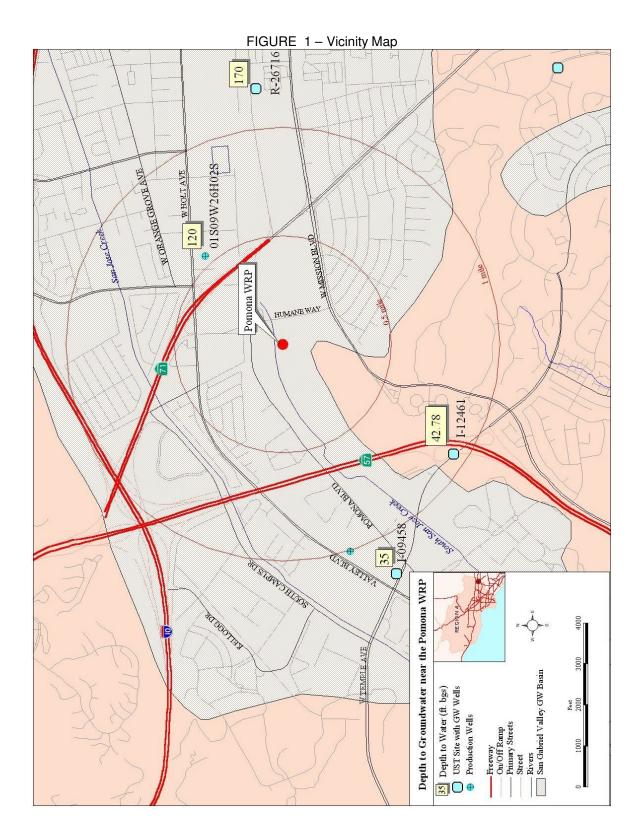
The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

#### VII. <u>RESCISSION</u>

Order No. 95-078, adopted by this Regional Board on June 12, 1995, is hereby rescinded, except for enforcement purposes.

I, Dennis Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 10, 2004.

Dennis Dickerson Executive Officer



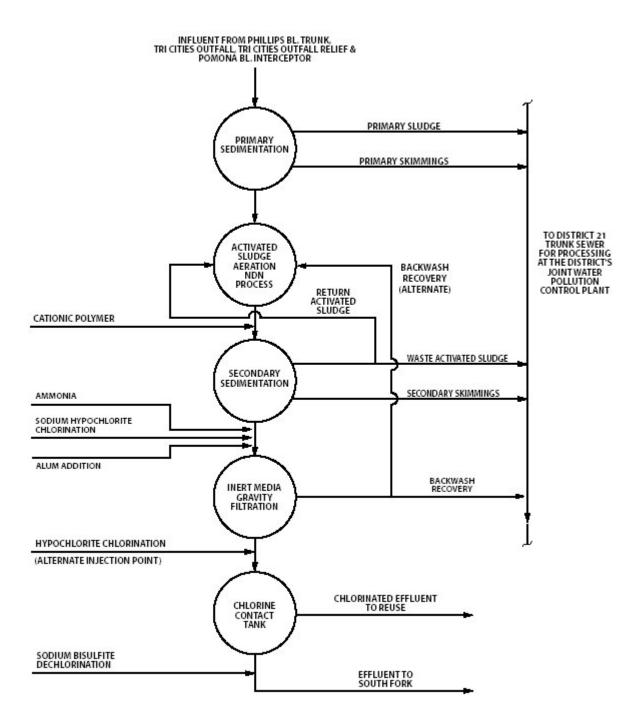


FIGURE 2 – PROCESS SCHEMATIC

CA0053619 Order No. R4-2004-0099

FIGURE 3