

California Regional Water Quality Control Board
Santa Ana Region

May 19, 2006

ITEM: *8

SUBJECT: Renewal of Waste Discharge Requirements and Master Reclamation Permit for the Inland Empire Utilities Agency's Regional Water Recycling Plants No. 1 and No. 4, Order No. R8-2006-0010, NPDES No. CA0105279, San Bernardino County

DISCUSSION:

See attached Fact Sheet

RECOMMENDATIONS:

Adopt Order No. R8-2006-0010, NPDES No. CA0105279 as presented.

COMMENT SOLICITATION:

Comments were solicited from the discharger and the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers, Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources, Glendale
State Department of Fish and Game, Long Beach
State Department of Health Services, San Bernardino
State Department of Health Services, Carpinteria – Jeff Stone
San Bernardino County Transportation/Flood Control District – Naresh Varma
San Bernardino County Environmental Health Services – Daniel Avera
Orange County Water District - Nira Yamachika
City of Chino - Public Works Department, Engineering Division – Jim Hill
City of Chino Hills - Public Works Department
Santa Ana River Discharger's Association – Roger Turner
Santa Ana Watershed Project Authority – Joseph Grindstaff
Orange County Coastkeeper
Lawyers for Clean Water C/c San Francisco Baykeeper

California Regional Water Quality Control Board

Region 8, Santa Ana- Region

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 - FAX (951) 781-6288- TDD (951) 782-3221

<http://www.waterboards.ca.gov/santaana>

ORDER NO. R8-2006-0010
NPDES NO. CA0105279

WASTE DISCHARGE AND PRODUCER /USER RECLAMATION REQUIREMENTS FOR THE INLAND EMPIRE UTILITIES AGENCY REGIONAL WATER RECYLING PLANTS NO. 1 & NO. 4 DISCHARGE TO REACH 3 OF SANTA ANA RIVER

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Inland Empire Utilities Agency
Name of Facility 1	Regional Water Recycling Plant No. 1 (RP-1)
Address	2450 East Philadelphia Avenue
	Ontario, CA 91761
	San Bernardino County
Name of Facility 2	Regional Water Recycling Plant No. 4 (RP-4)
Address	12811 Sixth Street
	Rancho Cucamonga, CA 91729
	San Bernardino County

The discharge by the Inland Empire Utilities Agency from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
001	Tertiary treated and disinfected recycled water	33 ° 56' 39" N	117 ° 38' 34" W	Prado Park Lake, unnamed creek tributary to Chino Creek, Chino Creek, and Reach 3 of Santa Ana River Chino North "Maximum Benefit" Groundwater Management Zone+; Chino 1, 2, and 3 "Antidegradation" Groundwater Management Zones+
002	Tertiary treated and disinfected, or secondary treated and disinfected	34 ° 01' 31" N	117 ° 33' 56" W	Reach 1 of Cucamonga Creek, Mill Creek, Chino Creek, and Reach 3 of Santa Ana River
003	Tertiary treated and disinfected	33 ° 56' 39" N	117 ° 38' 34" W	Chino North Groundwater Management Zone; Chino 1, 2 and 3 Groundwater Management Zones+
S-001	Stormwater from RP-1	34°01'36"N	117°35'59" W	Reach 1 of Cucamonga Creek
S-002	Stormwater from RP-1	34°01'28"N	117°35'58"W	Reach 1 of Cucamonga Creek
+ See Fact Sheet (Attachment F)				

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	May 19, 2006
This Order shall become effective on:	July 8, 2006
This Order shall expire on:	May 1, 2011
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, <u>not later than 180 days in advance of the Order expiration date</u> as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that this Order supercedes Order No. 01-01 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that this Order No. R8-2006-0010 with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on May 19, 2006.



Gerard J. Thibeault, Executive Officer

TABLE OF CONTENTS

I. Facility Information 5

II. Findings 5

III. Discharge Prohibitions 11

IV. Effluent Limitations and Discharge Specifications 11

 A. Effluent Limitations – Discharge Points 001 and 002 11

 1. Final Effluent Limitations 11

 2. Interim Effluent Limitations - DPs 001 and 002 13

 3. Toxicity Requirements - DPs 001 and 002 14

 4. Secondary Effluent Limitations - DP 002 15

 B. Land Discharge Specifications - Not Applicable 16

 C. Reclamation Specifications- DP 003 16

V. Receiving Water Limitations and specifications 19

 A. Surface Water Limitations 19

 B. Groundwater Limitations 20

VI. Provisions 21

 A. Standard Provisions 21

 B. Monitoring and Reporting Program Requirements (MRP) 22

 C. Special Provisions 22

 1. Reopener Provisions 22

 2. Special Studies, Technical Reports and Additional Monitoring Requirements 23

 3. Best Management Practices and Pollution Prevention 23

 4. Construction, Operation and Maintenance Specifications 24

 5. Special Provisions for Municipal Facilities (POTWs Only) 25

 6. Other Specific Provisions - Maximum Benefit Provisions 28

 7. Compliance Schedules – DP 001 and DP 002 28

VII. Compliance Determination 28

LIST OF TABLES

Table 1. Discharger Information 1

Table 2. Discharge Location 1

Table 3. Administrative Information 2

Table 4. Facility Information 5

Table 5. Basin Plan Beneficial Uses 8

Table 6. Tertiary Effluent Limitations 11

Table 7. Interim Cyanide Limitations 13

Table 8. Secondary Effluent Limitations 15

Table 9a. Reclaimed Effluent Limitations 16

Table 9b. Reclaimed Effluent TDS Limitations 17

Table 9c. Reclaimed Effluent TIN Limitations 17

LIST OF ATTACHMENTS

Attachment A – Definitions.....A-1
Attachment B – Location Map..... B-1
Attachment C – Flow Schematic..... C-1
Attachment D – Standard Provisions.....D-1
Attachment E – Monitoring and Reporting Program (MRP)..... E-1
Attachment F – Fact Sheet F-1
Attachment G – EPA PPL Table.....G-1
Attachment H – PQL TableH-1
Attachment I – ML Table..... I-1
Attachment J – Stormwater Pollution Prevention PlanJ-1
Attachment K – Stormwater Monitoring and Reporting Requirements.....K-1
Attachment L - Chino Basin Maximum Benefit Commitments L-1
Attachment M – Triggers for Monitoring Priority Pollutants.....M-1

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger		Inland Empire Utilities Agency
Name of Facility 1		Regional Water Recycling Plant No. 1 (RP-1)
Address		2450 East Philadelphia Avenue
		Ontario, CA 91761
		San Bernardino County
Name of Facility 2		Regional Water Recycling Plant No. 4 (RP-4)
Address		12811 Sixth Street
		Rancho Cucamonga, CA 91729
		San Bernardino County
Facility Contact, Title, and Phone		Patrick O. Shields, Executive Manager - Operations, (909) 993-1806
Mailing Address		P. O. Box 9020, Chino Hills, CA 91709
Type of Facility		POTW
Facility Design Flow	RP-1	44 million gallons per day
	RP-4	7 million gallons per day; 14 mgd when expansion is completed in May 2007

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds:

A. Background. The Inland Empire Utilities Agency (hereinafter Discharger) is currently discharging pursuant to Order No. 01-1 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0105279. The Discharger submitted a Report of Waste Discharge, dated June 29, 2005, and applied for a NPDES permit renewal to discharge from its Regional Water Recycling Plant No. 1 (RP-1) and No. 4 (RP-4) (hereinafter Facilities) up to 44 million gallons per day (mgd) and 7 mgd, respectively. RP4 will increase treatment capacity to 14 mgd when plant expansion is completed in May 2007. The application was deemed complete on February 28, 2006.

For the purposes of this Order, references to the “Discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B. Facility Description.** The Discharger owns and operates Regional Water Recycling Plants No. 1 (RP-1) and No. 4 (RP-4). The treatment systems consist of primary, secondary, and tertiary wastewater treatment. Wastewater from RP-1 that is discharged at Discharge Point 001, goes to El Prado Lake, then to Chino Creek, a tributary to Reach 3 of the Santa Ana River. RP-1 and RP-4 both discharge at discharge point 002 to Reach 1 of Cucamonga Creek, also a tributary to Reach 3 of Santa Ana River. The creeks and river are waters of the United States within the Santa Ana River Watershed. Attachment B provides a vicinity map of the facility. Attachment C provides a flow schematic of the treatment system at each facility.
- C. Legal Authorities.** This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. Attachment F, which contains background information and rationale for Order requirements, is hereby incorporated into this Order and, thus constitutes part of the Findings for this Order. Attachments A through E, and G through L are also incorporated into this Order.
- E.** The Regional Water Board has received a request from the Discharger for approval of its regional pretreatment program. The discharger's pretreatment program submittal was made in accordance with 40 CFR 403.9. The Regional Water Board has reviewed the discharger's pretreatment program submission and finds that it complies with the requirements of 40 CFR 403.8. The discharger's request did not ask for a modification of the categorical pretreatment standards under 40 CFR 403.7(b) and (c). The Regional Water Board hereby approves the regional pretreatment program of the Discharger (also referred to as the "Control Authority"). This approval is made in accordance with the requirements of 40 CFR 403.11. The approved pretreatment program and its components, such as Regional Wastewater Ordinance No. 82, local limits, and control mechanisms, among others, are hereby made an enforceable condition of this Order
- F. State law.** The provisions/requirements in subsections IV. C., and V.B. of this Order are included to implement State law only. These provisions are not required or authorized under the federal CWA; consequently, violations of these provisions are not subject to the enforcement remedies that are available for NPDES violations.
- G. California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of Division 13 of the Public Resources Code in accordance with Section 13389 of the CWC. This action also involves the re-issuance of waste discharge requirements for an existing facility that discharges treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15261.

- H. Technology-based Effluent Limitations.** Title 40 of the Code of Federal Regulations (CFR) at Section 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR Part 133 and tertiary treatment or equivalent requirements that meet both the technology-based secondary treatment standards for POTWs and protect the beneficial uses of the receiving waters. The Regional Water Board has considered the factors listed in CWC §13241 in establishing these requirements and Best Professional Judgment (BPJ) in accordance with 40 CFR §125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- I. Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where numeric water quality objectives have not been established for a pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR Section 122.44(d)(1)(vi).
- J. Water Quality Control Plans.** The Regional Water Board adopted a revised Water Quality Control Plan for the Santa Ana Region (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Santa Ana Region addressed through the plan. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment was adopted by the Regional Water Board on January 22, 2004. The State Water Resources Control Board (State Water Board) and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively. The surface water provisions of the Amendment are awaiting approval by the U.S. Environmental Protection Agency. This Order implements those provisions, which, for the Discharger, results in effluent limitations that are at least as stringent as those in the current permit.

In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. In accordance with Resolution No. 88-63, the Regional Board excepted Chino Creek, Reach 1 of Cucamonga Creek and Reach 3 and downstream reaches of the Santa Ana River from the municipal or domestic supply beneficial use.

As discussed in detail in the Fact Sheet (Attachment F), relevant beneficial uses as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Chino Creek	<u>Present or Potential:</u> Water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species.
002, S-001, S-002	Reach 1 of Cucamonga Creek, Chino Creek	<u>Present or Potential:</u> Ground water recharge (GWR), water contact recreation (REC-1), non-contact water recreation (REC-2), wildlife habitat (WILD), and limited warm freshwater habitat.
001 & 002 S-001 S-002	Reach 3 of Santa Ana River	<u>Present or Potential:</u> Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and rare, threatened or endangered species.
001 & 002 S-001 S-002 003	Chino North/Chino 1,2 and 3 Groundwater Management Zones+	<u>Present or Potential:</u> Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
	Downstream groundwater management zone (Orange County)	<u>Present or Potential:</u> Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

+ See Fact Sheet (Attachment F)

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- K.** On April 5, 2005, the Regional Board adopted Order No. R8-2005-0033 for the Inland Empire Utilities Agency and Chino Basin Watermaster, Phase I Chino Basin Recycled Water Groundwater Recharge Project. Order No. R8-2005-0033 regulates the use of recycled water from RP-1 and RP-4 for groundwater recharge. Consequently, this Order does not regulate the use of recycled water for groundwater recharge projects undertaken by the Discharger.
- L. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR, which incorporated the NTR criteria that were applicable in California. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- M. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the California Toxics Rule. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005.

- N. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes compliance schedules and interim effluent limitations and/or discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and/or discharge specifications is included in the Fact Sheet.
- O. 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 the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA 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 USEPA.
- P. Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on pollutants listed. Restrictions on pollutants listed are specified in federal regulations as discussed in Attachment F, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

- Q. Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR Section 131.12 and State Water Board Resolution No. 68-16.
- R. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order No. 01-01.
- S. Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- T. Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- U. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.
- V. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

III. DISCHARGE PROHIBITIONS

- A. Wastewater discharged shall be limited to tertiary treated and disinfected effluent and/or secondary treated and disinfected effluent that meets the conditions and requirements specified in Section IV.
- B. The direct discharge of secondary treated wastewater to Cucamonga Creek other than when the flow¹ in the Creek results in a dilution of 20:1 or more at the point of discharge is prohibited.
- C. The Discharge of wastewater at a location or in a manner different from those described in the Findings is prohibited.
- D. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, excepted as allowed in Standard Provisions - Permit Compliance I. G. of attachment D, Standard Provisions.
- E. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.
- F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Points 001 and 002

1. Final Effluent Limitations

With the exception of free cyanide, the Discharger shall attain and maintain immediate compliance with the following effluent limitations at DPs 001 and 002, with compliance measured at monitoring locations M-001A and M-001B, and M-002A and M-002B, respectively. These monitoring locations are described in the MRP:

- a. The discharge of tertiary treated wastewater shall maintain compliance with the following effluent limitations at DPs 001 and 002:

¹ *Exclusive of discharges to surface waters from upstream public owned treatment works.*

Table 6. Tertiary Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	--	--	--
Total Suspended Solids	mg/L	20	30	--	--	--
pH ²	standard units	--	--	--	6.5	8.5
Total Chlorine Residual ³	mg/L	--	--	--	--	0.1
Ammonia-Nitrogen	mg/L	4.5	--	--	--	--
Cyanide, Free* (effective on October 21, 2007)	µg/L	4.2	--	8.5	--	--
Selenium	µg/L	4.1	--	8.2	--	--
Bis(2-ethylhexyl) phthalate	µg/L	5.9	--	11.8	--	--

* Interim effluent limitations are specified for this constituent in IV. A. 2., below.

- b. The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.
- c. TDS Limitations - The lower of the two total dissolved solids limits specified in 1) or 2), below, is the limit.
 - 1) The Total Dissolved Solids (TDS) concentration of the discharge shall not exceed a 12-month running average concentration limit of 550 mg/L. This limitation may be met on an agency-wide basis using flow weighted averages of the discharges from all treatment plants operated by the Discharger⁴, or
 - 2) The 12-month average total dissolved solids concentration shall not exceed the 12-month average total dissolved solids concentration in the water supply by more than 250 mg/L⁵.
- d. The Total Inorganic Nitrogen (TIN) concentration of the discharge with compliance measured at monitoring locations M-001A and M-002A shall not exceed a 12-month running average concentration of 8 mg/L. This limitation may be met on an agency-wide basis using flow-weighted averages of the discharges from all treatment plants operated by the Discharger.

² See Section VII.L. – Compliance Determination.

³ See Section VII.I. – Compliance Determination.

⁴ The Discharge currently operates the Carbon Canyon Water Reclamation Plant and Regional Plant No. 5, in addition to RP-1 and RP-4.

⁵ See Section VII.M – Compliance Determination

e. Tertiary treated wastewater shall at all times be adequately oxidized, filtered, and disinfected tertiary treated wastewater and shall meet the following limitations:

1) With compliance measured at monitoring location M-001B and M-002A, the turbidity of the filter effluent shall not exceed any of the following:

- a) Average of 2 Nephelometric Turbidity Unit (NTU) within any 24-hour period;
- b) 5 NTU more than 5 percent of the time in any 24-hour period; and
- c) 10 NTU at any time.

2) With compliance measured at monitoring location M-001B and M-002B:

- a) The 7-day median number of total coliform shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml). (see Compliance Determination VII.H.1., below)
- b) The number of total coliform organism shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any 30-day period.
- c) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

f. There shall be no visible oil and grease in the discharge.

2. Interim Effluent Limitations - DPs 001 and 002

a. During the period beginning May 19, 2006 and ending on October 20, 2007, the discharge of tertiary effluent shall maintain compliance with the following limitations at Discharge Points 001 and 002, with compliance measured at Monitoring Locations M-001A and M-002A as described in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 7. Interim Cyanide Effluent Limitations

Discharge Point	Units	Average Monthly	Maximum Daily
001	µg/L	12	24
002	µg/L	7.5	15

3. Toxicity Requirements - DPs 001 and 002

Compliance with toxicity requirements shall be measured at monitoring location M-001A and M-002A:

- a. There shall be no acute or chronic toxicity in the plant effluent nor shall the plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. This Order contains no numeric limitation for toxicity. However, the Discharger shall conduct chronic toxicity monitoring.
- b. The Discharger shall implement the accelerated monitoring as specified in Attachment E when the result of any single chronic toxicity test of the effluent exceeds 1.0 TUc.
- c. The Discharger shall develop an Initial Investigation Toxicity Reduction Evaluation (IITRE) work plan that describes the steps the Discharger intends to follow if required by Toxicity Requirement d.), below. The work plan shall include at a minimum:
 - 1) A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of the exceedance, effluent variability, and/or efficiency of the treatment system in removing toxic substances. This shall include a description of an accelerated chronic toxicity testing program.
 - 2) A description of the methods to be used for investigating and maximizing in-house treatment efficiency and good housekeeping practices.
 - 3) A description of the evaluation process to be used to determine if implementation of a more detailed TRE/TIE is necessary.
- d. The Discharger shall implement the IITRE work plan whenever the results of chronic toxicity tests of the effluent exceed:
 - 1) A two month median value of 1.0 TUc for survival or reproduction endpoint or,
 - 2) Any single test value of 1.7 TUc for survival endpoint.
- e. The Discharger shall develop a detailed Toxicity Reduction Evaluation and Toxicity Identification Evaluation (TRE/TIE) work plan that shall describe the steps the Discharger intends to follow if the implemented IITRE fails to identify the cause of, or to rectify, the toxicity.
- f. The Discharger shall use as guidance, at a minimum, EPA manuals EPA/600/2-88/070 (industrial), EPA/600/4-89-001A (municipal), EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) to identify the cause(s) of toxicity. If during the life of this Order the aforementioned EPA manuals are revised or updated, the revised/updated manuals may also be used as guidance. The detailed TRE/TIE work plan shall include:

- 1) Further actions to investigate and identify the cause of toxicity;
 - 2) Actions the Discharger will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
 - 3) A schedule for these actions.
- g. The Discharger shall implement the TRE/TIE workplan if the IITRE fails to identify the cause of, or rectify, the toxicity, or if in the opinion of the Executive Officer the IITRE does not adequately address an identified toxicity problem.
- h. The Discharger shall assure that adequate resources are available to implement the required TRE/TIE.

4. Secondary Effluent Limitations - DP 002

The discharge of secondary treated and disinfected effluent when the flow⁶ at the monitoring location R-001U in Cucamonga Creek results in a dilution of 20:1 (receiving water flow:wastewater flow) or more at DP 002 shall meet the following effluent limitations:

- a. The discharge of secondary treated wastewater shall maintain compliance with the following effluent limitations, with compliance measured at monitoring location M-002A, as described in the attached MRP (Attachment E):

Table 8. Secondary Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
pH ⁷	standard units	--	--	--	6.5	8.5
Total Residual Chlorine ⁸	mg/L	--	--	--	--	2.1

- b. Secondary treated wastewater shall at all times be adequately oxidized and disinfected wastewater and shall meet the following limitations:
 - 1) With compliance measured at monitoring location M-002B, the number of coliform organisms does not exceed a median of 23 per 100 milliliters as determined from the daily coliform organism values for the last seven (7) days. (see also Compliance Determination VII.L.2., below)

⁶ Exclusive of discharges to surface waters from upstream publicly owned treatment works.
⁷ See Section VII. L. – Compliance Determination.
⁸ See Section VII. I – Compliance Determination.

- 2) With compliance measured at monitoring location M-002A, the discharge shall be considered adequately oxidized if the 5-day @ 20°C Biochemical Oxygen Demand and Total Suspended Solids constituent concentrations of the discharge are less than or equal to the limitations shown in A.4.a, above.
- c. The monthly average biochemical oxygen demand and suspended solids concentrations of the discharge shall not be greater than fifteen percent (15%) of the monthly average influent concentration.

