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Agency Secretary

California Regional Water Quality Control Board

Arnold Schwarzenegger
Governor

Colorado River Basin Region

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ORDER NO. R7-2005-0083
NPDES NO. CA0104493

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	City of Coachella and the Coachella Sanitary District
Name of Facility	Coachella Sanitary District Wastewater Treatment Plant, Coachella
Facility Address	87-075 Avenue 54
	Coachella, CA 92236
	Riverside County

The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	**Treated Wastewater**	**33 º, 39', 20" N**	**116 º, 08', 31" W**	**Coachella Valley Storm Water Channel**

This Order was adopted by the Regional Water Board on:	**June 29, 2005**
This Order shall become effective on:	**June 29, 2005**
This Order shall expire on:	**June 29, 2010**
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, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 00-032 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water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, Robert E. Perdue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 29, 2005.

Robert E. Perdue, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 7, COLORADO RIVER BASIN REGION

ORDER NO. R7-2005-0083
NPDES NO. CA0104493

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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	**City of Coachella and the Coachella Sanitary District**
Name of Facility	**Coachella Sanitary District Wastewater Treatment Plant, Coachella**
Facility Address	**87-075 Avenue 54**
	Coachella, CA 92236
	Riverside County
Facility Contact, Title, and Phone	**Jerry Jimenez, Superintendent, (760) 391-5008** **Eldon Lee, Director of Public Works, (760) 398-5744**
Mailing Address	**1515 Sixth Street, Coachella, CA 92236**
Type of Facility	**POTW**
Facility Design Flow	**2.4 Million Gallons per Day (MGD), and up to 4.5 MGD following expansion**

II. FINDINGS

The California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter Regional Water Board), finds:

A. **Background.** Coachella Sanitary District submitted a Report of Waste Discharge, dated December 28, 2004, and applied for a National Pollutant Discharge Elimination System (NPDES) permit renewal to discharge up to 2.4 million gallons per day (MGD) of treated wastewater from the wastewater treatment plant, and expanding to 4.5 MGD during the permit term. The application was deemed complete on February 2, 2005.

B. **Facility Description.** The Discharger owns and operates the wastewater treatment plant. The current total design capacity of the wastewater treatment plant is 2.4 MGD; and, the Discharger plans to expand the treatment plant capacity to 4.5 MGD during this permit term. The current wastewater treatment plant consists of a wet well, bar screen and comminuter, two parallel activated sludge treatment systems, an oxidation pond treatment system, and chlorination and dechlorination systems. The planned expansion will increase plant capacity through the addition of an oxidation ditch treatment system. Wastewater is discharged from Discharge 001 (see table on cover) to the Coachella Valley Storm Water Channel, a water of the United States. Attachment B is a topographic map of the area around the facility. Attachment C is a wastewater flow schematic of the facility. Attachment B and C are hereby incorporated into this Order.

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 for discharges that are not subject to regulation under CWA section 402.

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 through special studies. Attachments A through G, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.

E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR § 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, equivalent to secondary treatment standards for POTWs and protection of the beneficial uses of the receiving waters. The Regional Board has considered the factors listed in CWC § 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) 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, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

   The 2002 USEPA 303(d) List classifies Coachella Valley Storm Water Channel impaired by pathogens. No TMDL has been developed to date.

H. **No More Stringent than Federal Law.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal Clean Water Act. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations are discussed in detail in the Fact Sheet (Attachment F). Restrictions on technology-based effluent limits are specified in federal regulations as stated in Findings F. Technology-based Effluent Limitations. and detailed in the Fact Sheet, and the permit's technology-based pollutant restrictions are no more stringent than required by the Clean Water Act. 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 California Toxics Rule, the California Toxics Rule is the applicable standard pursuant to 40 C.F.R. 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 1, 2001. 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 [Clean Water] Act" pursuant to 40 C.F.R. 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 Clean Water Act and the applicable water quality standards for purposes of the Clean Water Act.

I. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) that 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 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Coachella Valley Storm Water Channel are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Coachella Valley Storm Water Channel[1]	Existing: Freshwater replenishment (FRESH), Water Contact Recreation (REC I)[2], non-contact water recreation (REC-2)[2], warm freshwater habitat (WARM); wildlife habitat (WILD), Preservation of Rare, Threatened or Endangered Species (RARE)[3].

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

J. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.

K. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so.

L. **Alaska Rule.** On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under U.S. EPA's new regulation (also known as the Alaska rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.

M. **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 Colorado River 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 does include compliance schedules and interim effluent limitations and discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and discharge specifications is included in the Fact Sheet (Attachment F).

[1] Section of perennial flow from approximately Indio to the Salton Sea
[2] Unauthorized Use.
[3] Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

N. **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 quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16.

O. **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.

P. **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 Boards 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.

Q. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41and 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).

R. **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.

S. **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. Upon the commencement of discharges from the oxidation ditch treatment system there shall be no further discharges from the oxidation pond treatment system to the Coachella Valley Storm Water Channel.

B. Bypass, overflow, discharge or spill of untreated or partially treated waste is prohibited.

C. The discharge of waste to land not owned or controlled by the Discharger is prohibited.

D. Discharge of treated wastewater at a location or in a manner different from that described in Finding No. II.B, above, is prohibited. This prohibition does not limit flexibility in discharging different percentages of treated wastewater.

E. The bypass or overflow of untreated wastewater or wastes to Coachella Valley Storm Water Channel is prohibited, except as allowed in the Standard Provisions for National Pollutant Discharge Elimination System Permit (hereinafter Standard Provisions), included as Attachment D.

F. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system. Following expansion, the discharger shall not accept waste in excess of the expanded design treatment capacity of the disposal system.

G. The discharge shall not cause degradation of any water supply.

H The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Section 13050(l) and 13050(m) of Division 7 of the California Water Code.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. During the period beginning June 29, 2005 and ending upon certification by the Regional Board (Provision VI.C.7.a) and commencement of discharges from the constructed oxidation ditch treatment system, the discharge of secondary treated wastewater from the oxidation pond treatment system shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001A as described in the attached Monitoring and Reporting Program (Attachment E):

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow, Oxidation Pond Treatment System	MGD	0.9	--	--	--	--

i. Percent Removal – Oxidation Pond Treatment System: The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 65 percent.

b. During the period beginning June 29, 2005 the discharge of secondary treated wastewater from the activated sludge treatment system shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001B as described in the attached Monitoring and Reporting Program (Attachment E):

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow, Activated Sludge Treatment System	MGD	1.5	--	--	--	--

i. Percent Removal – Activated Sludge Treatment System: The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

c. During the period beginning June 29, 2005 and ending upon certification by the Regional Board (Provision VI.C.7.a) and commencement of discharges from the constructed oxidation ditch treatment system, the

combined discharge of secondary treated wastewater from the activated sludge and oxidation pond treatment systems shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001C as described in the attached Monitoring and Reporting Program (Attachment E):

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	36	52	--	--	--
	lbs/day	720	1,041	--	--	--
Total Suspended Solids	mg/L	36	52	--	--	--
	lbs/day	720	1,041	--	--	--
Total Dissolved Solids	mg/L	--	--	2,500	--	--
	lbs/day	--	--	50,040	--	--
pH	standard units	--	--	--	6.0	9.0
Residual Chlorine	mg/L	0.01	--	--	--	0.02
	lbs/day	0.20	--	--	--	0.40
Copper [1]	µg/L	2.99	--	5.78	--	--
	lbs/day	0.06	--	0.12	--	--
Mercury	µg/L	0.051	--	0.102	--	--
	lbs/day	0.001	--	0.002	--	--
Selenium	µg/L	4.1	--	8.2	--	--
	lbs/day	0.08	--	0.16	--	--
Zinc [1]	µg/L	47	--	95	--	--
	lbs/day	0.95	--	1.9	--	--
Free Cyanide [1]	µg/L	4.3	--	8.5	--	--
	lbs/day	0.09	--	0.17	--	--
Bis(2-Ethylhexyl)Phthalate [1]	µg/L	5.9	--	12	--	--
	lbs/day	0.12	--	0.24	--	--
4,4'-DDE [1]	µg/L	0.00059	--	0.0012	--	--
	lbs/day	0.000012	--	0.000024	--	--
4,4'-DDT [1]	µg/L	0.00059	--	0.0012	--	--
	lbs/day	0.000012	--	0.000024	--	--
Heptachlor Epoxide [1]	µg/L	0.00011	--	0.00022	--	--
	lbs/day	0.0000022	--	0.0000044	--	--