B. Land Discharge Specifications - Not Applicable.

C. Reclamation Specifications- DP 003

- 1. Beginning May 19, 2006, the use of recycled water for golf course/landscape irrigation or other similar uses shall maintain compliance with the following limitations. Compliance is to be measured at representative monitoring location M-001A or other approved monitoring locations where representative samples of recycled water can be obtained for laboratory testing and analysis, as described in the attached MRP (Attachment E). The Discharger shall submit for approval by the Executive Officer other monitoring location(s) not specified herein where representative samples of recycled water could be obtained for laboratory testing and analysis.
 - a. Physical/Biological Limitations with compliance measured at monitoring location:

Table 9a. Recycled Water Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	--	--	--
Total Suspended Solids	mg/L	20	30	--	--	--
pH	standard units	--	--	--	6	9

- b. TDS Limitations: The following TDS limitations apply to recycled water uses, except groundwater recharge, that would affect underlying local Groundwater Management Zone(s). These limitations may be met on an agency-wide basis using flow-weighted averages of the discharges from all treatment plants operated by the Discharger.
 - 1) If maximum benefit is demonstrated (see Provisions VI.C.6.), the 12-month running average total dissolved solids concentration shall not exceed 550 mg/L.
 - 2) If maximum benefit is not demonstrated (see Provisions VI.C.6.), the 12-month running average total dissolved solids concentration shall not exceed the following:

Table 9b. Recycled Water Effluent TDS Limitations

Groundwater Management Zone	TDS, mg/L
Chino 1	280
Chino 2	250
Chino 3	260

- c. Total Inorganic Nitrogen (TIN) Limitations: The following TIN limitations apply to recycled water uses, except groundwater recharge, that would affect underlying local Groundwater Management Zone(s). These limitations may be met on an agency-wide basis using flow-weighted averages of the discharges from all treatment plants operated by the Discharger.
- 1) If maximum benefit is demonstrated (see Provisions VI.C.6.), the 12-month running average TIN concentration in recycled water shall not exceed 8 mg/L.
 - 2) If maximum benefit is not demonstrated (see Provisions VI.C.6.), the 12-month average TIN concentration in recycled wastewater shall not exceed the following limits:

Table 9c. Recycled Water Effluent TIN Limitations

Groundwater Management Zone	TIN
Chino 1	8.9
Chino 2	5.2
Chino 3	6.3

- d. Recycled water shall at all times be adequately oxidized, filtered, and disinfected tertiary treated wastewater and shall meet the following limitations:
- 1) With compliance measured at monitoring location M-001A or M-001B, the turbidity of the filter effluent shall not exceed any of the following:
 - a) Average of 2 Nephelometric Turbidity Unit (NTU) within any 24-hour period;
 - b) 5 NTU more than 5 percent of the time in any 24-hour period; and
 - c) 10 NTU at any time.
 - 2) With compliance measured at monitoring locations M-001A or M-001B, the disinfected effluent shall meet the following limitations:

- a) The 7-day median number of total coliform shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml).
 - b) The number of total coliform organism shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any 30-day period.
 - c) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.
 - d) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time⁹ measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
2. The use of recycled water shall only commence after the California Department of Health Services (CDHS) grants final approval for such use. The Discharger shall provide the Regional Water Board with a copy of the CDHS approval letter within 30 days of the approval notice.
 3. The Discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order, the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, and the "Guidelines for Use of Reclaimed Water" by the California Department of Health Services. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.
 4. The Discharger shall establish and enforce Rules and Regulations for Recycled Water users, governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the uniform statewide recycling criteria established pursuant to the California Water Code Section 13521.
 - a. Use of recycled water by the Discharger shall be consistent with its Rules and Regulations for Recycled Water Use.
 - b. Any revisions made to the Rules and Regulations shall be subject to the review of the Regional Water Board, the California Department of Health Services, and the County of San Bernardino Department of Environmental Health. The revised Rules and Regulations or a letter certifying that the Discharger's Rules and Regulations contain the updated provisions in this Order, shall be submitted to the Regional Water Board within 60 days of adoption of this Order by the Regional Water Board.
 5. The Discharger shall, within 60 days of the adoption of this Order, review and update as necessary its program to conduct compliance inspections of recycled water reuse sites. Inspections shall determine the status of compliance with the Discharger's Rules and Regulations for Recycled Water Use.

⁹ *Modal contact time shall be calculated daily based on the minimum one-hour average value in a 24-hour period.*

6. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in a pollution or nuisance, or adversely affect water quality, as defined in the California Water Code
7. Prior to delivering recycled water to any new user, the Discharger shall submit to the Regional Water Board, the California Department of Health Services and the San Bernardino County Health Department a report containing the following information for review and approval:
 - a. The average number of persons estimated to be served at each use site area on a daily basis.
 - b. The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain, and impoundment to be used.
 - c. The person or persons responsible for operation of the recycled water system at each use area.
 - d. The specific use to be made of the recycled water at each use area.
 - e. The methods to be used to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water and potable water piping systems. This shall include a description of the pressure, dye or other test methods to be used to test the system.
 - f. Plans and specifications which include following:
 - 1) Proposed piping system to be used.
 - 2) Pipe locations of both the recycled and potable systems.
 - 3) Type and location of the outlets and plumbing fixtures that will be accessible to the public.
 - 4) The methods and devices to be used to prevent backflow of recycled water into the potable water system.
 - 5) Plan notes relating to specific installation and use requirements.
8. The Discharger shall require the user(s) to designate an on-site supervisor responsible for the operation of the recycled water distribution system within the recycled water use area. The supervisor shall be responsible for enforcing this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system, maintenance of the distribution and irrigation system plans in "as-built" form, and for the distribution of the recycled wastewater in accordance with this Order.
9. For recycled water used in groundwater recharge, the Order No. R8-2005-0033 applies.

V. RECEIVING WATER LIMITATIONS AND SPECIFICATIONS

A. Surface Water Limitations

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order. The discharge shall not cause the following in El Prado Park Lake, Cucamonga Creek Flood Control Channel, or in downstream Reaches of the Santa Ana River:

- a. Coloration of the receiving waters, which causes a nuisance or adversely affects beneficial uses.
 - b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or affect beneficial uses.
 - c. An increase in the amounts of suspended or settleable solids in the receiving waters, which will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
 - d. Taste or odor-producing substances in the receiving waters at concentrations, which cause a nuisance or adversely affect beneficial uses.
 - e. The presence of radioactive materials in the receiving waters in concentrations, which are deleterious to human, plant or animal life.
 - f. The depletion of the dissolved oxygen concentration below 5.0 mg/L.
 - g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.
 - h. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.
2. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or State Board, as required by the Clean Water Act and regulations adopted thereunder.
 3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels, which are harmful to human health.
 4. The discharge shall not contain constituent concentrations of mercury that will result in the bioaccumulation of methylmercury in fish flesh tissue greater than 0.3 milligram methylmercury/kilogram. (See also Section VI.C.1.b. and VI.C.2., below).

B. Groundwater Limitations

1. The use of recycled water shall not cause the underlying groundwater to be degraded, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance overlying the local Groundwater Management Zone(s).

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions:
 - a. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.
 - b. The Discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.
 - c. The Discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any requirements specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
 - d. The Discharger shall optimize chemical additions needed in the treatment process to meet waste discharge requirements so as to minimize total dissolved solid increases in the treated wastewater.
 - e. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.
 - f. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Water Board's Executive Officer.
 - g. If the Discharger demonstrates a correlation between the biological oxygen demand (BOD₅) and total organic carbon (TOC) concentrations in the effluent to the satisfaction of the Executive Officer, compliance with the BOD₅ limits contained in this Order may be determined based on analyses of the TOC of the effluent.
 - h. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.
 - i. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency
 - j. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, or receiving water limitation of

this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

B. Monitoring and Reporting Program Requirements (MRP)

1. The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected may be reduced back to the levels specified in the original monitoring and reporting program at the discretion of the Executive Officer.

C. Special Provisions

1. Reopener Provisions

- a. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges.
- b. This Order may be reopened to include effluent limitations for pollutants determined to be present in the discharge in concentrations that pose a reasonable potential to cause or contribute to violations of water quality objectives.
- c. This Order may be reopened and modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include the appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to effluent toxicity.
- d. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- e. This Order may be reopened to include an appropriate bioaccumulation based effluent limit for mercury if test results (as required in Attachment E of this Order) show that the concentration levels of methylmercury in the fish tissue are at or above 0.3 milligrams per kilogram.

- f. This Order may be reopened to incorporate appropriate biosolids requirements if the State Water Resources Control Board and the Regional Water Quality Control Board are given the authority to implement regulations contained in 40 CFR 503.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. By June 1, 2006, the Discharger shall notify the Executive Officer of its continuous involvement with the comprehensive mercury investigation program currently being conducted by a group of Santa Ana River system Dischargers. If the Discharger discontinues its involvement with this comprehensive program, the Discharger shall, within 60 days of that date, submit for the approval of the Executive Officer its plan for the annual testing of mercury levels in fish flesh samples collected from the Santa Ana River, upstream of, at, and downstream of the point of the discharge point. Upon approval, the Discharger shall implement the plan.
- b. Toxicity Reduction Requirements.
If the implemented IITRE as specified in Section IV.A.2.d. fails to identify the cause of, or to rectify the toxicity, a Toxicity Reduction Evaluation (TRE) shall be conducted as defined in Attachment A. The Discharger shall take all reasonable steps to control toxicity once the source of toxicity is identified. Failure to conduct the required toxicity tests or a TRE within a designated period shall result in the establishment of effluent limitations for chronic toxicity under this Order and/or appropriate enforcement action.

3. Best Management Practices and Pollution Prevention

- a. Pollutant Minimization Program
 - 1) The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:
 - a) A sample result is reported as DNQ and the effluent limitation is less than the RL;
or
 - b) A sample result is reported as ND and the effluent limitation is less than the MDL.
 - 2) The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:
 - a) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

- b) Quarterly monitoring for the reportable priority pollutant(s) 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 priority pollutant(s) in the effluent at or below the effluent limitation;
- d) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- e) An annual status report that shall be sent to the Regional Water Board including:
 - (1) All PMP monitoring results for the previous year;
 - (2) A list of potential sources of the reportable priority pollutant(s);
 - (3) A summary of all actions undertaken pursuant to the control strategy; and
 - (4) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

- a. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 14, California Code of Regulations.
- b. The Discharger shall provide safeguards to assure that should there be reduction, loss, or failure of electric power, the Discharger will comply with the requirements of this Order.
- c. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:
 - 1) Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.
 - 2) Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
 - 3) Description of laboratory and quality assurance procedures.
 - 4) Process and equipment inspection and maintenance schedules.
 - 5) Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
 - 6) Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Sludge Disposal Requirements

- 1) Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Resources Control Board and Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Water Board's Executive Officer.
- 2) The use and disposal of biosolids shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.
- 3) Any proposed change in biosolids use or disposal practice from a previously approved practice should be reported to the Executive Officer and EPA Regional Administrator at least 90 days in advance of the change.
- 4) The Discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal that has the potential of adversely affecting human health or the environment.

b. Oxidized and Filtered Wastewater Requirements: The Discharger shall submit a monthly report that validates that recycled water used for recharge is an oxidized and filtered wastewater. The report shall include:

- 1) Description of when, how often and whether coagulation of the wastewater is employed in the treatment process. If coagulation is not used at all times, the users shall:
 - a) Continuously monitor the turbidity of the influent to the filters. Turbidity exceedances of 10 NTU or above at any time, and of 5 NTU for more than 15 minutes, shall be included in the monthly report;
 - b) Certify that chemical addition for coagulation has been automatically employed when the filter influent turbidity exceeds 5 NTU for more than 15 minutes.
- 2) Description of the type and rate of filtration employed in the treatment process.

c. Pretreatment Program

- 1) The Discharger¹⁰ shall implement the approved regional pretreatment program (see II. Findings E., above).

¹⁰ For purposes of the pretreatment program, Discharger is synonymous to Control Authority as defined in 40 CFR 403.12

- 2) The Discharger shall update as necessary and implement an acceptable pretreatment program.
- 3) All governmental agencies¹¹ within the sewer service areas of the treatment facility shall comply with the Discharger's approved regional pretreatment program and its components, including the Regional Wastewater Ordinance No. 82, local limits, and control mechanisms.
- 4) The Discharger shall update as necessary the appropriate contractual agreements with all governmental agencies. The contractual agreements shall give the Discharger the authority to implement and enforce the Regional Water Board approved regional pretreatment program within the sewer service areas of the treatment facilities addressed in this Order. The Discharger shall assure that any other steps necessary to provide this implementation and enforcement authority (e.g. adoption of ordinances, etc.) are taken by all governmental agencies. If a governmental agency is implementing its own pretreatment program for any portion of the service area of the treatment facilities, the Discharger shall assure that the governmental agency's pretreatment program is consistent with the Discharger's approved regional pretreatment program. In the event that any agency discharging to Discharger's facilities fails to effectively implement the approved regional pretreatment program, the Discharger shall implement and enforce its approved program within that agency's service area.
- 5) The Discharger shall ensure that the POTW¹² pretreatment program for all contributory agencies discharging to the Discharger's treatment facility are implemented and enforced. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions to Part 403. Where Part 403 or subsequent revisions place mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall submit for approval of the Regional Water Board's Executive Officer, a schedule for implementation of the required actions and shall implement the approved schedule. The schedule for implementation shall be submitted within six months from the date that such mandatory actions are established. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines and other remedies by the EPA, or other appropriate parties, as provided in the CWA, as amended (33 USC 1351 et seq.). The EPA or the Regional Water Board may also initiate enforcement action against an industrial user (IU) for non-compliance with applicable standards and requirements as provided in the CWA.
- 6) The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:
 - a) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

¹¹ Member agencies and sewerage agencies discharging wastewater into the facility.

¹² Publicly owned treatment works.

- b) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - c) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2);
 - d) Publish a list of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii); and
 - e) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
- 7) The following wastes shall not be introduced into the treatment works:
- a) Wastes which create a fire or explosion hazard in the treatment works;
 - b) Wastes which will cause corrosive structural damage to treatment works, but, in no case, wastes with a pH lower than 5.0 unless the works are designed to accommodate such wastes;
 - c) Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency;
 - d) Solid or viscous wastes in amounts that would cause obstruction to the flow in sewers or otherwise interfere with the proper operation of the treatment works.
- 8) The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by EPA under Section 307 of the CWA or amendments thereto for any discharge to the municipal system.
- 9) The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.
- 10) The Discharger shall require each user not in compliance with any pretreatment standard to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the CWA or amendments thereto. The Discharger shall forward a copy of such notice to the Regional Water Board and to the EPA Regional Administrator.

6. Other Specific Provisions - Maximum Benefit Provisions

- a. If the Regional Board finds that the maximum benefit commitments shown in Attachment L are not being satisfied, then the Discharger shall implement a mitigation program approved by the Regional Board for recycled water use in excess of the limitations applicable to the Chino 1, 2 and 3 Groundwater Management Zones (Sections IV.A.1.c. and IV.A.1.d., and Sections IV.C.1.b. and IV.C.1.c. A). A proposed mitigation plan and schedule shall be submitted within 60-days of notification by the Regional Board Executive Officer of the need to do so. The Discharger shall implement the plan and schedule upon approval by the Regional Board.

7. Compliance Schedules – DP 001 and DP 002

- a. This Order requires the Discharger to submit by June 30, 2006 a report that proposes a plan and schedule for achieving compliance with the final free cyanide effluent limitations. The Discharger is required to implement that plan and schedule upon approval by the Executive Officer. Quarterly progress reports are also required to be submitted.
- b. Violation(s) of interim effluent limitations are subject to the same enforcement remedies provided in the Water Code for violation(s) of final effluent limits.
- c. This Order will be reopened to consider appropriate changes to the compliance schedule if and as necessary based on submission of additional justification.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, Dischargers shall be deemed out of compliance with effluent limitations if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data.

When determining compliance with an AMEL for priority pollutants and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

F. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. 12-Month Running Average Effluent Limitation (12-MRAEL).

Compliance with the 12-month running average limits under Discharge Specification IV.A.1.c., IV.A.1.d., IV.C.1.b., and IV.C.1.c. shall be determined by the arithmetic mean of the last twelve monthly averages.

I. Total Chlorine Residual Limitation (TCR).

Compliance determinations for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation for total chlorine residual, the following conditions shall be satisfied:

1. The total time during which the total chlorine residual values are above 0.1 mg/L (or 2.1 mg/L when provided 20:1 dilution) (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
2. No individual excursion from 0.1 mg/L (or 2.1 mg/L) value shall exceed 5 minutes; and
3. No individual excursion shall exceed 5.0 (or 10.5 mg/L) mg/L.

J. Turbidity Limitations.

The Discharger shall be considered in compliance with Discharge Specifications IV.A.1.e. and IV.C.1.d. if the following conditions are met. If the Discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance:

1. There are no excursions above the limits specified in Discharge Specifications IV.A.1.e.(1)(a) and (b) and IV.C.1.e.(1)(a) and (b);
2. Exceedances of the "10 NTU at any time" turbidity requirement do not exceed a duration of one minute.
3. The apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument.

K. Coliform Organism Effluent Limitations.

1. Compliance with the running median total coliform limit expressed in Discharge Specification IV.A.1.e.2). and IV.C.1.d.2) shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.

2. Compliance with the running median total coliform limit expressed in Discharge Specification IV.A.3.c.1). shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 23 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 23 for more than one day in the week.

L. pH Effluent Limitations.

Pursuant to 40 CFR 401.17, the Discharger shall be in compliance with the pH limitations specified in the Discharge Specification IV.A.1.a, above, provided that both of the following conditions are satisfied:

1. The total time during which the pH values are outside the required range of 6.5-8.5 pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

M. TDS Increment Limit.

Compliance with Discharge Specifications IV.A.1.c.2) shall be based on IEUA's (RP-1, RP-4, RP-5, and CCWRF) areawide flow weighted TDS water supply quality and shall be determined from TDS analysis of secondary treated wastewater. The Discharger shall provide the necessary calculations showing the overall TDS water supply quality.

N. Priority Pollutants.

The Discharger 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.

1. Compliance determination shall be based on the reporting level selected from minimum level (ML)¹³ specified in Attachment "I" of this Order, unless an alternative reporting level is approved by the Regional Water Board's Executive Officer. When there is more than one ML value for a given substance, the Discharger shall select the ML value that is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment "I" of this Order. If no ML value is below the effluent limitation, then the Regional Water Board will select as the reporting level the lowest ML value and its associated analytical method.
2. When determining compliance with an average monthly limit and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of detected but not quantified (DNQ) or not detected (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

¹³ *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.*

- a. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ. If a sample result, or the arithmetic mean or median of multiple sample results, is below the reporting level, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a pollutant minimization program (PMP)¹⁴ the Discharger shall not be deemed out of compliance.

O. Non-Priority Pollutants.

The discharge shall be considered to be in compliance with an effluent limitation that is less than or equal to the PQL specified in Attachment H of this Order if the arithmetic mean of all test results for the monitoring period is less than the constituent effluent limitation. Analytical results that are less than the specified PQL shall be assigned a value of zero.

P. Compliance Determination

Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e. g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

Compliance with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), based on a single sample shall be determined by considering the concentrations of individual members of the group to be zero if the analytical response for the individual chemical falls below the method detection limit (MDL or PQL) for that chemical.

¹⁴ *The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation.*

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and
 n is the number of samples.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Bioaccumulative pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV) is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Dilution Ratio is the critical low flow of the upstream receiving water divided by the flow of the effluent discharged.

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Existing Discharger means any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., an existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Load Allocation (LA) is the portion of receiving water's total maximum daily load that is allocated to one of its nonpoint sources of pollution or to natural background sources.

Maximum Daily Flow is the maximum flow sample of all samples collected in a calendar day.

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

MEC: Maximum Effluent Concentration.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of May 14, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Objectionable Bottom Deposits are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by RWQCB(s) on a case-by-case basis.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC Section 13263.3(d), shall be considered to fulfill the PMP requirements. The following reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP). Reporting protocols in the Monitoring and Reporting Program, Attachment E, Section X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. A Reporting Level (RL) is the ML associated with an analytical method selected by the Discharger that is authorized for monitoring effluent limitations under this Order.

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the SWRCB or RWQCB.

Process Optimization means minor changes to the existing facility and treatment plant operations that optimize the effectiveness of the existing treatment processes.

Public Entity includes the federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL) is the ML corresponding to an approved analytical method for reporting a sample result that is selected either from Appendix 4 of the SIP by the Regional Water Board in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a RWQCB basin plan.

Standard Deviation (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

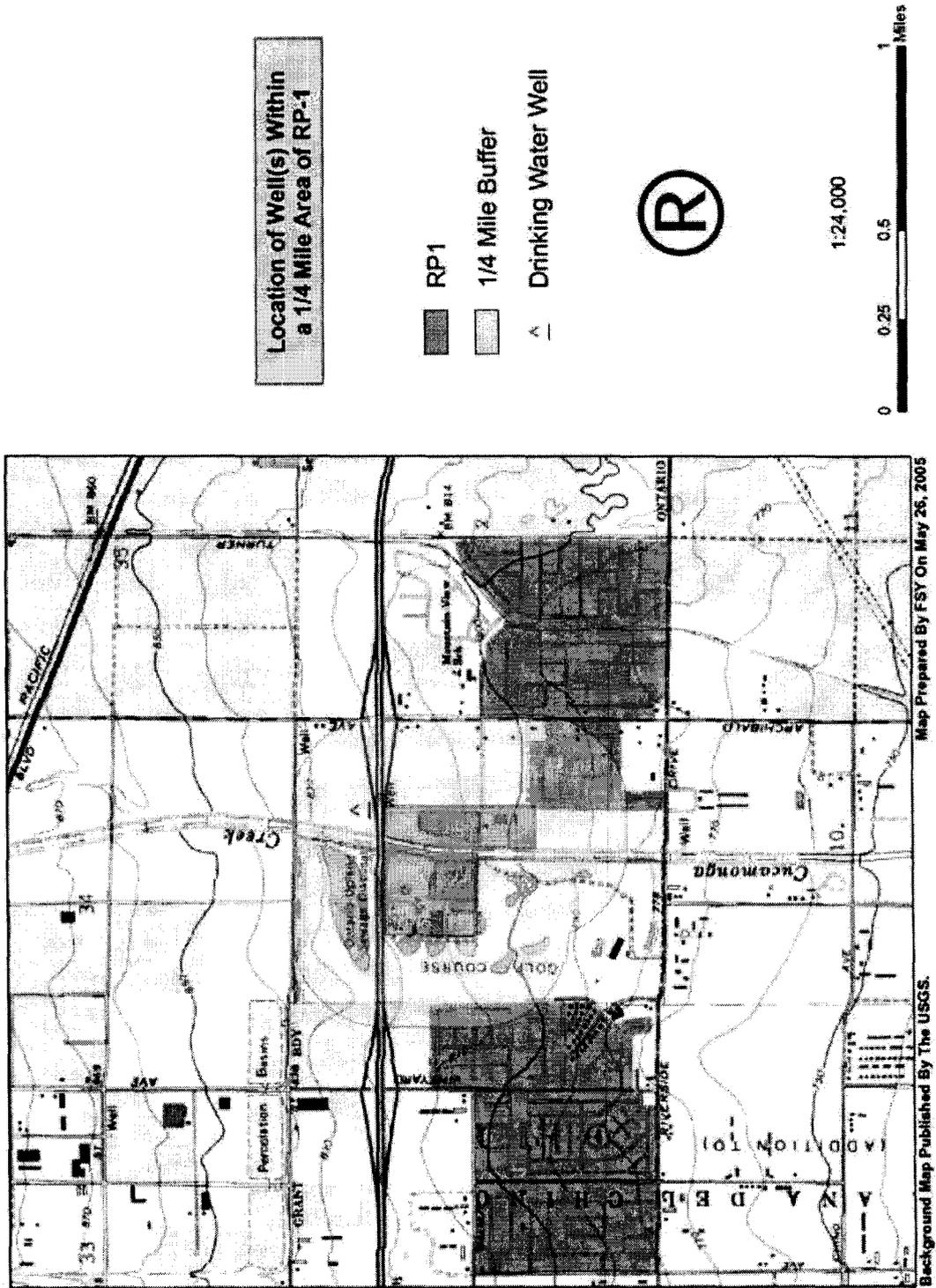
Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

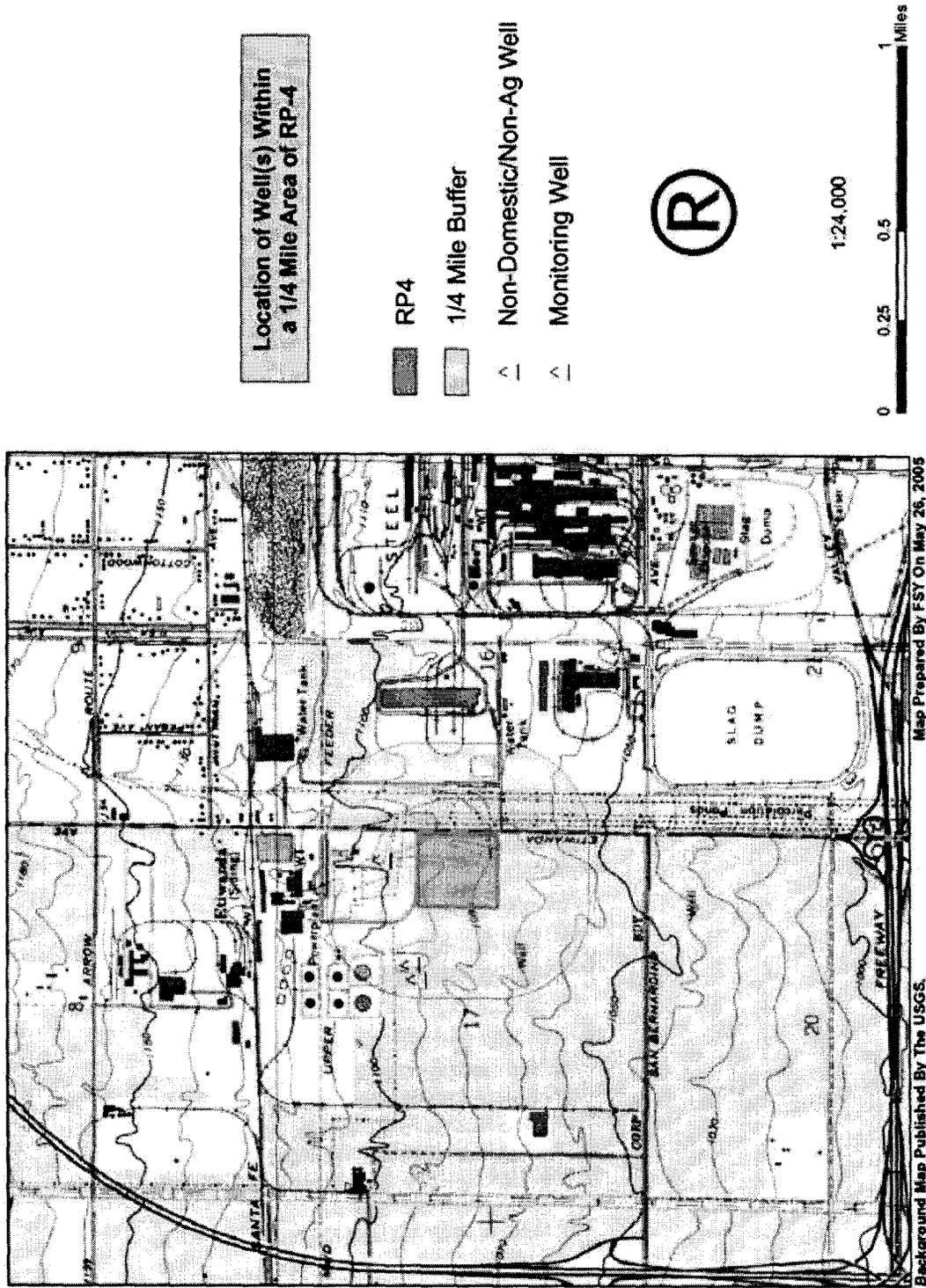
Use Attainability Analysis is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors as described in 40 CFR 131.10(g) (40 CFR 131.3, revised as of July 1, 1997).

Water Effect Ratio (WER) is an appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water.

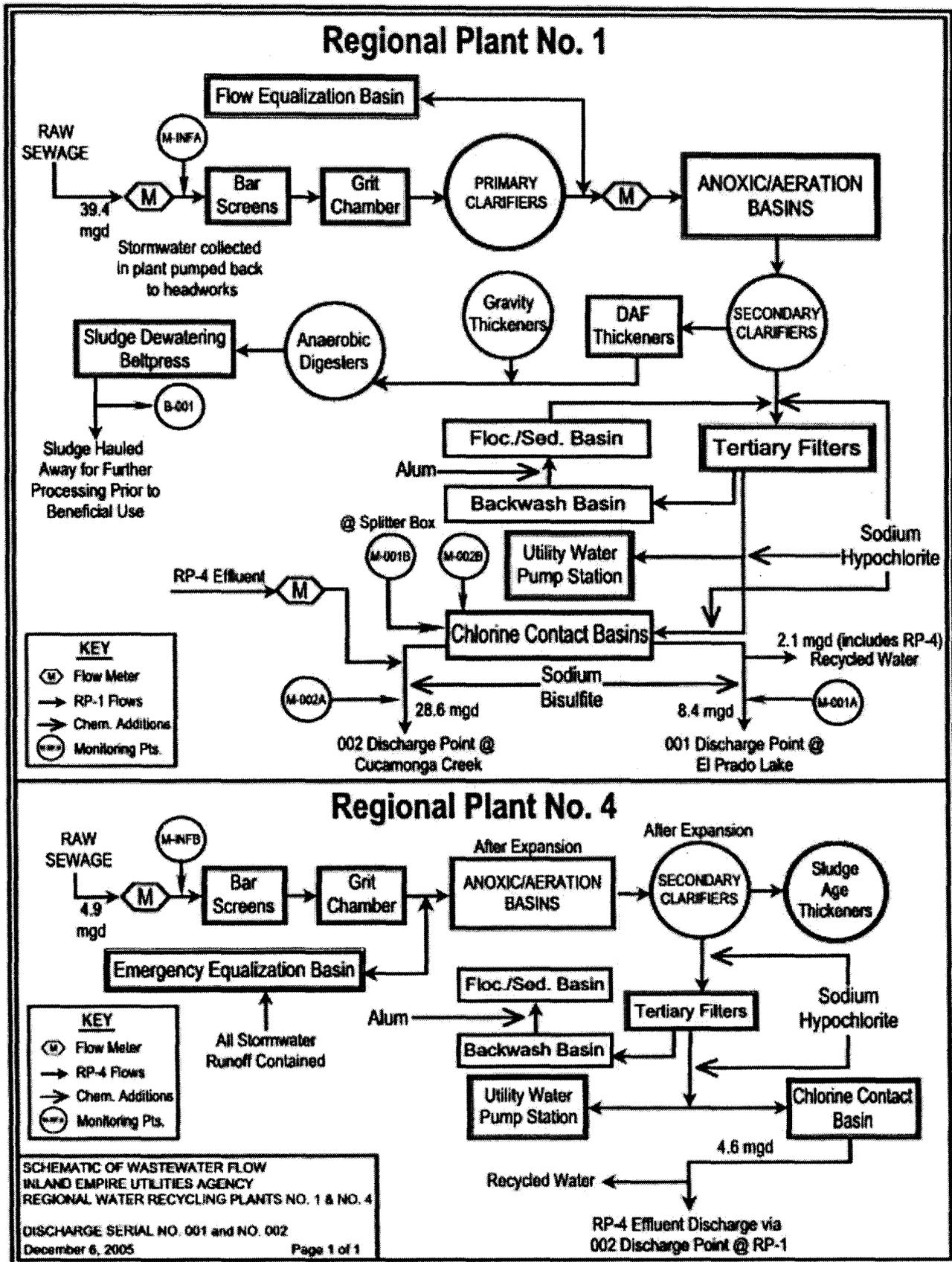
12-Month Running Average Effluent Limitation (12-MRAEL): the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

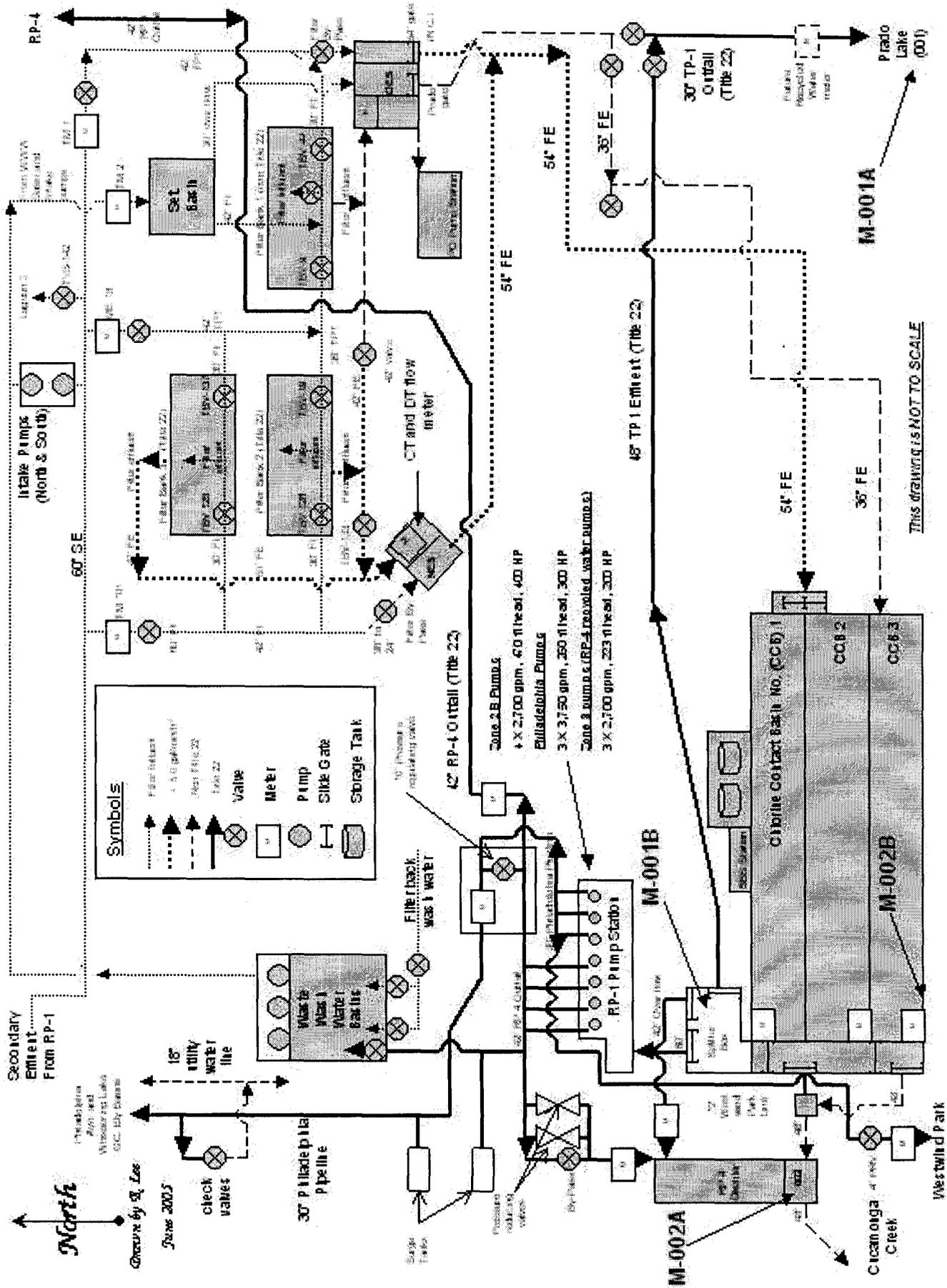
ATTACHMENT B – LOCATION MAPS

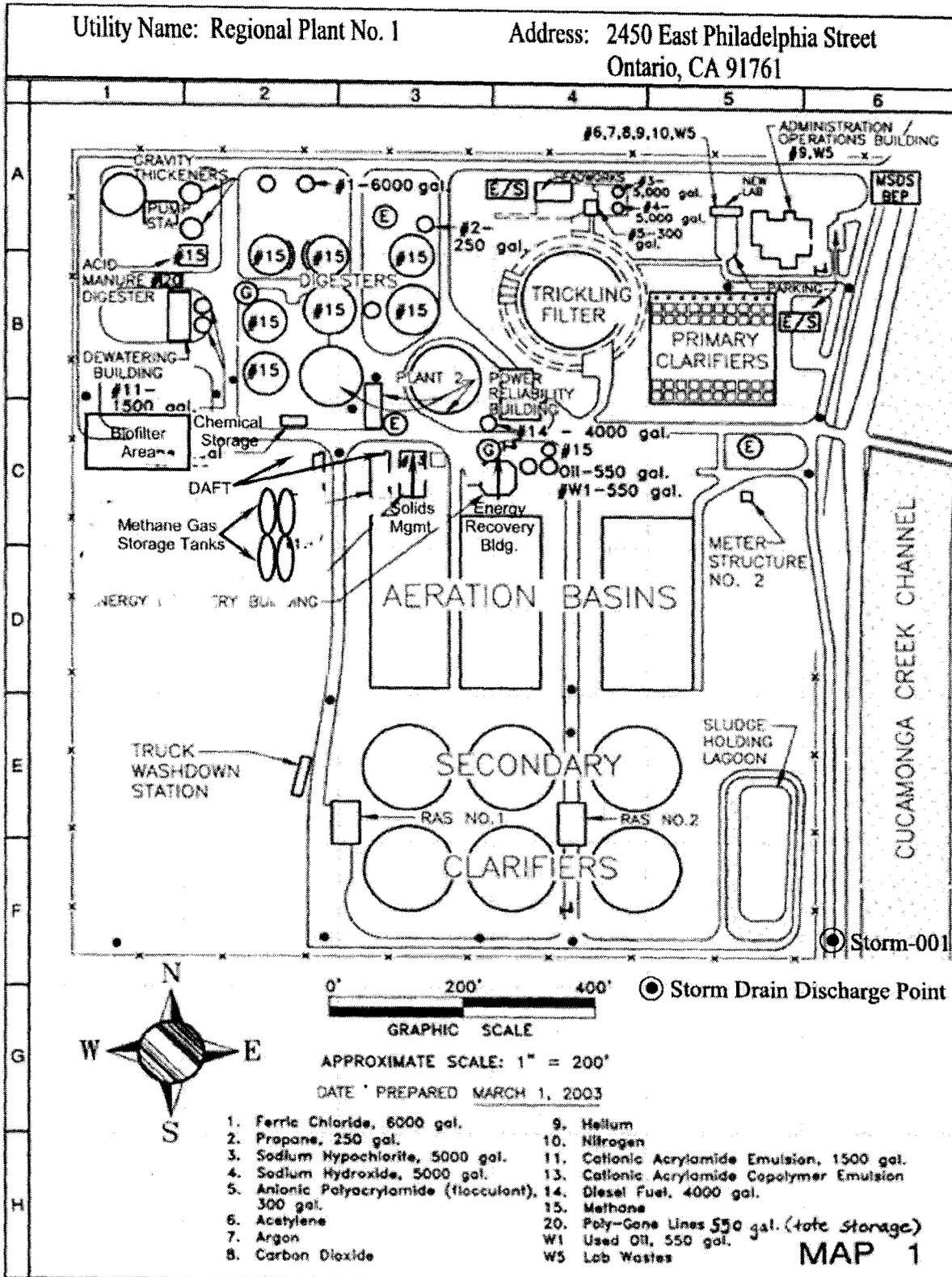




ATTACHMENT C – FLOW SCHEMATIC







ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or denial of a permit renewal application [*40 CFR §122.41(a)*].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [*40 CFR §122.41(a)(1)*].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [*40 CFR §122.41(c)*].

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [*40 CFR §122.41(d)*].

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [*40 CFR §122.41(e)*].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [*40 CFR §122.41(g)*].
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [*40 CFR §122.5(c)*].

F. Inspection and Entry

The Discharger shall allow the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR §122.41(m)(2)].
3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR §122.41(m)(3)(ii)].

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];

- b. The permitted Facility was, at the time, being properly operated [*40 CFR §122.41(n)(3)(i)*];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b. below (24-hour notice) [*40 CFR §122.41(n)(3)(iii)*]; and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [*40 CFR §122.41(n)(3)(iv)*].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [*40 CFR §122.41(n)(4)*].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [*40 CFR §122.41(f)*].

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [*40 CFR §122.41(b)*].

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [*40 CFR §122.41(l)(3)*] [*40 CFR §122.61*].

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [*40 CFR §122.41(j)(1)*].
- B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [*40 CFR §122.41(j)(4)*] [*40 CFR §122.44(i)(1)(iv)*].

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:

1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, SWRCB, or USEPA within a reasonable time, any information which the Regional Water Board, SWRCB, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, SWRCB, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h)] [CWC 13267].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [40 CFR Section 122.41(k)].
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR Section 122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [40 CFR Section 122.22(b)(1)];
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR Section 122.22(b)(2)]; and
 - c. The written authorization is submitted to the Regional Water Board, and State Water Board [40 CFR Section 122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR Section 122.22(c)].
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for

submitting false information, including the possibility of fine and imprisonment for knowing violations” [40 CFR §122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or SWRCB for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [*40 CFR §122.41(l)(6)(iii)*].

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [*40 CFR §122.41(l)(1)*]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [*40 CFR §122.41(l)(1)(i)*]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this Order. [*40 CFR Section 122.41(l)(1)(ii)*].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [*40 CFR §122.41(l)(1)(iii)*].

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or SWRCB of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [*40 CFR §122.41(l)(2)*].

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above [*40 CFR Section 122.41(l)(7)*].

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, SWRCB, or USEPA, the Discharger shall promptly submit such facts or information [*40 CFR §122.41(l)(8)*].

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [*40 CFR Section 122.42(b)*]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [*40 CFR Section 122.42(b)(1)*]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [*40 CFR Section 122.42(b)(2)*].
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [*40 CFR Section 122.42(b)(3)*].

Attachment E – Monitoring and Reporting Program – Table of Contents

Attachment E – Monitoring and Reporting Program (MRP)	E-2
I. General Monitoring Provisions.....	E-2
A. General Monitoring Provision	E-2
B. Minimum Level (ML) Requirements.....	E-5
II. Monitoring Locations.....	E-5
III. Influent Monitoring Requirements	E-6
A. Monitoring Locations at M-INFA and M-INFB.....	E-6
IV. Effluent Monitoring Requirements	E-7
A. Tertiary Effluent Monitoring Locations at M-001A and M-002A	E-7
B. Secondary Effluent Monitoring Locations at M-002A and M-002B With 20:1 Dilution ...	E-10
V. Whole Effluent Toxicity Testing Requirements	E-11
A. Toxicity Monitoring Requirements at M-001A and M-002A	E-11
VI. Land Discharge Monitoring Requirements – Not Applicable.....	E-13
VII. Reclamation Monitoring Requirements.....	E-13
A. Monitoring Location REC-001A	E-13
B. Monitoring Location REC-001B	E-13
C. Monitoring Users	E-13
VIII. Receiving Water Monitoring Requirements – Surface Water and Groundwater	E-14
A. Monitoring During 20:1 Dilution:	E-14
B. Monitoring Location R-001U for Surface Water.....	E-14
C. Monitoring Location R-001D for Surface Water:	E-14
D. Monitoring Location R-002 for Surface Water:	E-15
E. Groundwater	E-15
IX. Other Monitoring Requirements.....	E-15
A. Biosolids Monitoring at B-001	E-15
B. Stormwater Monitoring.....	E-15
C. Water Supply Monitoring	E-15
D. Pretreatment Monitoring and Reporting	E-16
X. Reporting Requirements	E-18
A. General Monitoring and Reporting Requirements.....	E-18
B. Self Monitoring Reports (SMRs).....	E-20
C. Discharge Monitoring Reports (DMRs)	E-23
D. Other Reports – Not Applicable	E-23

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (RWQCB) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. General Monitoring Provision

1. All sampling and sample preservation shall be in accordance with the current edition of “*Standard Methods for the Examination of Water and Wastewater*” (American Public Health Association).
2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of May 14, 1999) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this MRP. In addition, the Regional Water Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136. Unless otherwise specified herein, organic pollutants shall be analyzed using EPA method 8260, as appropriate.
3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports, or EPA or at laboratories approved by the Regional Water Board's Executive Officer.
4. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
5. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.
6. For effluent wastewater monitoring: The Discharger shall require its testing laboratory to calibrate the analytical system down to the minimum level (ML)¹ specified in Attachment “I” for priority pollutants with effluent limitations in this Order, unless an alternative minimum level is approved by the Regional Water Board’s Executive Officer. When there is more than one ML value for a given substance, the Discharger shall use the ML values, and their associated analytical methods, listed in Attachment “I” that are below the calculated effluent

¹ *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.*

limitation. The Discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method, listed in Attachment "I" shall be used. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

7. The Discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.

8. Monitoring and reporting shall be in accordance with the following:

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- a) The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and or as specified in this Order.
- b) A "grab" sample is defined as any individual sample collected in less than 15 minutes.
- c) A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.
- d) 24-hour composite samples shall be collected continuously during a 24-hour operation of the facility.
- e) Daily samples shall be collected on each day of the week.
- f) Monthly samples shall be collected on any representative day of each month.
- g) Quarterly samples shall be collected by any representative day of January, April, July, and October.

h) Annual samples shall be collected in accordance with the following schedule:

Table 1. Annual Sampling Schedule

Year	Annual Samples
2006	July
2007	October
2008	January
2009	April
2010	July
2011	April

9. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supercedes the retention period specified in Section IV.A. of Attachment D) from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:
- a) The information listed in Attachment D- IV Standard Provisions – Records, subparagraph B. of this Order;
 - b) The laboratory which performed the analyses;
 - c) The date(s) analyses were performed;
 - d) The individual(s) who performed the analyses;
 - e) The modification(s) to analytical techniques or methods used;
 - f) All sampling and analytical results, including
 - 1) Units of measurement used;
 - 2) Minimum reporting level for the analysis (minimum level, practical quantitation level (PQL));
 - 3) Results less than the reporting level but above the method detection limit (MDL);
 - 4) Data qualifiers and a description of the qualifiers;
 - 5) Quality control test results (and a written copy of the laboratory quality assurance plan);
 - 6) Dilution factors, if used; and
 - 7) Sample matrix type.
 - g) All monitoring equipment calibration and maintenance records;
 - h) All original strip charts from continuous monitoring devices;
 - i) All data used to complete the application for this Order; and,
 - j) Copies of all reports required by this Order.
 - k) Electronic data and information generated by the Supervisory Control And Data Acquisition (SCADA) System.
10. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

11. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

B. Minimum Level (ML) Requirements

For priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment "I" of this Order, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. When there is more than one ML value for a given substance listed in Attachment "I" – ML Table, the Discharger shall select any one of those cited analytical methods for compliance determination when the associated ML is below the calculated effluent limitation.