[1] Limitations are applicable after June 29, 2009. The interim limitations establish in Section IV.A.2 are applicable from June 29, 2005 through June 29, 2009.

d. Upon certification by the Regional Board (Provision VI.C.7.a) and commencement of discharges from the oxidation ditch treatment system the discharge of secondary treated wastewater from the oxidation ditch treatment system shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001D as described in the attached Monitoring and Reporting Program (Attachment E):

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow, Oxidation Ditch Treatment System	MGD	3.0	--	--	--	--

i. Percent Removal – Oxidation Ditch Treatment System: The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

e. Upon certification by the Regional Board (Provision VI.C.7.a) and commencement of discharges from the oxidation ditch treatment system the combined discharge of secondary treated wastewater from the activated sludge treatment system and oxidation ditches shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001C as described in the attached Monitoring and Reporting Program (Attachment E):

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	--	--	--
	lbs/day	1,126	1,689	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day	1,126	1,689	--	--	--
Total Dissolved Solids	mg/L	--	--	2,500	--	--
	lbs/day	--	--	93,825	--	--
pH	standard units	--	--	--	6.0	9.0
Residual Chlorine	mg/L	0.01	--	--	--	0.02
	lbs/day	0.38	--	--	--	0.75
Copper [1]	µg/L	2.99	--	5.78	--	--
	lbs/day	0.11	--	0.22	--	--

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Mercury	µg/L	0.051	--	0.102	--	--
	lbs/day	0.002	--	0.004	--	--
Selenium	µg/L	4.09	--	8.21	--	--
	lbs/day	0.15	--	0.31	--	--
Zinc [1]	µg/L	47.42	--	95.14	--	--
	lbs/day	1.78	--	3.57	--	--
Free Cyanide [1]	µg/L	4.3	--	8.5	--	--
	lbs/day	0.16	--	0.32	--	--
Bis(2-Ethylhexyl)Phthalate [1]	µg/L	5.9	--	11.8	--	--
	lbs/day	0.22	--	0.44	--	--
4,4'-DDE [1]	µg/L	0.00059	--	0.00118	--	--
	lbs/day	0.000022	--	0.000044	--	--
4,4'-DDT [1]	µg/L	0.00059	--	0.00118	--	--
	lbs/day	0.000022	--	0.000044	--	--
Heptachlor Epoxide [1]	µg/L	0.00011	--	0.00022	--	--
	lbs/day	0.0000041	--	0.0000083	--	--

[1] Limitations are applicable after June 29, 2009. The interim limitations establish in Section IV.A.2 are applicable from June 29, 2005 through June 29, 2009.

f. Wastewater effluent discharged to Coachella Valley Storm Water Channel shall not have a Escherichia coli (E. coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples during the calendar month) nor shall any sample exceed 400 MPN per 100 milliliters.

g. Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not exceed an annual average of 2,000 mg/L of total dissolved solids (TDS).

h. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water, as defined in Section V.E of the Monitoring and Reporting Program (Attachment E). 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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

2. Interim Effluent Limitations

a. During the period beginning June 29, 2005 and ending on June 29, 2009, the discharge of treated wastewater shall maintain compliance with the following limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (Attachment E). 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.

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Copper	µg/L	12	12
	lbs/day [1]	0.24	0.24
	lbs/day [2]	0.45	0.45
Zinc	µg/L	150	150
	lbs/day [1]	3	3
	lbs/day [2]	5.6	5.6
Free Cyanide	µg/L	13	13
	lbs/day [1]	0.26	0.26
	lbs/day [2]	0.49	0.49
Bis(2-Ethylhexyl)Phthalate	µg/L	8.5	11.8
	lbs/day [1]	0.17	0.24
	lbs/day [2]	0.32	0.44
4,4'DDE	µg/L	0.0027	0.0027
	lbs/day [1]	0.000054	0.000054
	lbs/day [2]	0.0001	0.0001
4,4'-DDT	µg/L	0.02	0.02
	lbs/day [1]	0.0004	0.0004
	lbs/day [2]	0.0008	0.0008
Heptachlor Epoxide	µg/L	0.01	0.01
	lbs/day [1]	0.0002	0.0002
	lbs/day [2]	0.0004	0.0004

[1] During the period from June 29, 2005 until discharges commence from the oxidation pond treatment system in accordance with certification requirements specified in Provision VI.C.2.d, the mass-based limits are based on a total design capacity of 2.4 MGD.

[2] During the period beginning upon the commencement of discharges from the oxidation pond treatment system and ending on June 29, 2009, the mass-based limits are based on a total design capacity of 4.5 MGD.

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Coachella Valley Storm Water Channel:

   a. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.

   b. The presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.

   c. Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affect beneficial uses.

   d. Discoloration in the receiving water that adversely affects beneficial uses.

   e. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

   f. Increase turbidity that results in adversely affecting beneficial uses.

   g. The normal ambient pH to fall below 6.0 or exceed 9.0 units.

   h. The natural receiving water temperature of surface waters shall not be altered by discharges of wastewater unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

   i. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.

   j. No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

   k. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

   l. Taste or odor-producing substances that adversely affect beneficial uses.

2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.

B. Groundwater Limitations

The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

   a. The Coachella Sanitary District Wastewater Treatment Plant shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.

   b. The Discharger shall comply with all conditions of this Board Order. Noncompliance constitutes a violation of the Federal Clean Water Act and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification of waste discharge requirements; or denial of a Permit renewal application.

   c. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

   d. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Section 3680, Chapter 4, Division 4, Title 23 of the California Code of Regulations. The Discharger shall ensure that all operating personnel are familiar with the contents of this Board Order.

   e. The Discharger shall report any noncompliance that may endanger human health or the environment. The Discharger shall immediately report orally information of the noncompliance as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, to the Regional Board office and the Office of Emergency Services. During non-business hours, the Discharger shall leave a message on the Regional Board office voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Board office in accordance with the above time limits.

f. The Discharger shall provide a report to the Regional Board upon determining that the treatment plant's monthly average flow rate for any month exceeds 80 percent of the design treatment capacity specified in Finding No. II.B above. The report should indicate what steps, if any the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.

g. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.

h. Prior to any modifications in this facility, which would result in material change in the quality or, quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.

i. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

j. This Board Order does not authorize violation of any federal, state, or local laws or regulations.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

a. The Discharger shall submit data sufficient to determine if a water quality–based effluent limitation is required in the discharge permit as required under the SIP. It is the Discharger's responsibility to provide all information requested by the Regional Board for use in the analysis. The permit shall be reopened to establish water quality-based effluent limitations, if necessary.

b. The permit shall be reopened and modified or revoked and reissued as a result of the detection of a reportable priority pollutant identified by special conditions' monitoring data, included in this permit. These special conditions in the permit may be, but are not limited to, fish tissue sampling, whole effluent toxicity tests, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in the permit as a result of the special condition monitoring data.

c. This Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the State Board or the Regional Board, including revisions to the Basin Plan.