If no ML value is below the effluent limitation, then the Discharger shall select as the reporting level (RL), the lowest ML value and its associated analytical method listed in Attachment "I".

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 2. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude and Longitude
--	M-INFA	Influent sampling at RP-1 influent line, before Headworks	34°01'48"N, 117°36'07"W
--	M-INFB	Influent sampling at RP-4, influent line, before Headworks	34°05'09"N, 117°31'28"W
001	M-001A	Effluent to El Prado Park Lake, close to the end of effluent pipeline at RP-1	33°56'39"N, 117°38'34"W
001	M-001B	At the RP-1 splitter box	34°01'29"N, 117°35'57"W
002	M-002A	Effluent to Reach 1 of Cucamonga Creek, at the end of effluent pipeline, combined flows from RP-1 and RP-4	34°01'31"N, 117°35'56"W
002	M-002B	Effluent to Reach 1 of Cucamonga Creek, at the end of CCB 3 (Chlorine Contact Basin)	34°01'28"N, 117°35'57"W
S-001	STORM-001	Storm water runoff from RP-1	34°01'36"N, 117°35'59"W
S-002	STORM-002	Storm water runoff from RP-1	34°01'28"N, 117°35'58"W
003	REC-001A	Same as M-001A	33°56'39"N, 117°38'34"W
003	REC-001B	Same as M-001B	34°01'29"N, 117°35'57"W
--	R-001U	Receiving surface water, within 500 feet upstream of the point of discharge DP 002 in Cucamonga Creek	34°01'29"N, 117°35'58"W

Table 2. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude and Longitude
--	R-001D	Receiving surface water, within 500 feet downstream of the point of discharge DP 002 in Cucamonga Creek	34°00'43"N, 117°35'59"W
--	R-002	Santa Ana River	--
--	B-001	Biosolids monitoring at end of dewatering	--

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations at M-INFA and M-INFB

1. Sampling stations shall be established for the points of inflow to the treatment plant. The sampling station(s) shall be located upstream of any in-plant return flows and where representative sample(s) of the influent of the treatment plant can be obtained.
2. The Discharger shall monitor the influent to the facility at Monitoring Locations M-INFA and M-INFB as follows:

Table 3. Influent Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Recorder/Totalizer	Continuous	See Section I.A.3, above, of this MRP
pH	pH Units	Recorder	"	"
Specific Conductance	µmhos/cm	"	"	"
TOC	mg/L	24-hr Composite	Weekly	"
Total Suspended Solids	"	"	"	"
Total Dissolved Solids	"	"	"	"
Ammonia-Nitrogen	"	Grab	"	"
Total Inorganic Nitrogen	"	"	"	"
Boron	mg/L	24-hr Composite	Quarterly	See Section I.A.3, above, of this MRP
Chloride	"	"	"	"
Fluoride	"	"	"	"
Sulfate	"	"	"	"
Total Hardness	mg/L	"	"	"
Arsenic	µg/L	"	Quarterly	See Section I.A.2, above, of this MRP
Cadmium	"	"	"	"
Total Chromium/Chromium, IV	"	"	"	See Section I.A.2, above, of this MRP
Copper	"	"	"	"
Lead	"	"	"	"
Mercury	"	"	"	"
Nickel	"	"	"	"
Phenol	"	"	"	"

Table 3. Influent Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Silver	“	“	“	“
Zinc	“	24-hr Composite	“	“
Cyanide (Free)	“	Grab	“	“
Volatile organic portion of EPA Priority Pollutants ² (See Attachment G)	µg/L	Grab	Annually	See Section I.A.2. above, of this MRP
Remaining EPA Priority Pollutants ³ (See Attachment G)	µg/L	24-hr Composite	Annually	“

IV. EFFLUENT MONITORING REQUIREMENTS

The Discharger shall monitor tertiary effluent at monitoring locations as follows. If more than one analytical test method is listed for a given parameter, the Discharger may select from the listed methods and associated Reporting Level⁴:

A. Tertiary Effluent Monitoring Locations at M-001A and M-002A

1. The Discharger shall monitor tertiary treated effluent for DP 001 and DP 002 at Monitoring Locations M-001A and M-002A as follows.

Table 4a. Tertiary Effluent Monitoring Requirements at M-001A and M-002A

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method And Reporting Level
Flow	mgd	Recorder/Totalizer	Continuous	See Section I.A.3. above, of this MRP
Specific Conductance	µmhos/cm	Recorder	“	“
pH	pH units	“	“	“
Total Residual Chlorine	mg/L	“	“	“
Turbidity ⁵	NTU	Recorder	Continuous	“
Total Organic Carbon (TOC)	mg/L	24-hr Composite	Daily	“
Temperature	°C	Grab	Weekly	“
BOD ₅ ⁶	mg/L	24-hr Composite	Weekly	“

² EPA priority pollutants are those remaining volatile organic pollutants listed in Attachment “G” which are not specifically listed in this monitoring program table.

³ Remaining EPA priority pollutants are those pollutants listed in Attachment “G” which are not volatile organics and pollutants not specifically listed in this monitoring program table.

⁴ Reporting Level (RL) Selection: When there is more than one ML value for a given substance, the Regional Water Board shall include as RLs in the permit, all ML values, and their associated analytical methods, listed in Appendix 4 of the SIP that are below the calculated effluent limitation. The Discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the Regional Water Board shall select as the RL the lowest ML value and its associated analytical method listed in Appendix 4 for inclusion in the permit.

⁵ At M-002 only.

⁶ BOD₅ is calculated daily based on a BOD₅/TOC correlation approved by the Regional Board.

Table 4a. Tertiary Effluent Monitoring Requirements at M-001A and M-002A

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method And Reporting Level
Suspended Solids	mg/L	24-hr Composite	Weekly	"
Ammonia-Nitrogen	mg/L	Grab	Weekly	See Section I.A.3. above, of this MRP
Total Dissolved Solids	"	"	Monthly	"
Total Hardness	"	"	"	"
Total Inorganic Nitrogen	mg/L	24-hr Composite	Monthly	"
Nitrate Nitrogen	"	"	"	"
Toxicity Monitoring	TUc	(See Section D, Below)	Monthly	"
Cadmium	µg/L	24-hr Composite	Monthly	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 0.5 µg/L
Chromium (VI) or Total Chromium	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 5 µg/L, Total Cr, RL 2 µg/L
Copper	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 5 µg/L
Cyanide, free	"	Grab	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP
Lead	"	24-hr Composite	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 5 µg/L
Mercury	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP
Selenium	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 2 µg/L
Silver	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 1 µg/L
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Monthly	See Sections I.A.2., I.A.3. & I.B., above of this MRP and RL 5 µg/L
Bicarbonate	mg/L	24-hr Composite	Quarterly	"
Boron	"	"	"	"
Calcium	"	"	"	"
Carbonate	"	"	"	"
Chloride	"	"	"	"
Fluoride	mg/L	24-hr Composite	Quarterly	See Section I.A.3. above, of this MRP
Magnesium	"	"	"	"
Nitrate	"	"	"	"
Sodium	"	"	"	"
Sulfate	"	"	"	"

Table 4a. Tertiary Effluent Monitoring Requirements at M-001A and M-002A

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method And Reporting Level
Aluminum	"	"	Quarterly	"
Pentachlorophenol	"	grab	Quarterly (See IV. A.3., below)	"
Antimony	"	24-hr Composite	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP
Arsenic	"	"	"	"
Barium	"	"	"	"
Benzene	"	"	"	"
Cobalt	"	"	"	"
Nickel	"	"	"	"
Zinc	"	"	"	See Sections I.A.2., I.A.3. & I.B., above of this MRP
Phenolic Compounds	"	Grab	"	"
Total Trihalomethanes ⁷	µg/L	Grab	"	"
Volatile organic portion of remaining EPA Priority Pollutants ⁶ (See Attachment "G")	µg/L	Grab	Annually (See IV. A.4., below)	"
Remaining EPA Priority Pollutants ⁷ (See Attachment "G")	µg/L	24-hr Composite	Annually (See IV. A.4., below)	"

2. The Discharger shall monitor tertiary treated effluent for DPs 001 and 002 at M-001B and M-002B as follows:

Table 4b. Effluent Monitoring Requirements for Coliform

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Minimum Sampling Frequency</u>	<u>Required Test Method</u>
Coliform Organisms	MPN per 100 ml ⁸	Grab	Daily	See Section I.A.3., above of this MRP
Turbidity ⁹	NTU	Recorder	Continuous	"

⁷ Sum of bromodichloromethane, dibromochloromethane, bromoform and chloroform.

⁸ MPN/100mL = Most Probable Number per 100 milliliters

⁹ At M-001B only.

3. The monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring at a concentration greater than the concentration specified for that pollutant¹⁰ in Attachment M shall be accelerated to monthly. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee.
4. The monitoring frequency for those priority pollutants that are detected during the required annual monitoring at a concentration greater than the concentration specified for that pollutant¹¹ in Attachment M shall be accelerated to quarterly for one year. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee.

B. Secondary Effluent Monitoring Locations at M-002A and M-002B With 20:1 Dilution

1. The Discharger shall monitor secondary treated effluent at M-001A when 20:1 dilution is provided by the Santa Ana River at the time of the discharge, as follows:

Table 4c. Secondary Effluent Monitoring at M-002A with 20:1 Dilution

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Flow	mgd	Recorder/ Totalizer	Continuous	See Section I.A.3., above, of this MRP
pH	pH units	"	"	"
Total Residual Chlorine	mg/L	"	"	"
BOD ₅	mg/L	Grab	Daily (when discharging)	"
Suspended Solids	mg/L	"	"	"
EPA Priority Pollutants	µg/L	"	Annually ¹² (See IV.A.4., above)	"

2. The Discharger shall monitor secondary treated effluent at M-002B as follows:

Table 4d. Secondary Effluent Monitoring at M-002B with 20:1 Dilution

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Coliform Organisms	MPN per 100 ml ¹³	Grab	Daily (when discharging)	See Sections I.A.2., I.A.3. & I.B., above of this MRP

¹⁰ For those priority pollutants without specified criteria values, accelerated monitoring is not required.

¹¹ For those priority pollutants without specified criteria values, accelerated monitoring is not required.

¹² Sample is collected from the first discharge, once a year.

¹³ MPN/100mL = Most Probable Number per 100 milliliters

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Toxicity Monitoring Requirements at M-001A and M-002A

1. The Discharger shall conduct critical life stage chronic toxicity testing in accordance with Method 1002.0 - Survival and Reproduction test for water flea, *Ceriodaphnia dubia* as specified in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 2002, Cincinnati, Ohio (October 2002, EPA-821-R-02-013).
2. The Discharger shall establish procedures to ensure that the toxicity testing laboratory notifies the Discharger of the results of toxicity testing by the end of the next business day following the completion of such tests.
3. The Discharger shall increase the frequency of chronic toxicity testing to every two weeks whenever any test result exceeds 1.0 TUc. The first test under the accelerated schedule shall be conducted within two weeks of receiving notice of the test that exceeds 1.0 TUc, and every two weeks thereafter. The Discharger may resume the regular test schedule when two consecutive chronic toxicity tests result in 1.0 TUc, or when the results of the Initial Investigation Reduction Evaluation conducted by the Discharger have adequately addressed the identified toxicity problem.
4. The presence of chronic toxicity shall be estimated as specified in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. EPA-821-R-02-013.
5. Results for both survival and reproduction endpoints shall be reported in TUc, where $TUc = 100/NOEC$ or $100/IC_p$ or EC_p (p is the percent effluent). The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the tests organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from the controls). The inhibition concentration (IC) is a point estimate of the toxicant concentration that causes a given percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method). The effective concentration (EC) is a point estimate of the toxicant concentration that would cause a given percent reduction in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., probit).
6. Additional Testing Requirements
 - a. A series of at least five dilutions and a control will be tested. Five dilutions of the series shall be within 60% to 100% effluent concentration.
 - b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing

is sufficient. Reference toxicants shall also be conducted using the same test conditions as the effluent toxicity test (e.g., same test duration, etc).

- c. If either of the reference toxicant test or the effluent tests do not meet all test acceptability criteria as specified in the manual¹⁴, then the Discharger must re-sample and re-test within 14 days or as soon as the Discharger receives notification of failed tests.
 - d. Control and dilution water should be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.
7. Quality Assurance/Control:
- a. A quality assurance/quality control (QA/QC) program shall be instituted to verify the results of the effluent toxicity monitoring program. The QA/QC program shall include but shall not be limited to the following: (1) Selection of an independent testing laboratory; (2) Approval by the Regional Board's Executive Officer or Executive Officer's designee of the independent testing laboratory; (3) Once during the year, the Discharger shall split samples with the independent laboratory for conducting chronic toxicity testing; (4) Results from the independent laboratory shall be submitted to the Regional Board and the Discharger for evaluation; (5) The Discharger shall review the test acceptability criteria in accordance with the EPA test protocols, EPA/600/4-91/002.
 - b. Results from the independent laboratory of the annual QA/QC split samples are to be used for Quality Assurance/Quality Control (QA/QC) purposes only and not for purposes of determining compliance with other requirements of this Order.
8. The use of alternative methods for measuring chronic toxicity may be considered by the Executive Officer on a case-by-case basis. The use of a different test species, in lieu of conducting the required test species may be considered and approved by the Executive Officer on a case-by case basis upon submittal of the documentation supporting Discharger's determination that a different species is more sensitive and appropriate.
9. Reporting: Results of all toxicity testing conducted within the month following the reporting period shall be submitted monthly in accordance with "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", third edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002). The report shall include a determination of the median value of all chronic toxicity testing results conducted during the two previous months.
10. Whenever an Initial Investigation Reduction Evaluation is conducted, the results of the evaluation shall be submitted upon completion. In addition, monthly status reports shall be submitted as part of the Discharger's monitoring report for the previous month.

¹⁴ Refers to USEPA Manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Third Edition. EPA/600/4-91/002."

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE.

VII. RECLAMATION MONITORING REQUIREMENTS

A. Monitoring Location REC-001A

The Discharger shall monitor recycled wastewater at REC-001A:

Table 5a. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency	Required Analytical Test Method
Total Inorganic Nitrogen	mg/L	24-hr composite	Monthly	See Section I.A.3., above, of this MRP
TDS	mg/L	“	“	“

B. Monitoring Location REC-001B

The Discharger shall monitor recycled wastewater at REC-001B:

Table 5b. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency	Required Analytical Test Method
Flow	mgd	Recorder/Totalizer	Continuous	---
CT ¹⁵	mg/L-min	Recorder	Continuous	See Section I.A.3., above, of this MRP
Coliform Organisms	MPN per 100 ml	Grab	Daily	“
Turbidity	NTU	Recorder	Continuous	“

C. Monitoring Users

Whenever recycled water is supplied to a user, the Discharger shall record on a permanent log: the volume of recycled water supplied; the user of recycled water; the locations of those sites including the names of the groundwater management zones underlying the recycled water use sites; type of use (e.g. irrigation, industrial, etc); and the dates at which water is supplied. The Discharger shall submit annually a summary report of the recorded information by groundwater management zone.

¹⁵ *CT is the product of total chlorine residual and modal contact time measured at the same point.*

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring During 20:1 Dilution:

The Discharger shall make provisions for the measurement of the receiving water flow at a suitable location in the creeks and determine whether a 20:1 dilution exists at the point of discharge before discharging secondary treated effluent. A dilution of 20:1 or more is required at the point of discharge. Flow measurements shall be made prior to any direct discharge to the creeks and shall continue on a daily basis until the discharged is terminated.

B. Monitoring Location R-001U for Surface Water

1. The Discharger shall monitor receiving water at R-001U as follows:

Table 6a. Receiving Water Monitoring at R-001U

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	Weekly	See Section I.A.3., above, of this MRP
Temperature	°C	“	“	See Section I.A.3., above, of this MRP
pH	pH unit	Grab	“	“
Hardness	mg/L	Grab	Weekly	See Section I.A.3., above, of this MRP
EPA Priority Pollutants	µg/L	“	quarterly	See Section I.A.2., above, of this MRP

C. Monitoring Location R-001D for Surface Water:

1. The Discharger shall monitor receiving water at R-001D as follows:

Table 6b. Receiving Water Monitoring at R-001D

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	weekly	See Section I.A.3., above, of this MRP
Temperature	°C	“	“	See Section I.A.3., above, of this MRP
pH	pH unit	Grab	“	“
Color change, foam, deposition of material, odor	--	observe	daily	See Section I.A.3., above, of this MRP

D. Monitoring Location R-002 for Surface Water:

Unless otherwise directed by the Regional Water Board Executive Officer, the Discharger shall implement the approved plan for the annual sampling and testing of mercury levels in fish flesh samples collected from the Santa Ana River. The frequency of monitoring and submission of reports shall be as stipulated in the approved plan.

E. Groundwater

Monitoring of groundwater recharge activities by the Discharger is addressed in Order No. R8-2005-0033.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring at B-001

1. Biosolids monitoring shall be conducted as follows:

Table 7. Biosolids Monitoring at B-001

Biosolids Monitoring	Units	Type of Sample	Minimum Frequency of Sampling & Testing
Priority Pollutants	mg/kg	Grab	Semi-annually
Moisture Content (% solid)	mg/kg	Grab	Quarterly

2. The Discharger shall maintain a permanent log of solids hauled away from the treatment facilities for use/disposal elsewhere, including the date hauled, the volume or weight (in dry tons), type (screening, grit, raw sludge, biosolids), application (agricultural, composting, etc), and destination. This information shall be reported quarterly.

B. Stormwater Monitoring

The Discharger shall comply with Attachment K of this Order, Stormwater Monitoring and Reporting Requirements.

C. Water Supply Monitoring

1. In August of each year, a sample of each source of the water supplied to the sewered area shall be obtained and analyzed for total dissolved solids concentration expressed in "mg/L".
2. Monthly reports shall be submitted stating the amount (in percentage or acre-feet) supplied to the sewered area from each source of water and the resulting flow-weighted water supply quality for total dissolved solids.

D. Pretreatment Monitoring and Reporting

1. The Discharger shall submit to the Regional Water Board and the EPA Region 9, a quarterly compliance status report. The quarterly compliance status reports shall cover the periods January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 -December 31. Each report shall be submitted by the end of the month following the quarter, except that the report for October 1 - December 31 may be included in the annual report. This quarterly reporting requirement shall commence for the first full quarter following issuance of this Order. The reports shall identify:
 - a. All significant industrial users (SIUs) which violated any standards or reporting requirements during that quarter;
 - b. The violations committed (distinguish between categorical and local limits);
 - c. The enforcement actions undertaken; and
 - d. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).
2. Annually, the Discharger shall submit a report to the Regional Water Board, the State Water Resources Control Board and the EPA Region 9 describing the pretreatment activities within the service area during the previous year. In the event that any control authority within the service area is not in compliance with any conditions or requirements of this Order or their approved pretreatment program (such as due to industrial user discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the Discharger shall also include the reasons for non-compliance and state how and when the Discharger and the control authority shall comply with such conditions and requirements. This annual report shall cover operations from July 1 through June 30 of each fiscal year and is due on September 30 of each year. The report shall contain, but not be limited to, the following information:
 - a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent wastewaters for those pollutants which are known or suspected to be discharged by industrial users (IUs) as identified by EPA under Section 307(a) of the CWA. The summary will include the result of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants¹⁶ detected in the full scan. The Discharger shall also provide any influent or effluent monitoring data for non-priority pollutants which the Discharger believes may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto.

¹⁶ *The Discharger is not required to analyze for asbestos.*

- b. A discussion of any upset, interference, or pass-through incidents at the treatment plant (if any), which the Discharger knows or suspects were caused by IUs of the POTW system. The discussion shall include the following:
 - 1) The reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the IU(s) responsible.
 - 2) A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through, interference or noncompliance with sludge disposal requirements.
- c. A complete and updated list of the Discharger's significant industrial users (SIUs), including names, Standard Industrial Classification (SIC) code(s) and addresses, and a list of any SIU deletions and/or additions. The Discharger shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs subject to Federal Categorical Standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations more stringent than Federal Categorical Standards and those, which are not subject to local limits.
- d. A list or table characterizing the industrial compliance status of each SIU, including:
 - 1) SIU name;
 - 2) Industrial category;
 - 3) The type (processes) of wastewater treatment in place;
 - 4) Number of samples taken by the POTW during the year;
 - 5) Number of samples taken by the SIU during the year;
 - 6) Whether all needed certifications (if allowed) were provided by SIUs which have limits for total toxic organics;
 - 7) Federal and Regional Standards violated during the year, reported separately;
 - 8) Whether the SIU at any time in the year was in Significant Noncompliance (SNC)¹⁷, as defined by 40 CFR 403.12 (f)(2)(vii); and
 - 9) A summary of enforcement actions against the SIU taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included.
 - 10) Number of inspections conducted at each SIU during the year.
- e. A compliance summary table which includes:
 - 1) SIU's which were in SNC at any time during the year;
 - 2) The total number of SIUs which are in SNC with pretreatment compliance schedules during the year;
 - 3) The total number of notices of violation and administrative orders issued against SIUs during the year;
 - 4) The total number of civil and criminal judicial actions filed against SIUs during the year;
 - 5) The number of SIUs which were published as being in SNC during the year; and
 - 6) The number of IUs from which penalties were collected during the year.

¹⁷ *SNC is determined at the beginning of each quarter based on data of the previous six months.*

- f. A short description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to changes concerning:
 - 1) The program's administrative structure;
 - 2) Local industrial discharge limitations;
 - 3) Monitoring program or monitoring frequencies;
 - 4) Legal authority or enforcement policy;
 - 5) Funding mechanisms; and
 - 6) Resource requirements and/or staffing levels.
 - g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
 - h. A summary of public participation activities to involve and inform the public.
 - i. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.
3. The cumulative number of industrial users that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
 4. The Discharger shall submit the quarterly compliance status reports and the annual pretreatment report to EPA Region 9, the State Board and the Regional Water Board.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. All analytical data shall be reported with method detection limit¹⁸ (MDLs) and with identification of either reporting level, practical quantitation levels (PQLs¹⁹) or limits of quantitation (LOQs).
3. Laboratory data for effluent samples must quantify each constituent down to the PQLs specified in Attachment "H" for non-priority pollutants and down to ML specified in Attachment "I" for priority pollutants. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water

¹⁸ The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.

¹⁹ PQL is the lowest concentration of a substance that can be determined within ± 20 percent of the true concentration by 75 percent of the analytical laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL is the method detection limit (MDL) x 5 for carcinogens and MDL x 10 for noncarcinogens.

Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

4. Discharge monitoring data shall be submitted in a format acceptable by the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this order.
5. The Discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.
6. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment "G" – Priority Pollutant Lists. The Discharger shall report with each sample result:
 - a. The reporting level achieved by the testing laboratory; and
 - b. The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999).
 - c. For receiving water monitoring and for those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999). In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38²⁰ is below the minimum level value specified in Attachment "I" and the Discharger cannot achieve an MDL value for that pollutant below or equal to the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.
7. For non-priority pollutants monitoring, all analytical data shall be reported with identification of practical quantitation levels and with method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999).
8. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.
9. The reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.

²⁰

See *Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

10. At any time during the term of this Order when electronic submittal of monitoring reports has become the norm, the State or Regional Water Board may notify the Discharger to discontinue submittal of hard copies of reports. When such notification is given, the Discharger shall stop submitting hard copies of required monitoring reports.
11. The Discharger shall report monitoring results for specific parameters in accordance with the following table:

Table 8. Reporting Requirements

<u>Parameter</u>	<u>Measurement</u>
Flow	Daily total flow
pH	Daily High and daily low
Total Residual Chlorine	Daily Maximum
Electrical Conductivity	Daily High
Turbidity	Daily maximum

12. The Discharger shall file a written report with the Regional Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy making body is adequately informed about it. The report shall include:
 - a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
 - b. The Discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment facilities.
 - c. The Discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy. SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under Sections III through IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit monthly, quarterly, and annual SMRs including the results of all

required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table 9. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	July 8, 2006	All	Submit with monthly SMR
Daily	July 8, 2006	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	July 8, 2006	Sunday through Saturday	Submit with monthly SMR
Monthly	July 8, 2006	1 st day of calendar month through last day of calendar month	30 days from the end of the monitoring period, submit as monthly SMR
Quarterly	July 8, 2006	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	30 days from the end of the monitoring period, submit with monthly SMR
Semiannually	July 8, 2006	January 1 through June 30 July 1 through December 31	30 days from the end of the monitoring period, submit with monthly SMR
Annually	July 8, 2006	January 1 through December 31	30 days from the end of the monitoring period, submit with monthly SMR

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The *estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.>"). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. The Discharger shall submit SMRs (with an original signature) when required by subsection B.1 above in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

6. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and identify the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
7. By April 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The annual report shall include the following:
 - a. Tabular and graphical summaries of the monitoring data obtained during the previous year;
 - b. A discussion of the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements;
 - c. A summary of the quality assurance (QA) activities for the previous year; and

- d. For priority pollutant constituents that do not have effluent limitations but are required to be monitored, the Discharger shall evaluate the monitoring data obtained during the previous year and determine whether detected constituents are at levels that would warrant reopening the permit to include effluent limitations for such constituent(s). To conduct this evaluation, the concentration of detected constituents shall be compared to the most stringent applicable receiving water objectives (freshwater or human health (consumption of organisms only) as specified for that pollutant²¹ in 40 CFR 131.38²²). For metals and selenium, site-specific translators approved by the Regional Board may be applied in this evaluation. The Discharger shall include a discussion of the corrective actions taken or planned to address values above receiving water objectives.

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

Regional Administrator
U. S. Environmental Protection Agency
Region 9 – Attention WTR – 7
75 Hawthorne Street
San Francisco, CA 94105

D. Other Reports – Not Applicable

²¹ For those priority pollutants without specified criteria values, accelerated monitoring is not required.

²² See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations

ATTACHMENT F – FACT SHEET – TABLE OF CONTENTS

Attachment F – Fact Sheet.....F-3

I. Permit Information.....F-4

II. Facility Description.....F-5

A. Description of Wastewater and Biosolids Treatment or Controls F-5

B. Discharge Points and Receiving Waters F-7

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data..... F-8

D. Compliance Summary..... F-11

E. Planned Changes..... F-12

III. Applicable Plans, Policies, and RegulationsF-12

A. Legal Authorities F-12

B. California Environmental Quality Act (CEQA) F-12

C. State and Federal Regulations, Policies, and Plans..... F-13

D. Impaired Water Bodies on CWA 303(d) List-Not Applicable F-15

E. Other Plans, Polices and Regulations-Not Applicable F-15

IV. Rationale For Effluent Limitations and Discharge Specifications.....F-15

A. Discharge Prohibitions..... F-16

B. Technology-Based Effluent Limitations..... F-16

 1. Scope and Authority F-16

 2. Applicable Technology-Based Effluent Limitations F-16

C. Water Quality-Based Effluent Limitations (WQBELs)..... F-17

 1. Scope and Authority F-17

 2. Applicable Water Quality Criteria and Development of WQBELs F-17

 3. Determining the Need for WQBELs F-19

 4. WQBEL Calculations F-20

 5. Whole Effluent Toxicity (WET) F-22

D. Best Professional Judgment -Based Effluent Limitations F-22

E. Summary of Final Effluent Limitations F-22

F. Interim Effluent Limitations – DP 001 and DP 002 F-23

G. Land Discharge Specifications – Not Applicable..... F-23

H. Reclamation Specifications - DP 003 F-23

V. Rationale for Receiving Water Limitations.....F-24

A. Surface Water..... F-24

B. Groundwater F-24

VI. Rationale for Monitoring and Reporting Requirements.....F-25

A. Influent Monitoring..... F-25

B. Effluent Monitoring F-25

C. Whole Effluent Toxicity Testing Requirements F-25

D. Receiving Water Monitoring F-26

 1. Surface Water F-26

 2. Groundwater – Not Applicable F-26

E. Other Monitoring Requirements F-27

VII. Rationale for ProvisionsF-27

A. Standard Provisions F-27

B. Special Provisions..... F-27

VIII. Public Participation	F-29
A. Notification of Interested Parties	F-29
B. Written Comments	F-29
C. Public Hearing	F-30
D. Waste Discharge Requirements Petitions	F-30
E. Information and Copying	F-30
F. Register of Interested Persons	F-31
G. Additional Information	F-31

List of Tables

Table 1. Facility Information	F-4
Table 2. Summary of Discharge Points	F-7
Table 3. Historic Effluent Limitations and Monitoring Data	F-8
Table 4. Compliance Summary	F-11
Table 5 Basin Plan Beneficial Uses	F-13
Table 6. Applicable Technology-basis	F-15
Table 7. Applicable Water Quality Criteria	F-17
Table 8. Summary of Final Effluent Limitations	F-26
Table 9. Summary of Interim Effluent Limits	F-27
Table 10. TDS/TIN Water Quality Objectives	F-28

ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

TABLE 1. FACILITY INFORMATION

WDID	8 360104004	
Discharger	Inland Empire Utilities Agency	
Name of Facility 1	Regional Water Recycling Plant No. 1 (RP-1)	
Address	2450 East Philadelphia Avenue	
	Ontario, CA 91761	
	San Bernardino County	
Name of Facility 2	Regional Water Recycling Plant No. 4 (RP-4)	
Address	12811 Sixth Street	
	Rancho Cucamonga, CA 91729	
	San Bernardino County	
Facility Contact, Title and Phone	Bob Nienhuis, Manager of Operations, (909) 993-1805 Gaspar Garza, Chief Plant Operator, RP-1/TP-1, (909) 993-1893 Mike Shanley, Chief Plant Operator, RP-4, (909) 993-1835	
Authorized Person to Sign and Submit Reports	Patrick O. Sheilds, Executive Manager of Operations (909) 993-1806	
Mailing Address	6075 Kimball Avenue, Chino, CA 91710 P. O. Box 9020, Chino Hills, CA 91709	
Billing Address	Same	
Type of Facility	POTW	
Major or Minor Facility	Major	
Threat to Water Quality	1	
Complexity	A	
Pretreatment Program	Y	
Reclamation Requirements	Y	
Facility Permitted Flow	RP-1	44 mgd
	RP-4	7 mgd, or 14 mgd when expansion is completed in May 2007
Facility Design Flow	RP-1	44 mgd
	RP-4	7 mgd, or 14 mgd when expansion is completed in May 2007
Watershed	Santa Ana River	
Receiving Water	Surface water: Reach 1 of Cucamonga Creek, Mill Creek, Chino Creek, Reach 3 of Santa Ana River Groundwater: Chino North "Maximum Benefit" Groundwater Management Zone/Chino 1, 2 and 3 "Antidegradation" Groundwater Management Zones	
Receiving Water Type	Freshwater – creeks, river and groundwater	

- A. The Inland Empire Utilities Agency (hereinafter Discharger, or IEUA) is the owner and operator of Regional Water Recycling Plants No. 1 (RP-1) and No. 4 (RP-4) (hereinafter Facilities), two publicly owned wastewater treatment plants with tertiary treatment processes.

For the purposes of this Order, references to the “Discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B. The Facilities discharge wastewater to tributaries of Reach 3 of Santa Ana River, a water of the United States. The discharges are currently regulated by Order No. 01-01, which was adopted on January 19, 2001 and expired on January 1, 2006. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.
- C. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on June 30, 2005. Supplemental Information was requested starting July 8, 2005. The latest supplemental information was received on December 8, 2005. A site visit was conducted on December 6, 2005, to observe operations and collect additional data to develop permit limitations and conditions. The application was deemed complete on February 28, 2006.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

RP-1 and RP-4 are domestic wastewater treatment plants with primary, secondary, and tertiary treatment. RP-1 is located at 2450 East Philadelphia Avenue, in the City of Ontario. This facility treats domestic and commercial/industrial wastes generated within IEUA's service area, which includes the Cities of Fontana, Montclair, Ontario, Upland and Rancho Cucamonga.

RP-1 began operation in 1948. Major changes were made in 1990 to bring the design capacity of the treatment plant to 44 mgd. In the last three years of operation, the annual average daily flow into the plant was 35.3 mgd and the highest monthly average value was 40.6 mgd, recorded during the month of November 2004. The treatment processes consist of bar screening, grit removal, primary clarification and flow equalization, activated sludge process, flocculation, filtration, sedimentation, chlorination and dechlorination. Solids treatment includes gravity thickener and dissolved air flotation thickeners, anaerobic digestion, digester gas utilization, and belt press dewatering. Belt wash water is pumped to the DAFT units where the solids can be recovered and the remaining liquid is returned to the activated sludge process. Belt press filtrate is pumped to the Non-Reclaimable Waste System (NRWS) line, which is ultimately treated by the County Sanitation Districts of Los Angeles County (CSDLAC). RP-1 currently discharges 35.7 mgd of tertiary treated wastewater to discharge outfalls DP 001 and DP 002. At DP 001, the flow average is 9.9 mgd. At DP 002, the flow average is 25.9 mgd.

RP-4 is located at 12811 Sixth Street, on a 27.5-acre site at the southwest corner of Etiwanda Avenue and Sixth Street in the City of Rancho Cucamonga. The service area encompasses an approximate 35-square mile region located generally north of Arrow Highway. The area contains portions of both the City of Fontana sewer service area, and Cucamonga Valley Water District (CVWD), which provides water and sewer service to the City of Rancho Cucamonga.

RP-4 treats domestic and commercial/industrial wastes generated within the Cities of Fontana and Rancho Cucamonga and some presently unincorporated portions of San Bernardino County.

RP-4 began operation in July 1997. RP-4 is a regional wastewater treatment plant designated to meet the needs of planned population growth in the service area through the 2020. Currently, RP-4 has a design capacity of 7 mgd. For the last three years, the annual daily flow into the plant was 4.9 mgd. The highest monthly average value was 6.3 mgd in May 2005. Currently, the RP-4 treatment process consists of bar screening, grit removal, anoxic tank, oxidation ditch, boat clarifier, flocculation, filtration, and chlorine disinfection. With the expansion of the facility, expected to be completed in 2007, the RP4 treatment process will consist of bar screening, grit removal, primary clarification, denitrification anoxic tanks, activated sludge process, secondary clarification, flocculation, filtration and chlorine disinfection. Treated effluent from RP-4 is piped to RP-1, where it commingles with RP-1 tertiary treated effluent prior to being discharged at DP 002, into Cucamonga Creek. Solids treatment includes aerated sludge holding. Since August 1999, secondary sludge produced at RP-4 is discharged to the RP-1 sewer line for treatment at the RP-1 facility.

RP-1 and RP-4 service a total population of about 472,900.

The Discharger delivers tertiary treated wastewater through the regional recycled water system at DP 003 for recycling use. The recycled water is used by Whispering Lakes Golf Course, Westwind Park, El Prado Golf Course, El Prado Regional Park, Caltrans, the City of Ontario for landscape irrigation, by Murai Farm, Engelsma Dairy, and CW Farms for agricultural irrigation, by construction sites for dust control, and by Reliant Energy for industrial cooling. Total average flow for irrigation was about 2.1 mgd in the last three years. Recycled water is also used for groundwater recharge¹ at Ely Basin, Banana Basin, Declez Basin, Etiwanda Conservation Ponds, Hickory Basins, RP-3 Basin, Turner Basin Nos. 1 to 4 and Jurupa Basin. The recycled water use is in the area overlying the Chino North "Maximum Benefit" Groundwater Management Zone (Chino 1, 2 and 3 "Antidegradation" Management Zones; see discussion below).

Storm water flows at RP-1 (west side) are diverted to a stormwater pump station that pumps the storm flows to a basin, which is ultimately pumped to the activated sludge system for treatment. When stormwater exceeds the capacity of the pump station/collection system, the stormwater is discharged at S-001 into Reach 1 of Cucamonga Creek. Stormwater flows at east side of RP-1 (TP-1) are diverted/pumped to a waste washwater basin. Storm flows impounded inside the basin are pumped to the TP-1 settling basin; from there the liquid is sent to the tertiary filters and the sludge is sent to RP-1 for further treatment. Discharge point S-002 has potential to discharge a very minimal amount of storm flows to Reach 1 of Cucamonga Creek.

Storm water flows at RP-4 are fully contained in an onsite 4 million gallon capacity storage basin. Beginning in 2006, the first quarter inch of stormwater flows from Inland Empire Regional Composting Facility² (IERCF) will also be diverted to the RP-4 storage basin. The

¹ *These groundwater recharge projects are regulated under Order No. R8-2005-0033, with the exception of Ely Basin which is currently regulated under Order No. 01-01. Ely Basin will be included as a part of IEUA's Phase II Chino Basin Groundwater Recharge Project. Until the Waste Discharge Requirements for the Phase II Chino Basin Groundwater Recharge Project include Ely Basin and are adopted by the Regional Board, IEUA will continue to comply with Ely Basin requirements stipulated in Order No. 01-01.*

² *This composting facility is owned and operated by the Discharger and is located adjacent to RP-4 Facility.*

remainder of the IERCF stormwater will flow to the City of Rancho Cucamonga storm drainage system. All water captured in this basin is then pumped to the headworks for treatment. As there is no direct discharge of stormwater runoff from RP-4 into surface waters, no stormwater requirements or monitoring are specified in this Order for RP-4.

Attachment B provides a map of the area around these facilities.
 Attachment C provides a flow schematic for each facility.

B. Discharge Points and Receiving Waters

1. Discharge Points for tertiary treated water

The Discharger discharges tertiary treated waste waster at two points designated Discharge Point (DP) Serials No. 001 and 002.

- DP 001 is the outfall of RP-1 to El Prado Park Lake. Overflow from the lake then discharges to an unnamed creek tributary to Chino Creek and thence to the Reach 3 of Santa Ana River, near Prado Dam. This lake is located at the northeast corner of Prado Regional Park. El Prado Park Lake is a restricted water impoundment. The average flow discharged at DP 001 was approximately 8.4 mgd for the last three years.
- DP 002 is the outfall of RP-1 and RP-4 to Reach 1 of Cucamonga Creek. This part of the creek is a lined flood control channel that discharges to Mill Creek and thence to Chino Creek and finally to Reach 3 of Santa Ana River, near Prado Dam. Average flow discharged is about 28.6 mgd.

2. Insignificant amounts of stormwater runoff may be discharged from RP-1 into Cucamonga Creek at S-001 and S-002.

3. Discharge Point for recycling water reuse:

- DP 003 is the discharge point for treated wastewater used for recycling purposes. It is located at the same effluent structure as DP 001. The Discharger delivers recycled water to several users through the regional recycled water system. Average flow is about 2.1 mgd.

Table 2. Summary of Discharge Points

Discharge Serial No.	Latitude	Longitude	Description	Flow & Frequency
001	33°56'39" N	117°38'34" W	Discharges to Prado Park Lake, which discharges to an unnamed creek tributary to Chino Creek and thence to Reach 3 of Santa Ana River, near Prado Dam	8.4 mgd
002	34°01'31" N	117°35'56" W	Discharges to Reach 1 of Cucamonga Creek, a lined flood control channel that discharges to Mill Creek and thence to Chino Creek, which is tributary to Reach 3 of Santa Ana River, near Prado Dam	28.6 mgd
S-001	34°01'36"N	117°35'59" W	Stormwater runoff from RP-1 to Reach 1, Cucamonga Creek	During storm season

Table 2. Summary of Discharge Points

Discharge Serial No.	Latitude	Longitude	Description	Flow & Frequency
S-002	34°01'28"N	117°35'58"W	Stormwater runoff from RP-1 to Reach 1, Cucamonga Creek	During storm season
003	33°56'39" N	117°38'34" W	Deliver recycled water for irrigation of Whispering Lake Golf Course and Westwind Park, and groundwater recharge at Ely Basins,	2.1 mgd, intermittent discharge

The facilities' location maps and treatment flow schematics are shown in Attachments B and C.

4. Receiving Waters

Over 90% of the tertiary treated wastewater effluent flow from these plants is discharged to Reach 1 of Cucamonga Creek, Chino Creek and Reach 3 of the Santa Ana River and the remaining flow is diverted for irrigation and groundwater recharge. Reach 1 of Cucamonga Creek, Chino Creek and the Santa Ana River are waters of the U.S. Recycled water for irrigation and groundwater recharge is used in the area overlying the Chino North "Maximum Benefit" Groundwater Management Zone (or Chino 1, 2 and 3 "Antidegradation" Management Zones).

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations/Discharge Specifications contained in the existing Order No. 01-1 for discharges from Discharge Point 001 and representative monitoring data (Monitoring Location No. M-001) are as follows:

Table 3a Historic Effluent Limitations and Monitoring Data for DP 001

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2001 – December 2005)		
	Average Monthly unless otherwise noted	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
BOD ₅ (mg/L)	30	45				4
Suspended Solids (mg/L)	30	45				3
Electrical conductivity				783		990
pH Daily Average Continuous Recorder (SU)			Grab samples: Min 6.5 Max 8.5			6.7-8.3
TDS (mg/L)	12-month avg: 515			533		554
Total Inorganic Nitrogen (mg/L)						14.0
Chloride (mg/L)						128
Sodium (mg/L)						123
Sulfate(mg/L)						74
Total Phosphorus (mg/L)						N/A

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2001 – December 2005)		
	Average Monthly unless otherwise noted	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Fluoride (mg/L)						0.3
Nitrate-N (mg/L)				12		
Ammonia (as N) (mg/L)	4.5			2.9		9.1
Chlorine (Total Residual, TRC) (mg/L)			Instantaneous Max 0.1			6.5
Nitrate plus Nitrite Nitrogen (mg/L)						13.6
Coliform MPN/100 ml		Median in last 7 days 2.2				34

Table 3b. Historic Effluent Limitations and Monitoring Data for DP 001

Parameter (units)	Effluent Limitation		Monitoring Data (Year 2005)	
	Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Antimony (µg/L)				<5
Arsenic (µg/L)				5
Beryllium (µg/L)				<1
Boron (mg/L)				0.3
Cadmium (µg/L)				<1
Chromium-Total Cr, (µg/L)				1
Lead (µg/L)				<2
Mercury (µg/L)				<0.2
Nickel (µg/L)				4
Selenium (µg/L)				7
Silver (µg/L)				<2
Thallium (µg/L)				<5
Zinc (µg/L)				30
Copper (µg/L)				6
Cyanide (µg/L)				24
Hexachlorocyclohexane-gamma (Lindane) (µg/L)	0.063	0.142		<0.01
Tetrachloroethylene, (µg/L)	8.85	17.79		<1
Bis(2-ethylhexyl)phthalate (µg/L)				<2

2. Effluent limitations/Discharge Specifications contained in the existing Order No. 01-1 for discharges from **Discharge Point 002** and representative monitoring data (Monitoring Location No. M-002) are as follows:

Table 3c. Historic Effluent Limitations and Monitoring Data for DP 002

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2001 – May 2005)		
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
BOD ₅ (mg/L)	30	45				8
Suspended Solids (mg/L)	30	45				12
Electrical conductivity				785		970
pH Daily Average Continuous Recorder (SU)			Grab samples: Min 6.5 Max 8.5			6.6-7.9
TDS (mg/L)				525		552
Total Inorganic Nitrogen (mg/L)						13.6
Chloride (mg/L)						120
Sodium (mg/L)						122
Sulfate (mg/L)						76
Total Phosphorus (mg/L)						N/A
Fluoride (mg/L)						0.3
Nitrate-N (mg/L)				12		
Ammonia (as N) (mg/L)				3.0		9.2
Chlorine (Total Residual, TRC) (mg/L)			Instantaneous Max, 0.1			0.05
Nitrate plus Nitrite Nitrogen (mg/L)						13.3

Table 3d. Historic Effluent Limitations and Monitoring Data for DP 002

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2001 – To December 2005)	
	Average Monthly	Median for Last 7 Days	Maximum Daily	Highest Average Weekly Discharge	Highest Daily Discharge
Coliform MPN/100 ml		2.2			300

Table 3e Historic Effluent Limitations and Monitoring Data for DP 002

Parameter (units)	Effluent Limitation		Monitoring Data (Year 2005)	
	Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Antimony (µg/L)				<5
Arsenic (µg/L)				5

Parameter (units)	Effluent Limitation		Monitoring Data (Year 2005)	
	Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Beryllium (µg/L)				<1
Boron (mg/L)				0.3
Cadmium (µg/L)				<1
Chromium-Total Cr, (µg/L)				<1
Lead (µg/L)				5
Mercury (µg/L)				<0.2
Nickel (µg/L)				4
Selenium (µg/L)				8
Silver (µg/L)				<2
Thallium (µg/L)				<5
Zinc (µg/L)				30
Cyanide (µg/L)				15
Copper (µg/L)				8
Hexachlorocyclohexane-gamma (Lindane) (µg/L)				<0.01
Tetrachloroethylene, (µg/L)				<1
Chloroform (µg/L)				97
Dibromochloromethane (µg/L)				8
Bis(2-ethylhexyl)phthalate (µg/L)				7

D. Compliance Summary

Table 4. Compliance Summary

Year	Parameter	Permit Limit	Compliance Basis	Monitoring Point	Number of Violations
2001	Chlorine Residual	0.1 mg/L	Individual Excursion (exceeding 5 minutes)	M-001	2
2001	Chlorine Residual	5.0 mg/L	No Individual Excursion	M-001	1
2002	Chlorine Residual	0.1 mg/L	Individual Excursion (exceeding 5 minutes)	M-001	2
2002	Chlorine Residual	5.0 mg/L	No Individual Excursion	M-001	1
2003	Chlorine Residual	0.1 mg/L	Individual Excursion (exceeding 5 minutes)	M-001	2
2003	Chlorine Residual	5.0 mg/L	No Individual Excursion	M-001	1
2004	Regional Sewer Overflow to Storm Channel in Ontario - Vandalism	None	Report	Regional Sewer	1

Year	Parameter	Permit Limit	Compliance Basis	Monitoring Point	Number of Violations
2004	Total Coliform	240 MPN/100mL	No Individual Excursion	M-002	1
2004	Chlorine Residual	0.1 mg/L	Individual Excursion (exceeding 5 minutes)	M-001	2
2004	Chlorine Residual	5.0 mg/L	No Individual Excursion	M-001	2
2005	Influent Overflow to Cucamonga Creek during Storm Event	None	Report	M-INF	1
2005	Turbidity	2 NTU	Daily Average	M-001	5
2005	Turbidity	2 NTU	Daily Average	M-002	3
2005	Turbidity	5 NTU	Excursion for more than 5% of the day	M-002	1
2005	Chlorine Residual	0.1 mg/L	Individual Excursion (exceeding 5 minutes)	M-001	1
2005	Chlorine Residual	5.0 mg/L	No Individual Excursion	M-001	1

E. Planned Changes

The Discharger plans to expand RP-4 from the current capacity of 7 MGD to 14 MGD. This expansion is expected to be complete by January 31, 2007. This will bring the combined capacity of RP-1 and RP-4 to 58 MGD.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to Section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of Division 13 of the Public Resources Code in accordance with Section 13389 of the CWC. This action also involves the re-issuance of waste discharge requirements for an existing facility that discharges

treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15261.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana Basin (hereinafter Basin Plan) on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 (Sources of Drinking Water Policy) requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies. Based on the exception criteria specified in Resolution No. 88-63, the Regional Board excepted Reach 1 of Cucamonga Creek, Chino Creek and Reach 3 and downstream reaches of the Santa Ana River from the municipal and domestic supply beneficial use.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed “management zones”, new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. The surface water components of the N/TDS Amendment are awaiting EPA approval. Effluent limitations for TDS and TIN in this Order are based on applicable surface water components of the N/TDS Amendment (i.e., N and TDS wasteload allocations) and are at least as stringent as the limits in the prior Order.