d. This Order may be reopened and the Whole Effluent Toxicity (WET) Testing Requirements contained in the Attachment E, Monitoring and Reporting Program, Section V modified to address changes to USEPA or State Water Board policies or guidance regarding the testing or reporting requirements for WET testing.

e. TMDLs for pathogens are to be developed by the Regional Water Board. The permit may be reopened and modified in the future to include appropriate requirements necessary to fully implement the approved TMDL if needed.

f. The Clean Water Act requires the Regional Water Board to modify, or terminate and reissue, the NPDES permit if a Discharger must implement a pretreatment program. Public notice and comment period is mandatory.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. **Toxicity Identification Evaluations or Toxicity Reduction Evaluations.** The Discharger shall submit to the Regional Board a toxicity reduction evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:

i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;

ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;

iii. If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or outside consultant).

b. **Translator Study.** In addition, should the Discharger request to use a translator for metals and selenium different than the U.S. EPA conversion factor, it shall complete a translator study within two years from the date of the issuance of this permit as stated in the SIP. In the event a translator study is not completed within the specified time, the U.S. EPA conversion factor-based effluent limitation as specified in the CTR shall be effective as a default limitation.

c. **Pollutant Minimization Study.** In accordance with Section 2.4.5 of the SIP the Discharger shall conduct a Pollutant Minimization Program as specified in Special Provision VI.C.4.c of this Order when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and either:

1) A sample result is reported as DNQ and the effluent limitation is less than reported ML; or
2) A sample is reported as ND and the effluent limitation is less than the MDL.

Evidence that a priority pollutant may be present includes, but is not limited to, sample results reported as DNQ, when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods included in this Order in accordance with the SIP, presence of whole effluent toxicity, health advisories for fish consumptions, and results of benthic or aquatic organism tissue sampling.

d. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion**.
All proposed changes to the facility that will result in the increase in flows, facility changes, and/or change in the nature and character of the discharge, must be reviewed and approved by the Executive Officer, prior to the start of construction of changes to the treatment facility. The Discharger shall submit a technical report that provides an analysis and justification to support the proposed plant expansion and improvement project. At a minimum, the report will evaluate treatment capacity, address mass increases of pollutants discharged, and propose additional units as necessary to enable adequate treatment. The report shall include time schedules for the ongoing and planned projects and address project status. The report shall also include documentation that any proposed increases in discharges will not violate the State Board's antidegradation policy. This analysis is necessary before the Board will consider approving any adjustment in effluent limitations.

e. **Operations Plan for Proposed Plant Expansion.** At least 30 days in advance of the operation of the new oxidation ditch treatment system the Discharger shall submit an Operations Plan in accordance with Section 13385(j)(1)(D) of the CWC. The Operations Plan will describe the actions the Discharger will take during the period of adjusting or testing, including steps to prevent violations and identifies the shortest reasonable time required for the period of adjusting and testing, not to exceed 90 days. Upon written acceptance of the Operations Plan by the Executive Officer, Sections 13385(h) and 13385(i) of the CWC do not apply, in accordance with Section 13385(j)(1) of the CWC, if a violation is caused by the operation or a new or reconstructed wastewater treatment unit during a defined period of adjusting or testing, not to exceed 90 days.

f. **Total Dissolved Solids Study.** The Discharger shall perform a study to evaluate whether a 400 mg/L incremental increase in salinity above the source water is practical and if not, what incremental increase is practical for their discharge. This report shall be submitted to the Regional Board's Executive Officer prior to the filing date for re-application. The following items describe the purpose and description of the minimum requirements for the report:

1) The permitting authority may permit a discharge in excess of the 400 mg/L incremental increase at the time of issuance or reissuance of a NPDES discharge permit, upon satisfactory demonstration by the permittee that it is not practicable to attain the 400 mg/L limit.

2) Demonstration by the applicant must include information on the following factors relating to the potential discharge:

(a) Description of the municipal entity and facilities.

(b) Description of the quantity and salinity of domestic water sources contributing to discharge.

(c) Description of significant salt sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.

(d) Description of water rights, including diversions and consumptive use quantities.

(e) Description of the wastewater discharge, receiving waters, quantity, salt load, and salinity.

(f) Alternative plans for minimizing salt contribution from the municipal discharge. Alternative plans should include:

(1) Description of system salt sources and alternative means of control; and

(2) Cost of alternative plans in dollars per ton, of salt removed from discharge

(g) Such other information pertinent to demonstration of non-practicability as the permitting authority may deem necessary.

3) In determining what permit conditions shall be required, the permit issuing authority shall consider the following criteria including, but not limited to:

(a) The practicability of achieving the 400 mg/L incremental increase.

(b) Where the 400 mg/L incremental increase is not determined to be practicable, the discharger shall provide the following:

(1) The impact of the proposed salt input of each alternative on the beneficial uses of the surface water in terms of tons per year and concentration;

(2) Costs per ton of salt removed from discharge of each alternative plan;

(3) Capability of minimizing the salt discharge;

(4) A proposed value for the practical incremental increase; and

(5) A justification for the proposed practical incremental increased value.

3. Best Management Practices and Pollution Prevention

a. **Best Management Practices Plan – Not Applicable**

b. **Stormwater – Not Applicable**

4. Compliance Schedules

a. **Compliance Plan.** The Discharger shall implement its compliance plan provided with its Infeasibility Report submitted on February 10, 2005 that identified the measures that will be taken to reduce the concentrations of copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDT, 4,4'-DDE, and heptachlor epoxide in their discharge to achieve compliance with the permit limitations specified in Effluent Limitations, IV.A.1.c. and IV.A.1.e of this Order.

b. **Compliance Plan Annual Reports.** The Discharger shall submit annual progress reports to describe the progress of studies and or actions undertaken to reduce copper, zinc, cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDT, 4,4'-DDE, and heptachlor epoxide in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified in Effluent Limitations, IV.A.2. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Attachment E, Reporting Requirements, Section X.D.2.

c. **Pollutant Minimization Program.** When required to develop a Pollutant Minimization Program (PMP) in accordance with Special Provision VI.C.2.c of this Order, the Discharger shall develop a PMP in accordance with Section 2.4.5.1 of the SIP as described below:

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 limitations specified in Sections IV.A.1.c,

IV.A.2.a and IV.A.2.b of this Order. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Board:

i. 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;

ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

iii. Implementation of appropriate cost-effective control measures consistent with the control strategy;

iv. An annual status report that shall be sent to the Regional Board at the same time the annual summary report is submitted in accordance with Attachment E, Reporting Requirements, Section X.D.2, and include:

- All PMP monitoring results for the previous year
- A list of potential sources of copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDT, 4,4'-DDE, and heptachlor epoxide
- A summary of all actions undertaken pursuant to the control strategy
- A description of actions to be taken in the following year.

5. Construction, Operation and Maintenance Specifications

a. Oxidation Ponds

i. The dissolved oxygen content in the upper zone (one foot) of the oxidation pond shall not be less than 1.0 mg/L.

ii. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all oxidation ponds.

iii. Oxidation pond shall be managed to control breeding of mosquitoes, in particular:

1) An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface;

2) Weeds shall be minimized through control of water depth, harvesting, or herbicides.

3) Dead algae, vegetation, and debris shall not accumulate on the water surface.

iv. The oxidation pond shall be maintained so they will be kept in aerobic conditions.

v. On-site wastes, including windblown spray from recycled water application, shall be strictly confined to the lands specifically designated for the disposal operation, and on-site irrigation practices shall be managed so there is no runoff of effluent from irrigated areas.

vi. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

vi. The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the Discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.