As previously discussed, the facilities discharge wastewater from three discharge points. The designated beneficial uses of receiving waters affected by the discharge from these facilities are as follows:

Table 5 Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Chino Creek	<u>Present or Potential:</u> water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species.
002, S-001 S-002	Reach 1 of Cucamonga Creek, Chino Creek	<u>Present or Potential:</u> Ground water recharge (GWR), water contact recreation (REC-1), non-contact water recreation (REC-2), wildlife habitat (WILD), and limited warm freshwater habitat.
001 & 002 S-001 S-002	Reach 3 of Santa Ana River	<u>Present or Potential:</u> Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and rare, threatened or endangered species.

Discharge Point	Receiving Water Name	Beneficial Use(s)
001 & 002 S-001 S-002 003	Chino North Groundwater "maximum benefit" management zone/Chino 1, 2 and 3 "antidegradation" management zone	<u>Present or Potential:</u> Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
	Downstream groundwater management zone in Orange county	<u>Present or Potential:</u> Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR, which incorporated the NTR criteria that were applicable in California. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the California Toxics Rule. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005.
5. **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 the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA 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 USEPA.
6. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on pollutants listed in Effluent limits. Restrictions on pollutants listed are specified in federal regulations as discussed, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the

applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

7. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. As discussed in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16.
8. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR §122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Order.
9. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

D. Impaired Water Bodies on CWA 303(d) List-Not Applicable

E. Other Plans, Policies and Regulations-Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, three options exist to protect water

quality: 1) 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA Section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

A. Discharge Prohibitions

The discharge prohibitions are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board’s plans and policies, U.S. Environmental Protection Agency guidance and regulations, and previous permit Order No. 01-1 provisions and are consistent with the requirements set for other discharges regulated by NPDES permits adopted by the Regional Water Board.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Regulations promulgated in 40 CFR §125.3(a)(1) require technology-based effluent limitations for municipal Dischargers to be placed in waste discharge requirements based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in Section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR Part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH.

2. Applicable Technology-Based Effluent Limitations

This facility meets the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of BOD₅, total suspended solids and removal rate as summarized in Table 6, below. These effluent limitations have been carried over from the previous Order for secondary treated wastewater discharge under conditions of 20:1 dilution provided by natural flow in the river.

Table 6. Summary of Technology-based Effluent Limitations under 20:1 Dilution

Constituent	Average Weekly (mg/L)	Average Monthly (mg/L)	Average Monthly Removal Rate %
Biochemical Oxygen Demand, 5-day 20 ⁰ C	45	30	85
Total Suspended Solids	45	30	85

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR §122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an in-stream excursion above any State water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other State plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Water Quality Criteria and Development of WQBELs

a. The Basin Plan specifies narrative and numeric water quality objectives applicable to surface water as follows.

Table 7a. Summary of Applicable Basin Plan Water Quality Objectives

Constituents	Basis for Limitations
Ammonia Nitrogen	Dissociates under certain conditions to the toxic un-ionized form. Thus nitrogen discharges to the Santa Ana River pose a threat to aquatic life and instream beneficial uses, as well as to the beneficial uses of affected groundwater. The Basin Plan specifies total ammonia and un-ionized ammonia objectives and an effluent limit of 4.5 mg/L for discharges to Chino Creek.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A pH range of 6.5 to 8.5 for surface water discharges is specified.
Oil & Grease	Oil and related materials have a high surface tension and are not soluble in water, resulting in odors and visual impacts.
Total Chlorine Residual	Chlorine and its reaction product are toxic to aquatic life. To protect aquatic life, the Basin Plan specifies that for wastewater discharged into inland surface waters the chlorine residual should not exceed 0.1 mg/L
Total Dissolved Solids	High levels of TDS can adversely impact aquatic life. The TDS limit for surface water discharges is based on the amended Basin Plan objectives and wasteload allocation of 550 mg/L.
Total Inorganic Nitrogen	Nitrogen discharges to the Santa Ana River pose a threat to aquatic life and instream beneficial uses, as well as to the beneficial uses of affected groundwater. The TIN limit for surface water discharges is based on the amended Basin Plan wasteload allocation of 8 mg/L.

This Order also includes a TDS limit based on the quality of the water supplied to the service area plus a reasonable use increment for TDS of 250 mg/L. This reasonable use

increment is discussed and authorized in the Basin Plan. The more restrictive of the TDS wasteload allocation-based limit or the TDS limit based on water quality plus a reasonable use increment applies to discharges from the facility.

The TDS/TIN wasteload allocations specified in the amended Basin Plan are based on the combined flows from all POTWs operated by IEUA. Consequently, the effluent limitations for these constituents may be met on a flow-weighted average basis for all of the treatment plants operated by the Discharger.

b. CTR and SIP

The California Toxics Rule (CTR) and State Implementation Policy specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority and non-priority pollutants.

c. Requirement to meet 2.2 total coliform bacteria limit in the effluent

Article 3, Section 60305 of Title 22, Chapter 3, "Use of Recycled water for impoundments" of the California Code of Regulations specifies that recycled water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated). The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California State Department of Health Services (CDHS) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation. The CDHS has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", Department of Health Services, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of recycled water to nonrestricted recreational impoundments, since the public health risks under both scenarios are analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.

Santa Ana River, Reach 3 is not a "nonrestricted recreational impoundment," nor is "recycled water³" being used as a supply source for the River pursuant to the definitions in Title 22. However, except during major storms, most of the flow in the River is composed of treated municipal wastewater discharges. The River is used for water contact recreation and, accordingly, is designated REC-1 (water contact beneficial use). People recreating in the River face an exposure similar to those coming in contact with recycled water in an impoundment. Therefore, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to the River as would be

³ *As defined in the Reclamation Criteria, recycled water means water which, as a result of treatment of domestic wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur.*

required for the use of recycled water in a nonrestricted recreational impoundment. Thus, this Order specifies requirements based on tertiary or equivalent treatment.

- d. Discharge of secondary treated and disinfected wastewater when the natural flows in the river provide at least 20:1 dilution:

The Department of Health Services has determined that public health and water contact recreation (REC-1) beneficial uses will be protected provided that at least 20:1 dilution of secondary treated and disinfected wastewater discharges by natural receiving waters is achieved ("Wastewater Disinfection Guidelines Feb. 1987; these guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection). Based on best professional judgment of the effluent limitations necessary to prevent nuisance and to assure public health and REC-1 use protection, it is necessary and appropriate to implement these guidelines in this Order.

The Santa Ana River is not naturally perennial. In dry weather, flow in the Santa Ana River is comprised predominantly of effluent discharges from municipal wastewater treatment facilities (POTWs), and very little natural flow exists. Under storm conditions, 20:1 (natural receiving waters to effluent) dilution of the effluent by storm flows may be provided. These storm conditions may also threaten the operational safety of the wastewater treatment facility through influx of infiltrated storm flows into the sanitary sewer system. The discharge of secondary effluent when 20:1 dilution is provided by the receiving waters may be necessary to protect the integrity of these facilities.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers criteria from the CTR, and when applicable, water quality objectives specified in the Basin Plan.

Sufficient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants for which effluent data were available. These data were used in the RPA and are summarized in the following Table. The priority pollutants, bis(2-ethylhexyl) phthalate, cyanide and selenium were determined to have reasonable potential to exceed water quality objectives. Consequently, effluent limitations for these constituents are included in this Order

Table 7b. is a summary of the RPA evaluation for cyanide, Bis(2-ethylhexyl) phthalate, and selenium using monitoring data submitted by the Discharger.

Table 7b. RPA Evaluation

<u>Parameter</u>	<u>Unit</u>	<u>Effluent</u>	<u>CTR</u>		<u>Is Effluent Limits Required</u>	
		<u>MEC</u>	<u>CMC</u>	<u>CCC</u>	<u>CMC</u>	<u>CCC</u>
Cyanide	µg/L	24	22	5	Yes	Yes
Selenium	µg/L	9	--	5	--	Yes
Bis(2-ethylhexyl) phthalate	µg/L	7	N/A	5.9	Yes	Yes

4. WQBEL Calculations

Total Chlorine Residual: For discharges under conditions of 20:1 or more dilution , the total chlorine residual effluent limitation in Section IV.A.3.a. is calculated using the equation specified in the State Implementation Policy Section 1.4 - Calculation of Effluent Limitation:

ECA, mg/L = C + D x (C-B) where:

- ECA= Effluent Concentration allowance/effluent limit
- B= Ambient background concentration
- C= Criterion/objective
- D= Dilution Credit

ECA = 0.1+20 x (0.1-0) = 2.1 mg/L

For priority pollutants, water quality based effluent limits are based on monitoring results and the calculation process outlined in Section 1.4 of the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California are summarized in the following tables.

Table 7c is the calculated permit limitations for Bis(2-ethylhexyl) phthalate, cyanide, and Selenium.

**Table 7c. Metals criteria calculation based on California Toxics Rule for freshwater discharges.
 IEUA RP-1/RP-4**

Unit $\mu\text{g/L}$

Constituent	Caltoxic				CV = 0.6			Aquatic		Human		Permit Limit	
	Freshwater		Human Health		Acute M	Chronic M	LTA	Objective/limits		Health Limits		Concentration Limit	
	CMC	CCC	H2O+Org	Org only	Acute LTA	Chronic LTA		MDEL	AMEL	MDEL	AMEL	MDEL	AMEL
Cyanide	22.0	5.2			7.06	2.74	2.74	8.52	4.25			8.5	4.2
Selenium	-	5.0			-	2.64	2.64	8.19	4.08			8.2	4.1
Bis(2-ethylhexyl) phthalate				5.9	--	--	--	--	--	11.8	5.9	11.8	5.9

Notes:

1. Cyanide, selenium and Bis(2-ethylhexyl) phthalate are confirmed to set up limits .
2. For Order R8-2006-0010.

5. Whole Effluent Toxicity (WET)

This Order does not specify WET limits. The monitoring data indicated that all chronic toxicity results were less than TUC of 1.

D. Best Professional Judgment -Based Effluent Limitations

- 1) For tertiary treated wastewater, the BOD₅ and TSS concentration limits are based on Best Professional Judgment. The secondary treatment standards specify BOD₅ and TSS concentration limits that are less stringent.

Table 7d. Tertiary Effluent BOD₅ and TSS Limits

Constituent	Average Weekly	Average Monthly
Biochemical Oxygen Demand	30 mg/L	20 mg/L
Suspended Solids	30 mg/L	20 mg/L

E. Summary of Final Effluent Limitations

Effluent Limitations in following Table

Table 8. Summary of Water Quality-based Final Effluent Limitations for Discharge Points 001 and 002

Parameter	Units	Effluent Limitations					Basis
		Average Monthly or as noted herein	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD ₅	mg/L	20	30	--	--	--	CO
Total Suspended Solids	mg/L	20	30	--	--	--	CO
Total Residual Chlorine	mg/L	--	--		--	0.1	BP, CO
TDS	mg/L	550 (12-M avg)					CO, BP
Ammonia-Nitrogen	mg/L	4.5					CO, BP
pH	Std. unit	--	--	--	6.5	8.5	CO, BP
Cyanide	µg/L	4.2		8.5			CTR, SIP
Selenium	µg/L	4.1		8.2			CTR, SIP
Bis(2-ethylhexyl) phthalate	µg/L	5.9		11.8			CTR, SIP
Coliform	MPN		2.2 Median of last 7 days				CO, Title 22

Notes: CO = Current Order; BP= Basin Plan.

F. Interim Effluent Limitations – DP 001 and DP 002

Based on SIP Section 2.1 - Compliance Schedules, the Discharger demonstrated that it is infeasible for the Discharger to achieve immediate compliance with CTR criterion for cyanide and requested a compliance schedule. This Order includes interim effluent limits for cyanide, which shall be effective starting on July 8, 2006 and ending on October 20, 2007. Compliance with the final cyanide limits are to be achieved as soon as possible but no later than October 20, 2007.

Table 9. Summary of Interim Effluent Limitations for Cyanide at Discharge Points 001 and 002

Discharge Point	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Max Daily	Instantaneous Minimum	Instantaneous Maximum	
001	µg/L	12		24			CTR, SIP
002	µg/L	7.5		15			CTR, SIP

G. Land Discharge Specifications – Not Applicable

H. Reclamation Specifications - DP 003

1. Section 13523 of the California Water Code provides that a Regional Water Board, after consulting with and receiving the recommendations from the CDHS and any party who has requested in writing to be consulted, and after any necessary hearing, shall prescribe water reclamation requirements for water which is used or proposed to be used as recycled water, if, in the judgment of the Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the CDHS pursuant to California Water Code Section 13521.
2. Reclamation specifications in the proposed Order are based on the recommendations from CDHS in accordance with recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, “Guidelines for Use of Reclaimed Water” by CDHS, and the California Water Code Section 13521.
3. As shown in Chapter 4 of the Basin Plan as amended by the N/TDS Amendment (Resolution No. R8-2004-0001), two sets of groundwater management zones (GMZs) and respective TDS and nitrate-nitrogen objectives have been adopted for a portion of the Chino Basin. “Maximum benefit” objectives are established for the Chino North GMZ, while “antidegradation” objectives are set for the Chino 1, 2 and 3 GMZs. Order No. R8-2006-0010 includes TDS and TIN limits for recycled water use that implement the Chino North and Chino 1, 2 and 3 TDS and TIN objectives. Provided that maximum benefit commitments specified in Chapter 5 of the amended Basin Plan (and shown in Attachment L of this Order) are satisfied by the Discharger and the Chino Basin Watermaster, the TDS and TIN discharges from the combined effluent quality from the Discharger’s treatment plants will be limited to 550 mg/L and 8 mg/L, respectively. The basis for these limits is as follows. The modeling analyses used to develop the TDS objective for the Chino North “Maximum

Benefit” Groundwater Management Zone assumed that recycled water used for irrigation was at 550 mg/L TDS. (The TDS objective for this GMZ (420 mg/L) is the TDS concentration of the volume-weighted average of State Project water, stormwater and recycled water (Pursuant to the December 5, 2002 Maximum Benefit Proposal by the Chino Basin Watermaster, page 5, Case 4 and modeling assumptions in its attached exhibits). The TIN limit when maximum benefit is demonstrated is based on the Chino North GMZ nitrate-nitrogen objective (5 mg/L), with the application of a 44% nitrogen loss coefficient. The 44% loss coefficient was derived from Chino Basin specific studies conducted by the discharger’s consultant, Wildermuth Environmental Inc. The TIN objective and the 44% loss coefficient were used in the equation for groundwater management zones without assimilative capacity that is specified in the Basin Plan (Chapter 5, Implementation, Nitrogen Loss Coefficients), resulting in a TIN limit of 8.93 mg/L. However, the discharger has committed to achieve 8 mg/L TIN as part of the maximum benefit commitments. Accordingly, the TIN limit is set at 8 mg/L. If the Regional Board finds that these maximum benefit commitments are not satisfied, then the Chino 1, 2 and 3 “antidegradation” management zones and their respective TDS and TIN objectives apply. Again, the TIN limits were calculated by employing the equation specified in the Basin Plan for management zones without assimilative capacity (see above). The TIN objectives of each of these GMZs and the 44% nitrogen loss coefficient were applied to calculate appropriate TIN limits. Since the Chino 1, 2 and 3 GMZs lack assimilative capacity for TDS, the TDS limits are the same as the management zone objectives.

Requirements pertaining to the implementation of the maximum benefit commitments are specified in Order No. R8-2005-0033, issued by the Regional Board to IEUA and the Chino Basin Watermaster for the Phase I-Groundwater Recharge Project. Order No. R8-2006-0010 requires that if maximum benefit is not demonstrated, the Discharger must implement an approved mitigation program for recycled water use in excess of the limitations applicable to the Chino 1, 2 and 3 GMZs. [Note: Effluent limitations for surface water discharges by IEUA are based on TDS and TIN wasteload allocations, which do not vary based on whether or not maximum benefit is demonstrated.]

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

1. The surface water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan.

B. Groundwater

1. The groundwater water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan. As such, they are required part of the proposed Order.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and State requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements without change. Influent monitoring is required to determine the effectiveness of the treatment program and assess treatment plant performance.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed monitoring and reporting program (Attachment E). This provision requires compliance with the monitoring and reporting program, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The SMP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The monitoring and reporting program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

This Order modifies the monitoring requirements specified in the Order No. 01-1 and adds monitoring requirements for EPA priority pollutants. This Order also requires the discharger to conduct accelerated monitoring for those constituents that are detected in the annual priority pollutant scan.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a

shorter time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, this Order requires the Discharger to conduct chronic toxicity testing. In addition, the Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity identification evaluation (TIE) studies.

This Order requires the Discharger to conduct chronic toxicity testing of the effluent on a monthly basis. The Order also requires the Discharger to conduct an Initial Investigation Toxicity Reduction Evaluation (IITRE) program when either the two-month median of toxicity test results exceeds 1 TUC or any single test exceeds 1.7 TUC for survival endpoint. Based on the results of this investigation program and at the discretion of the Executive Officer, a more rigorous Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) may be required. A re-opener provision is included in the Order to incorporate a chronic toxicity effluent limitation if warranted by the toxicity test results.

D. Receiving Water Monitoring

1. Surface Water

- a. For discharges of secondary treated and disinfected effluent when 20:1 or more dilution is provided by the creek at the point of discharge, the Order requires the Discharger to establish a sampling station(s) at a suitable location(s) where the flow⁴ in the Creek at the point of discharge can be determined. The Order also requires that flow measurements in the Creek are made prior to any direct discharge to the Creek and shall continue on a daily basis until the discharge is terminated.
- b. Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan.

2. Groundwater – Not Applicable

Groundwater monitoring is not necessary since Order No. R8-2005-0033 already requires the Discharger to implement a comprehensive groundwater monitoring program.

⁴ *Exclusive of discharges to surface waters from upstream publicly owned treatment works.*

E. Other Monitoring Requirements

1. **Water Supply Monitoring** - The Discharger is required to collect a sample of each source of water supplied and analyze for total dissolved solids. The result of this monitoring will enable the discharger to show compliance with TDS limitations in the Order.
2. **Biosolids Monitoring** - This Order continues the monitoring requirements specified in Order No. 01-1, with minor modification. The Discharger is now required to submit monitoring data annually instead of quarterly.
3. **Pretreatment Monitoring** - These monitoring and reporting requirements are established pursuant EPA 40 CFR 403 regulations.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

Title 40 CFR Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR Section 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with Section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR Sections 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC Section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. Toxicity Identification Evaluations or Toxicity Reduction Evaluations. This provision is based on the SIP, Section 4, Toxicity Control Provisions.
- b. Antidegradation Analysis. This provision is based on State Water Resources Control Board Resolution No. 68-16, which requires the Board in regulating the discharge of

waste to maintain high quality waters of the state (the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained.

- c. To assure that discharges occur only when the receiving waters can provide 20:1 dilution, the Order requires the Discharger to make provisions for the measurement of the receiving water flow at a suitable location and determine whether 20:1 dilution exists at the point of discharge before discharging secondary treated effluent.

3. **Best Management Practices and Pollution Prevention** - The requirements are based on the SIP Section 2.4.5.1

4. **Construction, Operation, and Maintenance Specifications** - The requirements are based on requirements that were specified in the prior Order.

5. **Special Provisions for Municipal Facilities - POTWs Only**

- a. **Biosolids:** On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the U.S. Environmental Protection Agency is the implementing agency.
- b. **Oxidized and Filtered Wastewater Requirements:** These requirements are based on Title 22 requirements for the use of recycled water.
- c. **Pretreatment:** The treatment plant capacity is 40 mgd and there are significant industrial users within the service areas. Consequently, this Order contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act; Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403); and/or Section 2233, Title 23, California Code of Regulations.

6. **Other Special Provisions**

Maximum Benefit Provisions – These are requirements based on the amended Basin Plan.

7. **Compliance Schedules**

This Order establishes final effluent limitations for free cyanide that are new limits for the discharges. This Order also contains a compliance schedule that provides the Discharger time to bring their discharges into compliance with the newly established final limits. In accordance with Section 2.1 of the SIP, compliance schedules can only be provided by the Board after the Discharger has submitted a report that demonstrates that it is infeasible for the Discharger to achieve immediate compliance with newly established final effluent limitations.

On December 9, 2005 IEUA requested that a compliance schedule for free cyanide limitations be included in this Order. IEUA demonstrated that immediate compliance with the proposed effluent limitations for free cyanide is infeasible. IEUA conducted a free cyanide investigation that addressed treatment plants (RP-1, RP-4) in past years. However, IEUA is still not able to identify and implement appropriate control measures.

The compliance schedule included in this Order is based on the shortest practicable time required to achieve compliance, but it exceeds one year. Consequently, this Order includes interim and final limits and a schedule for compliance with the final free cyanide limitations. The interim average monthly effluent limit is based on the maximum detected effluent concentration for free cyanide at RP-1 and RP-4. This is in accordance with SIP Section 2.2.1, which stipulates that "Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent." Since there is no limit on free cyanide in the prior Order No. 01-03, interim limits must be based on the current treatment plant performance.

The proposed permit allows the Discharger up to October 20, 2007 to achieve compliance with the final Cyanide limitations. Quarterly reporting is required to inform the Regional Board about the progress made by the Discharger to achieve compliance with the final limitations within the specified time.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Regional Water Recycling Plants. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the posting of Notice of Public Hearing at the Chino City Hall and at the local newspaper; and at the Regional Water Board website: <http://www.waterboards.ca.gov/santaana> on March 22, 2006

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on May 1, 2006,

Jane Qiu
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: May 19, 2006
Time: 9:00 A.M.
Location: City Council Chambers of Loma Linda
25541 Barton Road
City of Loma Linda. CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address <http://www.waterboards.ca.gov/santaana> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 9:00 a.m. and 3:00 p.m. Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 320-2008.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Jane Qiu at (951) 320-2008.

ATTACHMENT G - EPA PRIORITY POLLUTANT LIST

EPA PRIORITY POLLUTANT LIST		
Metals	Acid Extractibles	Base/Neutral Extractibles (continuation)
1. Antimony	45. 2-Chlorophenol	91. Hexachloroethane
2. Arsenic	46. 2,4-Dichlorophenol	92. Indeno (1,2,3-cd) Pyrene
3. Beryllium	47. 2,4-Dimethylphenol	93. Isophorone
4. Cadmium	48. 2-Methyl-4,6-Dinitrophenol	94. Naphthalene
5a. Chromium (III)	49. 2,4-Dinitrophenol	95. Nitrobenzene
5b. Chromium (VI)	50. 2-Nitrophenol	96. N-Nitrosodimethylamine
6. Copper	51. 4-Nitrophenol	97. N-Nitrosodi-N-Propylamine
7. Lead	52. 3-Methyl-4-Chlorophenol	98. N-Nitrosodiphenylamine
8. Mercury	53. Pentachlorophenol	99. Phenanthrene
9. Nickel	54. Phenol	100. Pyrene
10. Selenium	55. 2, 4, 6 -- Trichlorophenol	101. 1,2,4-Trichlorobenzene
11. Silver	Base/Neutral Extractibles	Pesticides
12. Thallium	56. Acenaphthene	102. Aldrin
13. Zinc	57. Acenaphthylene	103. Alpha BHC
Miscellaneous	58. Anthracene	104. Beta BHC
14. Cyanide	59. Benzidine	105. Delta BHC
15. Asbestos (not required unless requested)	60. Benzo (a) Anthracene	106. Gamma BHC
16. 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	61. Benzo (a) Pyrene	107. Chlordane
Volatile Organics	62. Benzo (b) Fluoranthene	108. 4, 4' - DDT
17. Acrolein	63. Benzo (g,h,i) Perylene	109. 4, 4' - DDE
18. Acrylonitrile	64. Benzo (k) Fluoranthene	110. 4, 4' - DDD
19. Benzene	65. Bis (2-Chloroethoxy) Methane	111. Dieldrin
20. Bromoform	66. Bis (2-Chloroethyl) Ether	112. Alpha Endosulfan
21. Carbon Tetrachloride	67. Bis (2-Chloroisopropyl) Ether	113. Beta Endosulfan
22. Chlorobenzene	68. Bis (2-Ethylhexyl) Phthalate	114. Endosulfan Sulfate
23. Chlorodibromomethane	69. 4-Bromophenyl Phenyl Ether	115. Endrin
24. Chloroethane	70. Butylbenzyl Phthalate	116. Endrin Aldehyde
25. 2-Chloroethyl Vinyl Ether	71. 2-Chloronaphthalene	117. Heptachlor
26. Chloroform	72. 4-Chlorophenyl Phenyl Ether	118. Heptachlor Epoxide
27. Dichlorobromomethane	73. Chrysene	119. PCB 1016
28. 1,1-Dichloroethane	74. Dibenzo (a,h) Anthracene	120. PCB 1221
29. 1,2-Dichloroethane	75. 1,2-Dichlorobenzene	121. PCB 1232
30. 1,1-Dichloroethylene	76. 1,3-Dichlorobenzene	122. PCB 1242
31. 1,2-Dichloropropane	77. 1,4-Dichlorobenzene	123. PCB 1248
32. 1,3-Dichloropropylene	78. 3,3'-Dichlorobenzidine	124. PCB 1254
33. Ethylbenzene	79. Diethyl Phthalate	125. PCB 1260
34. Methyl Bromide	80. Dimethyl Phthalate	126. Toxaphene
35. Methyl Chloride	81. Di-n-Butyl Phthalate	
36. Methylene Chloride	82. 2,4-Dinitrotoluene	
37. 1,1,2,2-Tetrachloroethane	83. 2-6-Dinitrotoluene	
38. Tetrachloroethylene	84. Di-n-Octyl Phthalate	
39. Toluene	85. 1,2-Dipenylhydrazine	
40. 1,2-Trans-Dichloroethylene	86. Fluoranthene	
41. 1,1,1-Trichloroethane	87. Fluorene	
42. 1,1,2-Trichloroethane	88. Hexachlorobenzene	
43. Trichloroethylene	89. Hexachlorobutadiene	
44. Vinyl Chloride	90. Hexachlorocyclopentadiene	

Attachment H – Practical Quantitation Levels for Compliance Determination

PRACTICAL QUANTITATION LEVELS FOR COMPLIANCE DETERMINATION			
	Constituent	RL, µg/l	Analysis Method
1	Arsenic	7.5	GF/AA
2	Barium	20	ICP/GFAA
3	Cadmium	15	ICP
4	Chromium (VI)	15.0	ICP
5	Cobalt	10.0	GF/AA
6	Copper	19.0	GF/ICP
7	Cyanide	50.0	335.2/335.3
8	Iron	100.0	ICP
9	Lead	26.0	GF/AA
10	Manganese	20.0	ICP
11	Mercury	0.5	CV/AA
12	Nickel	50.0	ICP
13	Selenium	14.0	GF/HYDRIDE GENERATION
14	Silver	16.0	ICP
15	Zinc	20	ICP
16	1,2 - Dichlorobenzene	5.0	601/602/624
17	1,3 - Dichlorobenzene	5.0	601
18	1,4 - Dichlorobenzene	5.0	601
18	2,4 - Dichlorophenol	10.0	625/604
20	4 - Chloro -3- methylphenol	10.0	625/604
21	Aldrin	0.04	608
22	Benzene	1.0	602/624
23	Chlordane	0.30	608
24	Chloroform	5.0	601/624
25	DDT	0.10	608
26	Dichloromethane	5.0	601/624
27	Dieldrin	0.10	608
28	Fluorantene	10.0	625/610
29	Endosulfan	0.50	608
30	Endrin	0.10	608
31	Halomethanes	5.0	601/624
32	Heptachlor	0.03	608
33	Hepthachlor Epoxide	0.05	608
34	Hexachlorobenzene	10.0	625
35	Hexachlorocyclohexane		
	Alpha	0.03	608
	Beta	0.03	608
	Gamma	0.03	608
36	PAH's	10.0	625/610
37	PCB	1.0	608
38	Pentachlorophenol	10.0	625/604
39	Phenol	10.0	625/604
40	TCDD Equivalent	0.05	8280
41	Toluene	1.0	602/625
42	Toxaphene	2.0	608
43	Tributyltin	0.02	GC
44	2,4,6-Trichlorophenol	10.0	625/604

ATTACHMENT I – MINIMUM LEVELS

MINIMUM LEVELS IN PPB (µg/l)

Table I- VOLATILE SUBSTANCES¹	GC	GCMS
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Dichlorobromomethane	0.5	2
1,1 Dichloroethane	0.5	1
1,2 Dichloroethane	0.5	2
1,1 Dichloroethylene	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichloropropylene (volatile)	0.5	2
Ethylbenzene	0.5	2
Methyl Bromide (<i>Bromomethane</i>)	1.0	2
Methyl Chloride (<i>Chloromethane</i>)	0.5	2
Methylene Chloride (<i>Dichloromethane</i>)	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
Tetrachloroethylene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
Trichloroethylene	0.5	2
Vinyl Chloride	0.5	2
1,2 Dichlorobenzene (volatile)	0.5	2
1,3 Dichlorobenzene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2

Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

ML Usage: The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

Note: chemical names in parenthesis and italicized is another name for the constituent.

¹ The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

MINIMUM LEVELS IN PPB (µg/l)

Table 2 – Semi-Volatile Substances ²	GC	GCMS	LC
2-Chloroethyl vinyl ether	1	1	
2 Chlorophenol	2	5	
2,4 Dichlorophenol	1	5	
2,4 Dimethylphenol	1	2	
4,6 Dinitro-2-methylphenol	10	5	
2,4 Dinitrophenol	5	5	
2- Nitrophenol		10	
4- Nitrophenol	5	10	
4 Chloro-3-methylphenol	5	1	
2,4,6 Trichlorophenol	10	10	
Acenaphthene	1	1	0.5
Acenaphthylene		10	0.2
Anthracene		10	2
Benzidine		5	
Benzo (a) Anthracene (<i>1,2 Benzanthracene</i>)	10	5	
Benzo(a) pyrene (<i>3,4 Benzopyrene</i>)		10	2
Benzo (b) Flouranthene (<i>3,4 Benzofluoranthene</i>)		10	10
Benzo(g,h,i)perylene		5	0.1
Benzo(k)fluoranthene		10	2
bis 2-(1-Chloroethoxyl) methane		5	
bis(2-chloroethyl) ether	10	1	
bis(2-Chloroisopropyl) ether	10	2	
bis(2-Ethylhexyl) phthalate	10	5	
4-Bromophenyl phenyl ether	10	5	
Butyl benzyl phthalate	10	10	
2-Chloronaphthalene		10	
4-Chlorophenyl phenyl ether		5	
Chrysene		10	5
Dibenzo(a,h)-anthracene		10	0.1
1,2 Dichlorobenzene (semivolatile)	2	2	
1,3 Dichlorobenzene (semivolatile)	2	1	
1,4 Dichlorobenzene (semivolatile)	2	1	
3,3' Dichlorobenzidine		5	
Diethyl phthalate	10	2	
Dimethyl phthalate	10	2	
di-n-Butyl phthalate		10	
2,4 Dinitrotoluene	10	5	
2,6 Dinitrotoluene		5	
di-n-Octyl phthalate		10	
1,2 Diphenylhydrazine		1	
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	
1,2,4 Trichlorobenzene	1	5	

MINIMUM LEVELS IN PPB (µg/l)

Table 2 - SEMI-VOLATILE SUBSTANCES²	GC	GCMS	LC	COLOR
Pentachlorophenol	1	5		
Phenol ³	1	1		50
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
N-Nitroso diphenyl amine	10	1		
Phenanthrene		5	0.05	
Pyrene		10	0.05	

Table 3- INORGANICS⁴	FAA	GFA A	IC P	ICPMS	SPGFA A	HYDRID E	CVAA	COLO R	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Lead	20	5	5	0.5	2				10000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000
Cyanide								5	

² With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

³ Phenol by colorimetric technique has a factor of 1.

⁴ The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

MINIMUM LEVELS IN PPB (µg/l)

Table 4- PESTICIDES – PCBs⁵	GC
Aldrin	0.005
alpha-BHC (<i>a-Hexachloro-cyclohexane</i>)	0.01
beta-BHC (<i>b-Hexachloro-cyclohexane</i>)	0.005
Gamma-BHC (<i>Lindane; g-Hexachloro-cyclohexane</i>)	0.02
Delta-BHC (<i>d-Hexachloro-cyclohexane</i>)	0.005
Chlordane	0.1
4,4'-DDT	0.01
4,4'-DDE	0.05
4,4'-DDD	0.05
Dieldrin	0.01
Alpha-Endosulfan	0.02
Beta-Endosulfan	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

Techniques:

- GC - Gas Chromatography
- GCMS - Gas Chromatography/Mass Spectrometry
- HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
- LC - High Pressure Liquid Chromatography
- FAA - Flame Atomic Absorption
- GFAA - Graphite Furnace Atomic Absorption
- HYDRIDE - Gaseous Hydride Atomic Absorption
- CVAA - Cold Vapor Atomic Absorption
- ICP - Inductively Coupled Plasma
- ICPMS - Inductively Coupled Plasma/Mass Spectrometry
- SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
- DCP - Direct Current Plasma
- COLOR - Colorimetric

⁵ *The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.*

ATTACHMENT J – STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

A. Implementation Schedule

The storm water pollution prevention plan (SWPPP) shall be updated and implemented in a timely manner, but in no case later than June 30, 2006.

B. Objectives

The SWPPP has two major objectives: (1) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (2) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage). To achieve these objectives, dischargers should consider the five phase process for SWPPP development and implementation as shown in Table A, below.

The SWPPP requirements are designed to be sufficiently flexible to meet the various needs of the facility. SWPPP requirements that are not applicable to the facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

C. Planning and Organization

1. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in the Stormwater monitoring program of Order No. R8-2006-0010. The SWPPP shall clearly identify the storm water pollution prevention related responsibilities, duties, and activities of each team member.

2. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. The discharger shall review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of Order No. R8-2006-0010.

The discharger shall identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of Order No. R8-2006-0010. As examples, dischargers whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, the discharger whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

D. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

1. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
2. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
3. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
4. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section F.1.d., below, have occurred.
5. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.
6. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

E. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

F. Description of Potential Pollutant Sources

1. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section D.5., above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:
 - a. **Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the processes (manufacturing or treatment), cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
 - b. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
 - c. **Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.
 - d. **Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges. Include toxic chemicals (listed in 40 Code of Federal Regulations [CFR] Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR, Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spills or leaks do not reoccur. Such list shall be updated as appropriate during the term of Order No. R8-2006-0010.

- e. **Non-Storm Water Discharges.** The discharger shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains

(inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions of Order No. R8-2006-0010 are prohibited. (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

- f. **Soil Erosion.** Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.
2. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B below. The last column of Table B, "Control Practices", should be completed in accordance with Section H., below.

G. Assessment of Potential Pollutant Sources

1. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in Section F., above, to determine:
 - a. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - b. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. The discharger shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.
2. The discharger shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

The discharger is required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section H., below.

H. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections F. and G., above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

The discharger shall consider the following BMPs for implementation at the facility:

1. Non-Structural BMPs: Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. The discharger should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section H.2., below). Below is a list of non-structural BMPs that should be considered:
 - a. Good Housekeeping: Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.
 - b. Preventive Maintenance: Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.
 - c. Spill Response: This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.
 - d. Material Handling and Storage: This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.
 - e. Employee Training: This includes training of personnel who are responsible for (a) implementing activities identified in the SWPPP, (b) conducting inspections, sampling, and visual observations, and (c) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.
 - f. Waste Handling/Recycling: This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

- g. **Record Keeping and Internal Reporting:** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.
 - h. **Erosion Control and Site Stabilization:** This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.
 - i. **Inspections:** This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.
 - j. **Quality Assurance:** This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.
2. **Structural BMPs:** Where non-structural BMPs as identified in Section H.1., above, are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:
- a. **Overhead Coverage:** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.
 - b. **Retention Ponds:** This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.
 - c. **Control Devices:** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.
 - d. **Secondary Containment Structures:** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
 - e. **Treatment:** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

I. Annual Comprehensive Site Compliance Evaluation

The discharger shall conduct one comprehensive site compliance evaluation in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

1. A review of all visual observation records, inspection records, and sampling and analysis results.
2. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
3. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
4. An evaluation report that includes, (1) identification of personnel performing the evaluation, (2) the date(s) of the evaluation, (3) necessary SWPPP revisions, (4) schedule, as required in Section J.5, below, for implementing SWPPP revisions, (5) any incidents of non-compliance and the corrective actions taken, and (6) a certification that the discharger is in compliance with Order No. R8-2006-0010. If the above certification cannot be provided, explain in the evaluation report why the discharger is not in compliance with this order. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Attachment D, Standard Provision, Section V Reporting, Subsection B. Signatory and Certification Requirements of Order No. R8-2006-0010.

J. SWPPP General Requirements

1. The SWPPP shall be retained on site and made available upon request by a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
2. The Regional Water Board and/or local agency may notify the discharger when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the discharger shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the discharger shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
3. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (1) may significantly increase the quantities of pollutants in storm water discharge, (2) cause a new area of industrial activity at the facility to be exposed to storm water, or (3) begin an industrial activity which would introduce a new pollutant source at the facility.
4. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a discharger determines that the SWPPP is in violation of any requirement(s) of Order No. R8-2006-0010.
5. When any part of the SWPPP is infeasible to implement by the deadlines specified in Order No. R8-2006-0010, due to proposed significant structural changes, the discharger shall submit a report to the Regional Water Board prior to the applicable deadline that (1) describes the portion

of the SWPPP that is infeasible to implement by the deadline, (2) provides justification for a time extension, (3) provides a schedule for completing and implementing that portion of the SWPPP, and (4) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. The discharger shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

6. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

TABLE A

**FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL
STORM WATER POLLUTION PREVENTION PLANS**

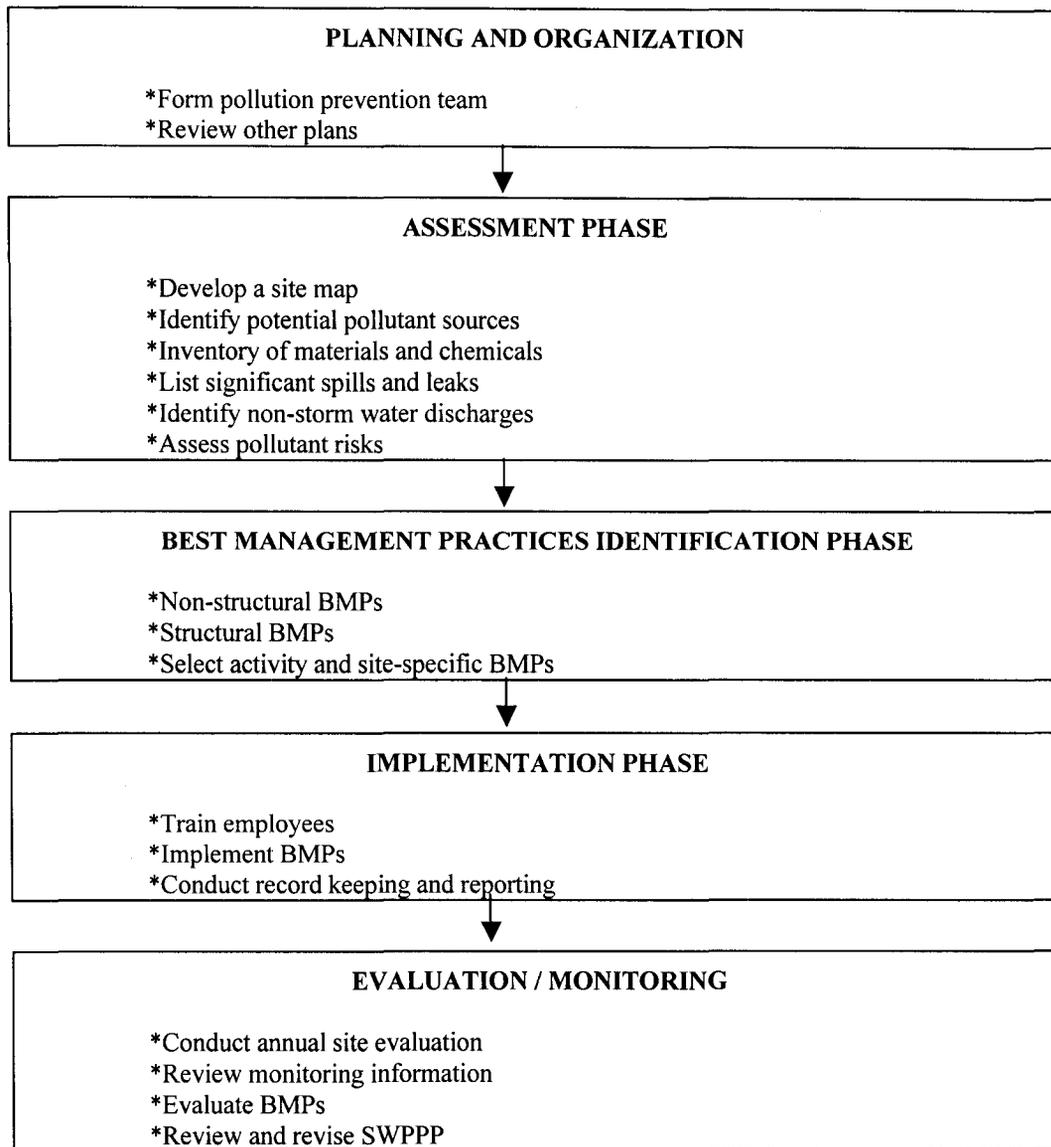


TABLE B

EXAMPLE

**ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND
 CORRESPONDING BEST MANAGEMENT PRACTICES
 SUMMARY**

AREA	ACTIVITY	POLLUTANT SOURCE	POLLUTANT	BEST MANAGEMENT PRACTICES
Vehicle & equipment fueling	Fueling	Spills and leaks during delivery	Fuel oil	<ul style="list-style-type: none"> - Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area - Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program - Implement adequate preventative maintenance program to prevent tank and line leaks <ul style="list-style-type: none"> - Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques.
		Spills caused by topping off fuel oil	Fuel oil	
		Hosing or washing down fuel area	Fuel oil	
		Leaking storage tanks	Fuel oil	
		Rainfall running off fueling areas, and rainfall running onto and off fueling area	Fuel oil	

ATTACHMENT K – STORMWATER MONITORING AND REPORTING PROGRAM

STORMWATER MONITORING AND REPORTING REQUIREMENTS

A. Implementation Schedule

The discharger shall continue to implement their existing Stormwater monitoring program and implement any necessary revisions to their Stormwater monitoring program in a timely manner, but in no case later than June 30, 2006. The discharger may use the monitoring results conducted in accordance with their existing Stormwater monitoring program to satisfy the pollutant/parameter reduction requirements in Section E.3., below, and Sampling and Analysis Exemptions and Reduction Certifications in Section J, below.