1) Facilities shall be available to keep the plant in operation in the event of commercial power failure.

vii. Public contact with undisinfected water or wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

b. Facility and Treatment Operation

i. The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the Discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.

ii. Temporary power shall be provided to maintain the plant in operation in the event of commercial power failure.

c. Spill Response Plan

i. The Discharger shall review its current Spill Response Plan (SRP) developed under previous Order 00-032 and revise if needed within 60 days after the effective date of this Order. Revised plans shall be submitted for Regional Board staff review. Thereafter, the plan shall be updated annually, and shall be available for staff review during Regional Board inspections. The Discharger shall ensure that all operating personnel are familiar with the contents of the SRP. A copy of the SRP shall be maintained at the site and shall be accessible to all operating personnel.

d. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the wastewater disposal facilities.

6. Special Provisions for Municipal Facilities (POTWs Only)

a. Sludge Disposal Requirements

i. The Discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Regional Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste materials using an alternative method.

ii. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Board Order. The sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses should be submitted to the Regional Board as part of the Monitoring and Reporting Program.

iii. All sludge generated at the wastewater treatment plant will be disposed, treated, or applied to land in accordance with Federal Regulations 40 CFR 503.

iv. 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 Regional Board's Executive Officer.

v. The Discharger shall obtain prior written approval from the Regional Board specifying location and method of disposal before disposing of Class B or lesser quality sludge, or similar solid waste materials. In addition, the Discharger shall provide the results of any sludge analyses as specified by the Regional Board's Executive Officer.

b. Pretreatment Program

i. The Discharger reports that there are no known industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment plant; however, the Discharger is currently conducting surveys of industrial facilities in their service area. Upon completion of the surveys, the Discharger shall submit the study to the Regional Board for evaluation of pretreatment requirements.

ii. In the event that there are industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment plant or the Regional Board or its Executive Officer determines that circumstances warrant pretreatment requirements in order to prevent Interference [40 CFR 403.3(j)] with the wastewater treatment facility or Pass Through [40 CFR 403.3(n)], then:

1) The Discharger shall notify the Regional Board within 30 days after there are discharges that trigger the pretreatment requirements.

2) The Discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Regional Board's review and approval as soon as possible but not more than one year after Discharger's notification to Regional Board of pretreatment requirements.

3) The Discharger shall enforce the federal categorical pretreatment standards on all Categorical Industrial Users (CIUs).

4) The Discharger shall notify the CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 CFR Part 400 – 699). The Discharger may develop more stringent, technology-based local limit if it can show cause.

5) The Discharger shall notify the RWQCB if the CIU violates its discharge effluent limits.

iii. The Discharger shall provide the Regional Board with an annual report describing the pretreatment program activities over the previous 12-month period. The report shall be transmitted to the Regional Board office no later than January 15 of each year and include:

1) A summary of actions taken by the Discharger, which ensures industrial-user compliance;

2) An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and

3) The name and address of each user that received a revised discharge limit.

iv. The Regional Board retains the right to take legal action against an industrial user and/or the Discharger where a user fails to meet the approved applicable pretreatment standards.

d. Combined Sewer Overflows (CSOs) – Not Applicable

e. Sanitary Sewer Overflows/Collection Systems – Not Applicable

7. Other Special Provisions

a. The Discharger shall provide written certification that the expansion through addition of the oxidation ditch treatment system has been completed and the total design capacity of the wastewater treatment plant has increased to 4.5 MGD. Upon written acceptance of the certification by the Regional Water Board's Executive Officer, the alternate effluent limitations for the treatment plant treatment system shall be effective.

b. The Discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions including Regional Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Water Board.

c. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Water Board will revise and modify this Board Order in accordance with such more stringent standards.

d. The Discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.

e. The Discharger shall exclude from the wastewater treatment plant any liquid or solid waste that could adversely affect the plant operation or effluent quality. The excluded liquid or solid waste shall be disposed of in accordance with applicable regulations.

f. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.

VII. Compliance Determination

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

A. Average Monthly Effluent Limitation (AMEL).
If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and 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.

B. Average Weekly Effluent Limitation (AWEL).
If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and 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.

C. Maximum Daily Effluent Limitation (MDEL).
If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and 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.

D. Instantaneous Minimum Effluent Limitation.
If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and 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).

E. Instantaneous Maximum Effluent Limitation.
If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and 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).

F. Water Quality-Based Effluent Limitations.

1. In accordance with Section 2.4.5 of the SIP, compliance with water quality-based effluent limitations shall be determined as follows:

   a. Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

   b. When determining compliance with an average monthly effluent limitation 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 DNQ or 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, 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.

If a sample result, or the arithmetic mean or median of multiple sample results, is below the reported ML, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP, the Discharger shall not be deemed out of compliance.

ATTACHMENT A – DEFINITIONS

20°C BOD_5: Biochemical oxygen demand 5-day at 20°C.

Annual Average: calculated as the sum of all average monthly discharges calculated during a calendar year divided by the number of monthly average discharges calculated during that year.

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.

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.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

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).

Log Mean of Most Probable Number (MPN): the geometric mean of E. coli bacteria data (measured as MPN per 100 milliliters), based on a minimum of not less than five samples during the calendar month. The geometric mean is equal to the antilog of the average of log-transformed data.

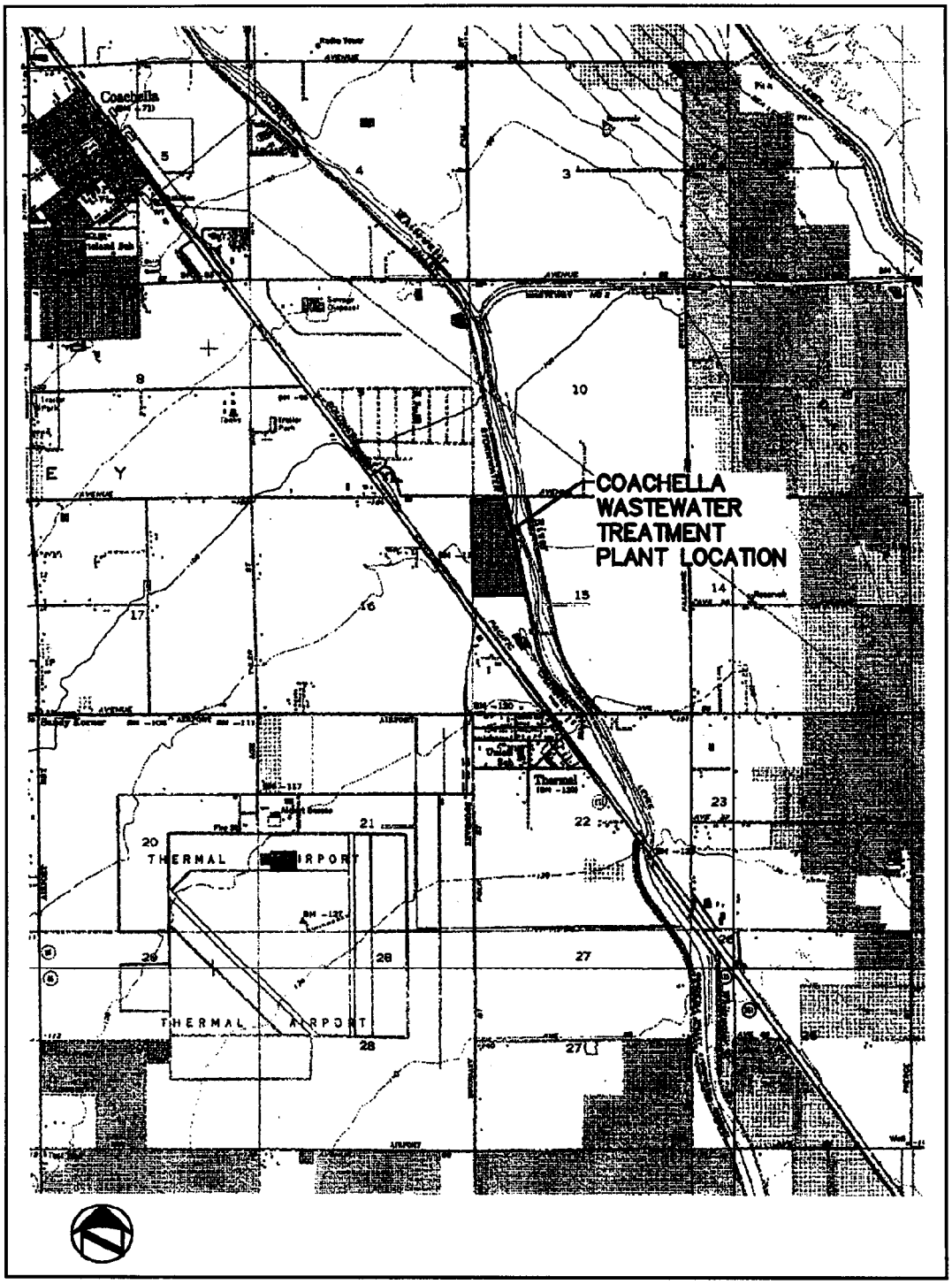
Maximum Daily Effluent Limitation (MDEL): the highest allowable daily discharge of a pollutant.