B. Objectives

The objectives of the monitoring program are to:

1. Ensure that storm water discharges are in compliance with waste discharge requirements specified in Order No. R8-2006-0010.
2. Ensure practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.
3. Aid in the implementation and revision of the SWPPP required by Attachment “J” Stormwater Pollution Prevention Plan of Order No. R8-2006-0010.
4. Measure the effectiveness of best management practices (BMPs) to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges. Much of the information necessary to develop the monitoring program, such as discharge locations, drainage areas, pollutant sources, etc., should be found in the Storm Water Pollution Prevention Plan (SWPPP). The facility's monitoring program shall be a written, site-specific document that shall be revised whenever appropriate and be readily available for review by employees or Regional Water Board inspectors.

C. Non-Storm Water Discharge Visual Observations

1. The discharger shall visually observe all drainage areas within their facility for the presence of unauthorized non-storm water discharges;
2. The discharger shall visually observe the facility's authorized non-storm water discharges and their sources;
3. The visual observations required above shall occur quarterly, during daylight hours, on days with no storm water discharges, and during scheduled facility operating hours⁶. Quarterly

⁶ *"Scheduled facility operating hours" are the time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.*

visual observations shall be conducted in each of the following periods: January-March, April-June, July-September, and October-December. The discharger shall conduct quarterly visual observations within 6-18 weeks of each other.

4. Visual observations shall document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge. Records shall be maintained of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2006-0010.

D. Storm Water Discharge Visual Observations

1. With the exception of those facilities described in Section D.4., below, the discharger shall visually observe storm water discharges from one storm event per month during the wet season (October 1-May 30). These visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained storm water shall occur at the time of release.
2. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three (3) working days⁷ without storm water discharges and that occur during scheduled facility operating hours.
3. Visual observations shall document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records shall be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2006-0010.
4. The discharger with storm water containment facilities shall conduct monthly inspections of their containment areas to detect leaks and ensure maintenance of adequate freeboard. Records shall be maintained of the inspection dates, observations, and any response taken to eliminate leaks and to maintain adequate freeboard.

E. Sampling and Analysis

1. The discharger shall collect storm water samples during the first hour of discharge from (1) the first storm event of the wet season, and (2) at least one other storm event in the wet season. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is released. The discharger that does not collect samples from the first storm event of the wet season are still required to collect samples from two other storm events of the wet season and shall explain in the "Annual Stormwater Report" (see Section L, below) why the first storm event was not sampled.

⁷ Three (3) working days may be separated by non-working days such as weekends and holidays provided that no storm water discharges occur during the three (3) working days and the non-working days.

2. Sample collection is only required of storm water discharges that occur during scheduled facility operating hours and that are preceded by at least (3) three working days without storm water discharge.
3. The samples shall be analyzed for:
 - a. Total suspended solids (TSS) pH, specific conductance, and total organic carbon (TOC). Oil and grease (O&G) may be substituted for TOC;
 - b. Toxic chemicals and other pollutants that are likely to be present in storm water discharges in significant quantities. If these pollutants are not detected in significant quantities after two consecutive sampling events, the discharger may eliminate the pollutant from future sample analysis until the pollutant is likely to be present again;
 - c. The discharger is not required to analyze a parameter when either of the two following conditions are met: (a) the parameter has not been detected in significant quantities from the last two consecutive sampling events, or (b) the parameter is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the discharger's evaluation of the facilities industrial activities, potential pollutant sources, and SWPPP; and
 - d. Other parameters as required by the Regional Water Board.

F. Sample Storm Water Discharge Locations

1. The discharger shall visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the facility's storm water discharges from the storm event.
2. If the facility's storm water discharges are commingled with run-on from surrounding areas, the discharger should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the facility's storm water discharges from the storm event.
3. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfalls), the discharger shall identify and collect samples from other locations that represent the quality and quantity of the facility's storm water discharges from the storm event.
4. The discharger that determines that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (1) collect samples from a reduced number of substantially identical drainage areas, or (2) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. The discharger must document such a determination in the annual Stormwater report.

G. Visual Observation and Sample Collection Exceptions

The discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until the minimum requirements of Sections D. and E., above, are completed with the following exceptions:

1. The discharger is not required to collect a sample and conduct visual observations in accordance with Section D and Section E, above, due to dangerous weather conditions, such as flooding, electrical storm, etc., when storm water discharges begin after scheduled facility operating hours or when storm water discharges are not preceded by three working days without discharge. Visual observations are only required during daylight hours. The discharger that does not collect the required samples or visual observations during a wet season due to these exceptions shall include an explanation in the "Annual Stormwater Report" why the sampling or visual observations could not be conducted.
2. The discharger may conduct visual observations and sample collection more than one hour after discharge begins if the discharger determines that the objectives of this section will be better satisfied. The discharger shall include an explanation in the "Annual Stormwater Report" why the visual observations and sample collection should be conducted after the first hour of discharge.

H. Alternative Monitoring Procedures

The discharger may propose an alternative monitoring program that meets Section B, above, monitoring program objectives for approval by the Regional Water Board's Executive Officer. The discharger shall continue to comply with the monitoring requirements of this section and may not implement an alternative monitoring plan until the alternative monitoring plan is approved by the Regional Water Board's Executive Officer. Alternative monitoring plans are subject to modification by the Regional Water Board's Executive Officer.

I. Monitoring Methods

1. The discharger shall explain how the facility's monitoring program will satisfy the monitoring program objectives of Section B., above. This shall include:
 - a. Rationale and description of the visual observation methods, location, and frequency;
 - b. Rationale and description of the sampling methods, location, and frequency; and
 - c. Identification of the analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges. This shall include justification that the method detection limits are adequate to satisfy the objectives of the monitoring program.
2. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including the discharger's own field instruments for measuring pH and Electro-conductivity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory

analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in Order No. R8-2006-0010 or by the Regional Water Board's Executive Officer. All metals shall be reported as total recoverable metals or unless otherwise specified in Order No. R8-2006-0010. With the exception of analysis conducted by the discharger, all laboratory analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The discharger may conduct their own sample analyses if the discharger has sufficient capability (qualified employees, laboratory equipment, etc.) to adequately perform the test procedures.

J. Sampling and Analysis Exemptions and Reductions

A discharger who qualifies for sampling and analysis exemptions, as described below in Section J.1.a or who qualifies for reduced sampling and analysis, as described below in Section J.2., must submit the appropriate certifications and required documentation to the Regional Water Board prior to the wet season (October 1) and certify as part of the annual Stormwater report submittal. A discharger that qualifies for either the Regional Water Board or local agency certification programs, as described below in Section J.1.b and c, shall submit certification and documentation in accordance with the requirements of those programs. The discharger who provides certification(s) in accordance with this section are still required to comply with all other monitoring program and reporting requirements. The discharger shall prepare and submit their certification(s) using forms and instructions provided by the State Water Board, Regional Water Board, or local agency or shall submit their information on a form that contains equivalent information. The discharger whose facility no longer meets the certification conditions must notify the Regional Water Board's Executive Officer (and local agency) within 30 days and immediately comply with Section E., Sampling and Analysis requirements. Should a Regional Water Board (or local agency) determine that a certification does not meet the conditions set forth below, the discharger must immediately comply with the Section 5., Sampling and Analysis requirements.

1. Sampling and Analysis Exemptions

A discharger is not required to collect and analyze samples in accordance with Section E., above, if the discharger meets all of the conditions of one of the following certification programs:

a. No Exposure Certification (NEC)

This exemption is designed primarily for those facilities where all industrial activities are conducted inside buildings and where all materials stored and handled are not exposed to storm water. To qualify for this exemption, the discharger must certify that their facilities meet all of the following conditions:

- i. All prohibited non-storm water discharges have been eliminated or otherwise permitted.
- ii. All authorized non-storm water discharges have been identified and addressed in the SWPPP.
- iii. All areas of past exposure have been inspected and cleaned, as appropriate.

- iv. All significant materials related to industrial activity (including waste materials) are not exposed to storm water or authorized non-storm water discharges.
- v. All industrial activities and industrial equipment are not exposed to storm water or authorized non-storm water discharges.
- vi. There is no exposure of storm water to significant materials associated with industrial activity through other direct or indirect pathways such as from industrial activities that generate dust and particulates.
- vii. There is periodic re-evaluation of the facility to ensure conditions i, ii, iv, v, and vi above are continuously met. At a minimum, re-evaluation shall be conducted once a year.

b. Regional Water Board Certification Programs

The Regional Water Board may grant an exemption to the Section E. Sampling and Analysis requirements if it determines a discharger has met the conditions set forth in a Regional Water Board certification program. Regional Water Board certification programs may include conditions to (1) exempt the discharger whose facilities infrequently discharge storm water to waters of the United States, and (2) exempt the discharger that demonstrate compliance with the terms and conditions of Order No. R8-2006-0010.

c. Local Agency Certifications

A local agency may develop a local agency certification program. Such programs must be approved by the Regional Water Board. An approved local agency program may either grant an exemption from Section E. Sampling and Analysis requirements or reduce the frequency of sampling if it determines that a discharger has demonstrated compliance with the terms and conditions of the Industrial Activities Storm Water General Permit Order No. 97-03-DWQ which was adopted by the State Water Resources Control Board on April 17, 1997.

2. Sampling and Analysis Reduction

- a. A discharger may reduce the number of sampling events required to be sampled for the remaining term of Order No. R8-2006-0010 if the discharger provides certification that the following conditions have been met:
 - i. The discharger has collected and analyzed samples from a minimum of six storm events from all required drainage areas;
 - ii. All prohibited non-storm water discharges have been eliminated or otherwise permitted;
 - iii. The discharger demonstrates compliance with the terms and conditions of the Order No. R8-2006-0010 for the previous two years (i.e., completed Annual Stormwater Reports, performed visual observations, implemented appropriate BMPs, etc.);

- iv. The discharger demonstrates that the facility's storm water discharges and authorized non-storm water discharges do not contain significant quantities of pollutants; and
 - v. Conditions ii, iii, and iv above are expected to remain in effect for a minimum of one year after filing the certification.
- b. Unless otherwise instructed by the Regional Water Board, the discharger shall collect and analyze samples from two additional storm events during the remaining term of Order No. R8-2006-0010 in accordance with Table A, below. The discharger shall collect samples of the first storm event of the wet season. The discharger that does not collect samples from the first storm event of the wet season shall collect samples from another storm event during the same wet season. The discharger that does not collect a sample in a required wet season shall collect the sample from another storm event in the next wet season. The discharger shall explain in the "Annual Stormwater Report" why the first storm event of a wet season was not sampled or a sample was not taken from any storm event in accordance with the Table A schedule, below.

Table A REDUCED MONITORING SAMPLING SCHEDULE		
Discharger Filing Sampling Reduction Certification By	Samples Shall be Collected and Analyzed in these wet seasons	
	Sample 1	Sample 2
Sept. 1, 2006	Oct. 1, 2006-May 31, 2007	Oct. 1, 2006-May 31, 2007
Sept. 1, 2007	Oct. 1, 2007-May 31, 2008	Oct. 1, 2007-May 31, 2008
Sept. 1, 2008	Oct. 1, 2008-May 31, 2009	Oct. 1, 2008-May 31, 2009
Sept. 1, 2009	Oct. 1, 2009-May 31, 2010	Oct. 1, 2009-May 31, 2010
Sept. 1, 2010	Oct. 1, 2010-May 31, 2011	Oct. 1, 2010-May 31, 2011

K. Records

Records of all storm water monitoring information and copies of all reports (including the Annual Stormwater Reports) required by Order No. R8-2006-0010 shall be retained for a period of at least five years. These records shall include:

1. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;
2. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;
3. Flow measurements or estimates;
4. The date and approximate time of analyses;
5. The individual(s) who performed the analyses;
6. Analytical results, method detection limits, and the analytical techniques or methods used;
7. Quality assurance/quality control records and results;
8. Non-storm water discharge inspections and visual observations and storm water discharge visual observation records (see Sections C. and D., above);
9. Visual observation and sample collection exception records (see Section E.1, F.4, G, and J.2.b, above);
10. All calibration and maintenance records of on-site instruments used;
11. All Sampling and Analysis Exemption and Reduction certifications and supporting documentation (see Section J);
12. The records of any corrective actions and follow-up activities that resulted from the visual observations.

L. Annual Report

The discharger shall submit an Annual Stormwater Report by July 1 of each year to the Executive Officer of the Regional Water Board and to the local agency (if requested). The report shall include a summary of visual observations and sampling results, an evaluation of the visual observation and sampling and analysis results, laboratory reports, the Annual Comprehensive Site Compliance Evaluation Report required in Section 9. of Attachment "J" of Order No. R8-2006-0010, an explanation of why a facility did not implement any activities required by Order No. R8-2006-0010 (if not already included in the Evaluation Report), and records specified in Section K., above. The method detection limit of each analytical parameter shall be included. Analytical results that are less than the method detection limit shall be reported as "less than the method detection limit". The Annual Stormwater Report shall be signed and certified in

accordance with Attachment D. Federal Standard Provisions, Section V-Reporting, Subsection B. Signatory and Certification requirements of Order No. R8-2006-0010. The discharger shall prepare and submit their Annual Stormwater Reports using the annual report forms provided by the State Water Board or Regional Water Board or shall submit their information on a form that contains equivalent information.

M. Watershed Monitoring Option

Regional Water Boards may approve proposals to substitute watershed monitoring for some or all of the requirements of this section if the Regional Water Board finds that the watershed monitoring will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of Order No. R8-2006-0010.

ATTACHMENT L – CHINO BASIN MAXIMUM BENEFIT COMMITMENTS

Table 5-8a of Resolution No. R8-2004-0001

Chino Basin Maximum Benefit Commitments

Description of Commitment	Compliance Date – as soon as possible, but no later than
1. Surface Water Monitoring Program a. Submit Draft Monitoring Program to Regional Board b. Implement Monitoring Program c. Quarterly data report submittal d. Annual data report submittal	a. January 23, 2005 (complied) b. Within 30 days from date of Regional Board approval of monitoring plan c. April 15, July 15, October 15, January 15 d. February 15 th
2. Groundwater Monitoring Program a. Submit Draft Monitoring Program to Regional Board b. Implement Monitoring Program c. Annual data report submittal	a. January 23, 2005(complied) b. Within 30 days from date of Regional Board approval of monitoring plan c. February 15 th
3. Chino Desalters a. Chino 1 desalter expansion to 10 MGD b. Chino 2 desalter at 10 MGD design	a. Prior to recharge of recycled water b. Recharge of recycled water allowed once award of contract and notice to proceed issued for construction of desalter treatment plant
4. Future desalters plan and schedule submittal	October 1, 2005 Implement plan and schedule upon Regional Board approval
5. Recharge facilities (17) built and in operation	June 30, 2005 (Partially complied)
6. IEUA wastewater quality improvement plan and schedule submittal	60 days after agency-wide 12 month running average effluent TDS quality equals or exceeds 545 mg/L for 3 consecutive months or agency-wide 12 month running average TIN equals or exceeds 8 mg/L in any month. Implement plan and schedule upon approval by Regional Board

Table 5-8a

Chino Basin Maximum Benefit Commitments (cont.)

Description of Commitment	Compliance Date – as soon as possible, but no later than
<p>7. Recycled water will be blended with other recharge sources so that the 5-year running average TDS and nitrate-nitrogen concentrations of water recharged are equal to or less than the “maximum benefit” water quality objectives for the affected Management Zone (Chino North or Cucamonga).</p> <p>a. Submit a report that documents the location, amount of recharge, and TDS and nitrogen quality of stormwater recharge before the OBMP recharge improvements were constructed and what is projected to occur after the recharge improvements are completed</p> <p>b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of CBW/IEUA enhanced recharge facilities.</p>	<p>Compliance must be achieved by end of 5th year after initiation of recycled water recharge operations.</p> <p>a. Prior to initiation of recycled water recharge</p> <p>b. Annually, by February 15th, after initiation of construction of basins/other facilities to support enhanced stormwater recharge.</p>
<p>8. Hydraulic Control Failure</p> <p>a. Plan and schedule to correct loss of hydraulic control</p> <p>b. Achievement and maintenance of hydraulic control</p> <p>c. Mitigation plan for temporary failure to achieve/maintain hydraulic control</p>	<p>a. 60 days from Regional Board finding that hydraulic control is not being maintained</p> <p>b. In accordance with plan and schedule approved by Regional Board. The schedule shall assure that hydraulic control is achieved as soon as possible but no later than 180 days after loss of hydraulic control is identified.</p> <p>c. By January 23, 2005(compiled). Implement plan upon Regional Board determination that hydraulic control is not being maintained.</p>
<p>9. Ambient groundwater quality determination</p>	<p>July 1, 2005 and every 3 years thereafter</p>

ATTACHMENT M – TRIGGERS FOR MONITORING PRIORITY POLLUTANTS

The values shown in the table below are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of organisms only) as specified for that pollutant in 40 CFR 131.38⁸). For hardness dependent metals, the hardness value used is 139 mg/L and for pentachlorophenol, the pH value used is 7.5 standard units.

	Constituent	µg/L
1	Antimony	2150
2	Arsenic	75
3	Beryllium	
4	Cadmium	3.7
5a	Chromium III	136
5b	Chromium VI	5.7
6	Copper	15.5
7	Lead	11
8	Mercury	0.026
9	Nickel	34.5
10	Selenium	2.5
11	Silver	3.6
12	Thallium	3.2
13	Zinc	79
14	Cyanide	2.6
15	Asbestos	--
16	2,3,7,8-TCDD (Dioxin)	0.00000007
17	Acrolein	390
18	Acrylonitrile	0.33
19	Benzene	36
20	Bromoform	180
21	Carbon Tetrachloride	2.2
22	Chlorobenzene	10500
23	Chlorodibromomethane	17
24	Chloroethane	--
25	2-Chloroethyl vinyl ether	--
26	Chloroform	
27	Dichlorobromomethane	23
28	1,1-Dichloroethane	--
29	1,2-Dichloroethane	50
30	1,1-Dichloroethylene	1.6
31	1,2-Dichloropropane	20
32	1,3-Dichloropropylene	850
33	Ethylbenzene	14500
34	Methyl Bromide	2000
35	Methyl Chloride	--
36	Methylene Chloride	800
37	1,1,2,2-Tetrachloroethane	5.5

	Constituent	µg/L
38	Tetrachloroethylene	4.43
39	Toluene	100000
40	1,2,-Trans-dichloroethylene	70000
41	1,1,1-Trichloroethane	--
42	1,1,2-Trichloroethane	21
43	Trichloroethylene	41
44	Vinyl Chloride	263
45	2-Chlorophenol	200
46	2,4-Dichlorophenol	395
47	2,4-Dimethylphenol	1150
48	4,6-Dinitro-O-cresol	383
49	2,4-Dinitrophenol	7000
50	2-Nitrophenol	--
51	4-Nitrophenol	--
52	3-Methyl-4-Chlorophenol	--
53	Pentachlorophenol	4.1
54	Phenol	2300000
55	2,4,6-Trichlorophenol	3.3
56	Acenaphthene	1350
57	Acenaphthylene	--
58	Anthracene	55000
59	Benzidine	0.00027
60	Benzo (a) anthracene	0.025
61	Benzo (a) pyrene	0.025
62	Benzo (b) fluoranthene	0.025
63	Benzo (g,h,i) pyrene	--
64	Benzo (k) fluorantene	0.025
65	Bis (2-Chloroethoxy) methane	--
66	Bis (2-Chloroethyl) ether	0.7
67	Bis (2-Chloroisopropyl) ether	85000
68	Bis (2-ethyhexyl) phthalate	3
69	4-Bromophenyl phenyl ether	--
70	Butyl benzyl phthalate	2600
71	2-Chloronaphthalene	2150
72	4-Chlorophenyl phenyl ether	--
73	Chrysene	0.025
74	Dibenzo (a,h) anthracene	0.025
75	1,2-Dichlorobenzene	8500

⁸ See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations

ATTACHMENT M -Continued

	Constituent	µg/L
76	1,3-Dichlorobenzene	1300
77	1,4-Dichlorobenzene	1300
78	3,3-Dichlorobenzidine	0.039
79	Diethyl phthalate	60000
80	Dimethyl phthalate	1450000
81	Di-N-butyl phthalate	6000
82	2,4-Dinitrotoluene	4.6
83	2,6-Dinitrotoluene	--
84	Di-N-octyl phthalate	--
85	1,2-Diphenylhydrazine	0.27
86	Fluoranthene	185
87	Fluorene	7000
88	Hexachlorobenzene	0.00039
89	Hexachlorobutadiene	25
90	Hexachlorocyclopentadiene	8500
91	Hexachloroethane	4.5
92	Indeno (1,2,3-cd) pyrene	0.025
93	Isophorone	300
94	Naphthalene	--
95	Nitrobenzene	950
96	N-Nitrosodimethylamine	4.05
97	N-Nitrosodi-N-propylamine	0.7
98	N-Nitrosodiphenylamine	8
99	Phenanthrene	--
100	Pyrene	5500
101	1,2,4 -Trichlorobenzene	--
102	Aldrin	0.00007
103	BHC Alpha	0.0065
104	BHC Beta	0.023
105	BHC Gamma	0.0315
106	BHC Delta	--
107	Chlordane	0.0003
108	4,4-DDT	0.0003
109	4,4-DDE	0.0003
110	4,4-DDD	0.00042
111	Dieldrin	0.00007
112	Endosulfan Alpha	0.028
113	Endosulfan Beta	0.028
114	Endosulfan Sulfate	120
115	Endrin	0.018
116	Endrin Aldehyde	0.41
117	Heptachlor	0.00011
118	Heptachlor Epoxide	0.000055
119	PCB 1016	0.000085
120	PCB 1221	0.000085
125	PCB 1260	0.000085
126	Toxaphene	0.00038