mg/L: milligrams per Liter.

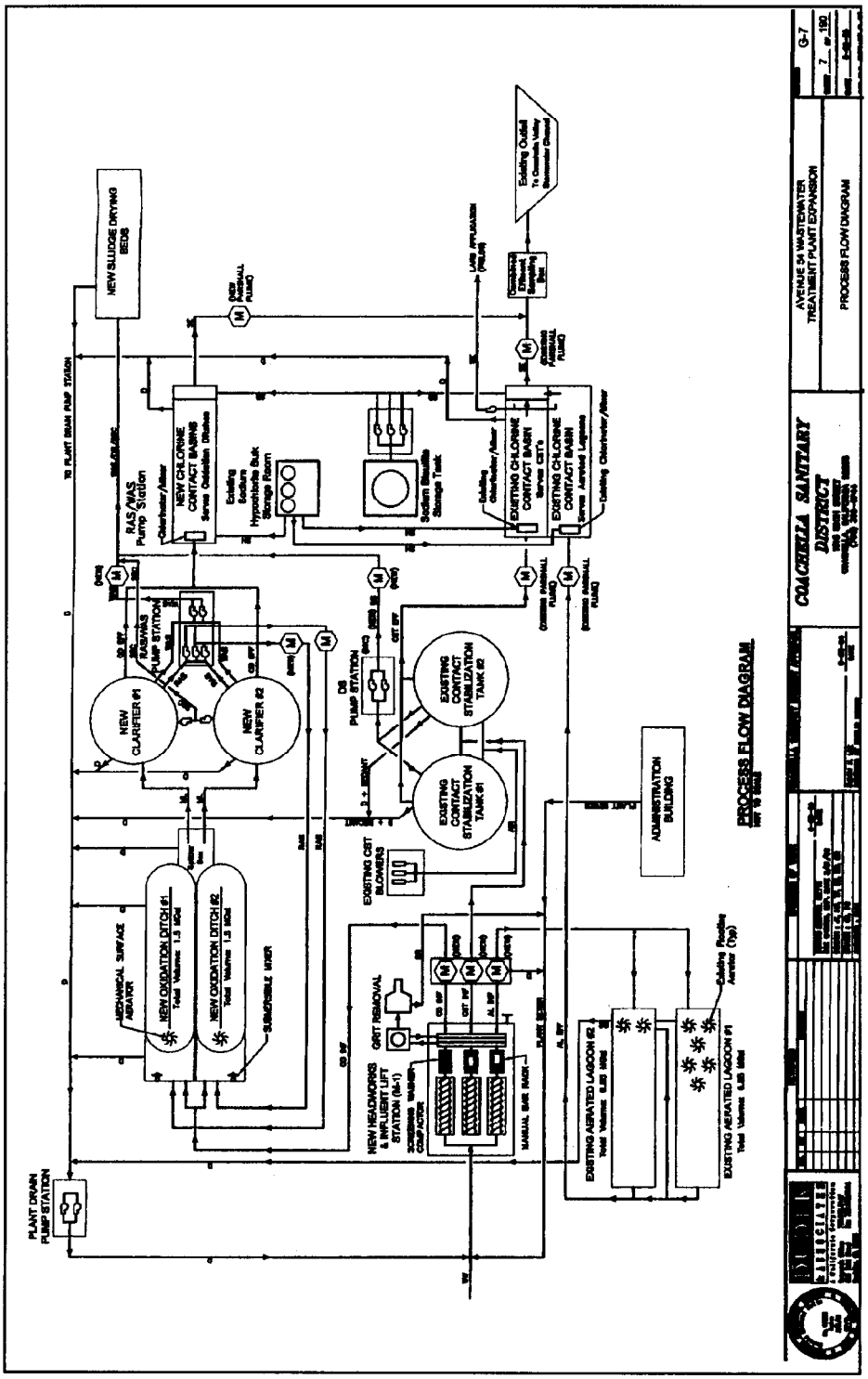
µg/L: micrograms per Liter.

MGD Million gallons per day.

ATTACHMENT B – TOPOGRAPHIC MAP



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – FEDERAL 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 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 Clean Water Act 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 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 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 Provision – 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 [*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 paragraph H.2 of this section 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 [*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, SWRCB, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [*40 CFR §122.41(k)*].

2. All permit applications shall be signed as follows:

   a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [*40 CFR §122.22(a)(1)*];

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [*40 CFR §122.22(a)(2)*]; or

   c. For a municipality, State, federal, or other public agency: 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 §122.22(a)(3)*].

3. All reports required by this Order and other information requested by the Regional Water Board, SWRCB, or USEPA shall be signed by a person described in paragraph (b) of this provision, 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 paragraph (2.) of this provision [*40 CFR §122.22(b)(1)*];

   b. The authorization specified 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 §122.22(b)(2)*]; and

   c. The written authorization is submitted to the Regional Water Board, SWRCB, or USEPA [*40 CFR §122.22(b)(3)*].

4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, SWRCB or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].

5. Any person signing a document under paragraph (2.) or (3.) of this provision 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 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)*].

   c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [*40 CFR §122.41(l)(6)(ii)(C)*].

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 subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [*40 CFR §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 E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [*40 CFR §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 CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in

a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [*40 CFR §122.41(a)(2)*] [*CWC 13385 and 13387*].

B. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000 [*40 CFR §122.41(a)(3)*].

C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [*40 CFR §122.41(j)(5)*].

D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [*40 CFR §122.41(k)(2)*].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [*40 CFR §122.42(a)*]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR §122.42(a)(1)*]:

   a. 100 micrograms per liter (µg/L) [*40 CFR §122.42(a)(1)(i)*];

   b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [*40 CFR §122.42(a)(1)(ii)*];

   c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR §122.42(a)(1)(iii)*]; or

   d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [*40 CFR §122.42(a)(1)(iv)*].

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR §122.42(a)(2)*]:

   a. 500 micrograms per liter (µg/L) [*40 CFR §122.42(a)(2)(i)*];

   b. 1 milligram per liter (mg/L) for antimony [*40 CFR §122.42(a)(2)(ii)*];

   c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR §122.42(a)(2)(iii)*]; or

   d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [*40 CFR §122.42(a)(2)(iv)*].

B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [*40 CFR §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 §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 §122.42(b)(2)*].

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 §122.42(b)(3)*].

Attachment E – Monitoring and Reporting Program – Table of Contents

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, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Board.

B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

1. "A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10: 421.)
2. "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
3. "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)
4. "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)

C. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

D. 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. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

F. The Discharger shall comply with the following:

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

2. 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 Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application.

3. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements.
   b. The individual(s) who performed the sampling or measurements.
   c. The date(s) analyses were performed.
   d. The individual(s) who performed the analyses
   e. The analytical techniques or methods used; an
   f. The results of such analyses.

G. The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.

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:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
--	M-INF	Wastewater influent to the treatment facilities
001	M-001A	Wastewater effluent from the oxidation pond treatment facilities
001	M-001B	Wastewater effluent from the activated sludge treatment facilities
001	M-001C	Representative sample from the total combined effluent wastewater flow prior to discharge from Discharge Point 001; 33 º, 39', 20" N Latitude and 116 º, 08', 31" W Longitude
001	M-001D	Wastewater effluent from the oxidation ditch treatment facilities
--	R-001	Receiving water monitoring location not to exceed 200 feet upstream from the point of discharge.
--	R-002	Receiving water monitoring location not to exceed 200 feet downstream of the discharge pipe outlet at a point where the plume would be expected.
--	S-001	Sludge removed for disposal

[1] In the event of flooding such that the normal receiving water monitoring locations are submerged or inaccessible, alternative receiving water monitoring locations shall be the bridge at Avenue 52 for R-001 and the bridge at Avenue 56 for R-002

Monitoring Location M-001C is the location at which a representative sample of the combined effluent wastewater flow (i.e., following recombination of waste streams) prior to discharge from Discharge Point 001 can be obtained. This location shall serve as the point of compliance for effluent limitations established in Sections IV.A.1.c and IV.A.1.e of the Order and as the sampling point for water quality-based effluent limitations established in Sections IV.A.1.c through IV.A.1.g of the Order. During the period beginning June 29, 2005 and ending upon certification by the Regional Board (Provision VI.C.2.d) and commencement of discharges from the oxidation ditch treatment system, the monitoring location for the recombined waste streams represent discharges from the oxidation pond and activated sludge treatment systems. Upon completion of construction of the oxidation ditch treatment system is complete, the monitoring location for the recombined waste streams represent discharges from the oxidation ditch and activated sludge treatment systems (i.e., the oxidation pond treatment system will be taken off-line).

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-INF

1. The Discharger shall monitor influent to the facility at M-INF as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
20°C $CBOD_5$	mg/L	24-Hr. Composite	1x/Week	[1]
Suspended Solids	mg/L	24-Hr. Composite	1x/Week	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136; for priority pollutants the methods mus meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, b methods approved by this Regional Board or the State Board.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001A

1. During the period beginning June 29, 2005 and ending upon certification by the Regional Board (Provision VI.C.2.d) and commencement of discharges from the oxidation ditch treatment system, the Discharger shall monitor the effluent from the oxidation pond treatment system at M-001A as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Daily Effluent Discharge	MGD	Flow Meter Reading	1x/Day	--
20°C $CBOD_5$	mg/L	24-Hr. Composite	1x/Week	[1]
Suspended Solids	mg/L	24-Hr. Composite	2x/Week	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR section 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

B. Monitoring Location M-001B

1. During the period beginning June 29, 2005, the Discharger shall monitor the effluent from the activated sludge treatment system at M-001B as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Daily Effluent Discharge	MGD	Flow Meter Reading	1x/Day	--
20°C $CBOD_5$	mg/L	24-Hr. Composite	1x/Week	[1]
Suspended Solids	mg/L	24-Hr. Composite	2x/Week	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR section 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

C. Monitoring Location M-001C

1. The Discharger shall monitor the combined effluent from the treatment systems (i.e., prior to completion of the oxidation ditches, from the activated sludge and oxidation pond, and upon completion of the oxidation ditches, from the activated sludge and oxidation ditches) at M-001C as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
20°C $CBOD_5$	mg/L	24-Hr. Composite	1x/Week	[1]
Suspended Solids	mg/L	24-Hr. Composite	2x/Week	[1]
pH	pH units	Grab	1x/Day [2]	[1]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Escherichia Coli (E. Coli)	Number/ 100 ml	Grab	2x/Week	[3]
Chlorine Residual	mg/L	Continuous	1x/Day [2]	[1]
Nitrates as Nitrogen (N)	mg/L	24-Hr. Composite	1x/Month	[1]
Nitrites as N	mg/L	24-Hr. Composite	1x/Month	[1]
Ammonia Nitrogen as N	mg/L	24-Hr. Composite	2x/Month	[1]
Total Nitrogen as N	mg/L	24-Hr. Composite	1x/Month	[1]
Total Phosphate as Phosphorus (P)	mg/L	24-Hr. Composite	1x/Month	[1]
Ortho-Phosphate as P	mg/L	24-Hr. Composite	1x/Month	[1]
Total Dissolved Solids	mg/L	24-Hr. Composite	1x/Month	[1]
Oil and Grease	mg/L	Grab	1x/Year	[1]
Sulfates	mg/L	24-Hr. Composite	1x/Quarter	[1]
Chloride	mg/L	24-Hr. Composite	1x/Quarter	[1]
Temperature	°F	Grab	1x/Day	[1]
Hardness (as $CaCO_3$)	mg/L	Grab	1x/Quarter	[1]
Copper [4]	µg/L	Grab	1x/Month	[1]
Mercury	µg/L	Grab	2x/Year	[1]
Selenium	µg/L	Grab	2x/Year	[1]
Free Cyanide	µg/L	Grab	2x/Year	[1]
Bis(2-Ethylhexyl)Phthalate	µg/L	Grab	1x/Month	[1]
4,4'-DDT	µg/L	Grab	2x/Year	[1]
4,4'-DDE	µg/L	Grab	2x/Year	[1]
Heptachlor Epoxide	µg/L	Grab	2x/Year	[1]
Priority Pollutants [5]	µg/L	Grab	1x/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR section 136; for priority pollutants the methods mu meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, methods approved by this Regional Water Board or the State Water Board.

[2] The Discharger shall collect five samples per week.

[3] The discharger may monitor for E. coli using analytical methods, Standard Method 9221.F or 9223, (APHA. 1998, 1995, 1992. St Methods for the Examination of Water and Wastewater. American Public Health Association, 20th, 19th and 18th Editions. Amer. Publ. Hlth. Assoc., Washington, D.C.).

[4] Total recoverable.

[5] Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requiren of this Order, and included as Attachment G.

D. Monitoring Location M-001D

1. Upon certification by the Regional Board (Provision VI.C.2.d) and commencement of discharges from the oxidation ditch treatment system the Discharger shall monitor the effluent from the oxidation ditch treatment system at M-001D as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Daily Effluent Discharge	MGD	Flow Meter Reading	1x/Day	--
20°C $CBOD_5$	mg/L	24-Hr. Composite	1x/Week	[1]
Suspended Solids	mg/L	24-Hr. Composite	2x/Week	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR section 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Monitoring Requirements

1. Bioassays shall be performed to evaluate the toxicity of the discharged wastewater in accordance with the following procedures unless otherwise specified by the Regional Board's Executive Officer or his designee:

   a. Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Board's Executive Officer. Pimephales promelas (fathead minnow) and Ceriodaphnia dubia (water flea) are suggested test species that may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/821-R-02-013 – Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, 4th Edition, and EPA/821-R-02-012 – Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, 5th Edition, or subsequent editions.

2. The Discharger shall conduct chronic and acute toxicity testing on the final effluent discharged to Coachella Valley Storm Water Channel at monitoring point M-001C as follows:

Test	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity	TU_c	24-hr Composite	1x/Quarter
Acute Toxicity [1]	TU_a [2]	24-hr. composite	1x/Quarter

[1] Acute Bioassay results can be calculated from chronic bioassay test for Pimephales promelas
[2] Discharger can provide Pass/Fail when using a t-test

3. Both test species given below shall be used to measure chronic and acute toxicity:

Species	Effect	Test Duration (days)	Reference[1]
Fathead Minnow (Pimephales promelas)	Larval Survival and Growth	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 (Acute)

Water Flea (Ceriodaphnia dubia)	Survival and Reproduction	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 (Acute)

1 Additional references listed in Section V.A.4
2 Acute Bioassay results can be calculated from chronic bioassay tests.

4. Toxicity Test References for Conducting Toxicity Tests

   a. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA/821-R-02-012, October, 2002 or subsequent editions.

   b. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October, 2002 or subsequent editions.

B. Quality Assurance

1. Dilution and control waters may be obtained from an unaffected area of receiving waters. Synthetic (standard) dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 TU_c

2. A series of at least five dilutions and a control shall be tested for chronic toxicity testing and may be used for acute toxicity testing. The series shall include the following concentrations: 12.5, 25, 50, 75, and 100 percent effluent.

3. For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an LC50).

4. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).

5. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the permittee must re-sample and retest within 15 working days or as soon as possible. The restesting period begins when the Discharger receives the test results that indicate retesting is needed and ends when the discharger collects the first sample required to complete the retest.

6. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PSMD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

C. Accelerated Monitoring Requirements

The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a nine-week period beginning from the date the Discharger receives the results indicating an initial exceedance of the chronic or acute toxicity triggers described below:

Any chronic toxicity test that exceeds 2 chronic toxicity units (TU_c) or a three (3)-sample [1]median[1] (consecutive samples) that exceeds 1 TU_c shall trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity shall trigger an accelerated monitoring frequency. High acute toxicity is defined as follows:

a. Less than 80% survival when acute toxicity is calculated from results of the chronic toxicity test (only for *Pimephales promelas*), or

b. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test, or

c. Results of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.

Accelerated monitoring frequency shall consist of performing three (3) toxicity tests in a nine (9)-week period beginning from the date the Discharger receives the results indicating an initial exceedance of the chronic or acute toxicity triggers. The scope of accelerated monitoring shall be limited to the species and analytical method that failed the test.

If implementation of the generic TRE workplan indicates the source of the exceedance of the toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the toxicity trigger is detected in this test, the discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.

If none of the three tests indicated exceedance of the toxicity trigger, then the permittee may return to the normal bioassay testing frequency.

D. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations

1. A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:

[1] 3-Sample median is defined as follows: The middle value of 3 consecutive samples arranged from the low value to the high value.

a. Two of the three accelerated chronic toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, Section V.C; or

b. Two of the three acute toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, Section V.C.

c. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.

d. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:

   a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);

   b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);

   c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a);

   d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b);

3. As part of the TIE investigation, the Discharger shall be required to implement its Toxicity Reduction Evaluation (TRE) workplan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:

   a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002;

   b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

E. Definition of Toxicity

1. Chronic toxicity measures sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms.

2. Chronic toxicity shall be measured in TU_c, where $TU_c = 100/NOEC$. 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 test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significantly different from the controls).

3. Acute toxicity is a measure of primarily lethal effects that occur over a ninety-six (96) hour period. Acute toxicity for Pimephales promelas can be calculated from the results of the chronic toxicity test for Pimephales promelas and reported along with the results of each chronic test. Acute toxicity for Ceriodaphnia dubia cannot be calculated from the results of the chronic toxicity test for Ceriodaphnia dubia because the test design is not amenable to calculation of a lethal concentration (LC50) value as needed for the acute requirement.

4. Acute toxicity shall be measured in Tu_a, where $Tu_a = 100/LC50$ or as pass/fail using a t-test. LC50 is the toxicant concentration that would cause death in 50 percent of the test organisms.

F. Reporting

1. The Discharger shall submit the analysis and results of the toxicity test, including any accelerated testing in toxicity units with the discharge monitoring reports for the month in which the last test is conducted.

2. If a Toxicity Identification Evaluation (TIE) is conducted the Discharger shall submit the results of the TIE with the discharge monitoring reports for the month in which the final report is completed.

3. If the Toxicity Reduction Evaluation (TRE) Workplan has been initiated, the Discharger shall report on the progress of the actions being taken and include this information with each monthly monitoring report.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

A. Monitoring Location - Not Applicable

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Location R-001

1. The Discharger shall monitor the Coachella Valley Storm Water Channel at R-001 as follows. In the event that no receiving water is present at R-001, no receiving water monitoring data is required for station R-001:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Temperature	°F	Grab	1x/Month	[1]
Chlorine Residual	mg/L	Grab	1x/Month	[1]
Dissolved Oxygen	mg/L	Grab	1x/Month	[1]
Nitrates	mg/L	Grab	1x/Month	[1]
Ammonia	mg/L	Grab	1x/Month	[1]
Total Nitrogen	mg/L	Grab	1x/Month	[1]
Total Phosphate	mg/L	Grab	1x/Month	[1]
pH	pH units	Grab	1x/Month	[1]
Hardness (as $CaCO_3$)	mg/L	Grab	1x/Month	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollut by methods approved by this Regional Board or the State Board.

B. Monitoring Location R-002

1. The Discharger shall monitor Coachella Valley Storm Water Channel at R-002 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Temperature	°F	Grab	1x/Month	[1]
Chlorine Residual	mg/L	Grab	1x/Month	[1]
Dissolved Oxygen	mg/L	Grab	1x/Month	[1]
Nitrates	mg/L	Grab	1x/Month	[1]
Ammonia	mg/L	Grab	1x/Month	[1]
Total Nitrogen	mg/L	Grab	1x/Month	[1]
Total Phosphate	mg/L	Grab	1x/Month	[1]
pH	pH units	Grab	1x/Month	[1]
Hardness (as $CaCO_3$)	mg/L	Grab	1x/Month	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollut by methods approved by this Regional Board or the State Board.

C. Visual Monitoring Upstream and Downstream Receiving Water Sampling Points

1. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at Stations R-001 and R-002. In the event that no receiving water is present at station R-001, no receiving water monitoring data is required for station R-001. Notes on receiving water conditions shall be summarized in the monitoring report. Attention shall be given to the presence or absence of:

   a. Floating or suspended matter
   b. Discoloration
   c. Aquatic life (including plants, fish, shellfish, birds)
   d. Visible film, sheen or coating
   e. Fungi, slime, or objectionable growths
   f. Potential nuisance conditions

IX. OTHER MONITORING REQUIREMENTS

A. Water Supply Monitoring

The Discharger is required to obtain or acquire quarterly source water data for total dissolved solids, either through monitoring or obtaining the data from the drinking water purveyor.

B. Monitoring Location S-001 Sludge Monitoring

1. Sludge that is generated at the treatment facility shall be sampled and analyzed for the following prior to disposal:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Arsenic	mg/kg	Grab	1x/Year	[1]
Cadmium	mg/kg	Grab	1x/Year	[1]
Copper	mg/kg	Grab	1x/Year	[1]
Lead	mg/kg	Grab	1x/Year	[1]
Mercury	mg/kg	Grab	1x/Year	[1]
Molybdenum	mg/kg	Grab	1x/Year	[1]
Nickel	mg/kg	Grab	1x/Year	[1]
Selenium	mg/kg	Grab	1x/Year	[1]
Zinc	mg/kg	Grab	1x/Year	[1]
Fecal Coliform	MPN/gram	Grab	1x/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 503.

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. The Discharger shall report the results of acute and chronic toxicity testing, TRE and TIE as required in the previous section entitled, "Effluent Toxicity Testing".

3. The results of any analysis take, more frequently than required at the locations specified in this Monitoring and Reporting Program shall be reported to the Regional Board.

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. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.

2. The Discharger shall submit monthly, quarterly, and annual Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Monthly reports shall be due on the 1st day of the second month following the end of each calendar month; Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter; Annual reports shall be due on February 1 following each calendar year.

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

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	**June 30, 2005**	All	First day of second calendar month following month of sampling
X / day	**June 30, 2005**	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	First day of second calendar month following month of sampling
X / week	**Sunday following June 30, 2005**	Sunday through Saturday	First day of second calendar month following month of sampling
X / month	**July 1 following June 30, 2005**	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

X / quarter	**July 1 following June 30, 2005**	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
X / year	**January 1 following June 30, 2005** [1]	January 1 through December 31	February 1

1 On February 1, 2006, the Discharger will report the data collected for the period between June 29, 2005 and January 1, 2006.

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

5. 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.

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 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. 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:

Submit monitoring reports to:
California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring, Suite 100 Palm Desert, CA 92260

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 self-monitoring reports. Until such notification is given, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

Submit monitoring reports to:
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.

D. Other Reports

1. Operation and Maintenance

The Discharger shall report the following:

Activity	Reporting Frequency
To inspect and document any operation/maintenance problems by inspecting each unit process. In addition, calibration of flow meters, cleaning of chlorine contact chamber and mechanical equipment shall be performed in a timely manner and documented.	Annually
The amount of chemical used (i.e., chlorine, etc.) shall be monitored daily and reported monthly. Measured in pounds per day.	Monthly

Attachment F – Fact Sheet – Table of Contents

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.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

WDID	**7A330104012**
Discharger	**City of Coachella and the Coachella Sanitary District**
Name of Facility	**Coachella Sanitary District Wastewater Treatment Plant, Coachella**
Facility Address	**87-075 Avenue 54**
	Coachella, CA 92236
	Riverside County
Facility Contact, Title and Phone	**Jerry Jimenez, Superintendent, (760) 391-5008** **Eldon Lee, Director of Public Works, (760) 398-5744**
Authorized Person to Sign and Submit Reports	**Jerry Jimenez, Superintendent, (760) 391-5008** **Eldon Lee, Director of Public Works, (760) 398-5744**
Mailing Address	**1515 Sixth Street, Coachella, CA 92236**
Billing Address	**SAME**
Type of Facility	**POTW**
Major or Minor Facility	**Major**
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Y
Reclamation Requirements	**User Onsite**
Facility Permitted Flow	**2.4 (4.5) mgd**
Facility Design Flow	**2.4 (4.5) mgd**
Watershed	**Coachella Subunit of the Whitewater Hydrologic Unit**
Receiving Water	**Coachella Valley Storm Water Channel**
Receiving Water Type	**Storm Water Channel**

A. The Coachella Sanitary District is the operator of Coachella Sanitary District Wastewater Treatment Plant, a publicly owned treatment works facility. The City of Coachella owns the property at 87-075 Avenue 54, Coachella, CA 92236 on which the Facility is located. Together the Coachella Sanitary District and the City of Coachella are hereinafter referred to as Discharger.

B. The Facility discharges wastewater to Coachella Valley Storm Water Channel, a water of the United States and is currently regulated by Order No. 00-032 which was adopted on June 28, 2000 and expires on June 28, 2005.

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 December 28, 2004. Supplemental Information was requested on February 3, 2005 and received on February 10, 2005. A site visit was

conducted on December 8, 2004, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

1. The City of Coachella owns and the Coachella Sanitary District operates the wastewater collection, treatment and disposal system (hereinafter referred to as facility) and provides sewerage service to the City of Coachella with an approximate population of 30,000 people. The current wastewater treatment plant has a treatment capacity of 2.4 million gallons-per-day (MGD) and is located in Section 15, T6S, R8E, SBB&M.

2. The wastewater treatment plant consists of an activated sludge treatment system and an oxidation pond treatment system. The headworks consists of a wet well, comminutor, and bar screen. Flow from the headworks is split between to two secondary treatment systems; the activated sludge treatment system and oxidation pond treatment system.

3. Effluent from each treatment system is chlorinated separately in dedicated channels within the chlorine contact basin. The chlorinated flows combine after the contact chamber and dechlorinated prior to discharge through Discharge 001. Wastewater is discharged from Discharge 001 to the Coachella Valley Storm Water Channel, a water of the United States.

4. The activated sludge treatment system capacity is 1.5 MGD and consists of two process units operated in parallel. The activated sludge treatment system consists of two contact stabilization tanks that provide aeration, clarification, reaeration, and aerobic digestion. Each tank has a secondary treatment design capacity of 0.75 MGD. Raw wastewater is pumped into the contact stabilization chamber and mixed with activated sludge. From the contact chamber, mixed liquor flows to the secondary clarifier. Clarified effluent is measured at a parshall flume, located between the two activated sludge tanks, prior to being treated with sodium hypochloride for disinfection in a chlorine contact chamber.

5. The oxidation pond treatment system consists of two secondary oxidation ponds that are operated in series. The oxidation ponds have a combined secondary treatment capacity of 0.9 MGD. Each pond is equipped with five aerators. Wastewater is pumped into the first pond and then flows into the second pond for additional treatment. The effluent is measured at a parshall flume and then enters the chlorine contact chamber for disinfection.

6. Disinfected wastestreams from the activated sludge and oxidation ponds are combined after the chlorine contact chamber, dechlorinated with sodium meta-bisulfite and discharged to the Coachella Valley Storm Water Channel.

7. Waste Activated Sludge (WAS) is pumped from the activated sludge treatment system is routed to the aerobic digester section of the treatment unit. From the aerated digester section, the WAS is pumped to eight sludge drying beds for drying. The total area of the drying beds is about 5 acres. Each bed is 2 feet deep and separated from the adjacent bed by 6 feet. The usual practice at the plant is to allow the sludge to dry for 1 year. After complete drying, the sludge is disposed of at the facility by incorporating it into the on-site soil. According to the RWD, the facility generated 351 dry metric tons of sludge per 365 days during the previous reporting period.

8. The Discharger owns and operates the wastewater collection system which provides conveyance of raw wastewater to the treatment facility. Previous Order 00-032 indicated a total collection system length of approximately 63 miles. The collection system is a separate sanitary sewer system, and the facility experiences less than 0.01 MGD of inflow and/or infiltration on average into its system.

B. Discharge Points and Receiving Waters

1. The final effluent is discharged to the Coachella Valley Storm Water Channel. The Coachella Valley Storm Water Channel conveys the effluent to the Salton Sea. The permitted maximum daily flow limitation is equal to the facility's current design capacity of the wastewater treatment plant as 2.4 MGD.

2. The discharge consists of disinfected secondary treated domestic wastewater.

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

1. Effluent limitations contained in the previous Order 00-032 for discharges from the activated sludge treatment system, Discharge Point 001 and representative monitoring data from the term of the previous Order are as follows:

Parameter (units)	Effluent Limitation			Monitoring Data (From May 2001 – To September 2004)		
	Average Monthly	Average Weekly	Maximum Daily	Maximum Average Monthly Discharge	Maximum Average Weekly Discharge	Maximum Daily Discharge
Discharge Flow (MGD)	--	--	1.5	1.3	--	1.5
BOD (mg/L)	30	45	--	319	1,100	1900
TSS (mg/L)	30	45	--	103.6	420	640
Settleable Matter (ml/L)	0.3	0.5	--	0.25	0.4	0.5
pH (ph units)	--	--	6.0 – 9.0	--	--	7.29 [1]
Percent Removal, BOD (%)	85	--	--	49.9 [2]	--	--
Percent Removal, TSS (%)	85	--	--	48.6 [2]	--	--

[1] This represents the range of reported values of pH.
[2] This value represents the lowest reported value of the minimum percent removal of the pollutant. For BOD, the Discharger violated the minimum percent removal requirement five times; reported values in compliance with the minimum percent removal effluent limitation ranged from 90.8 to 98.9 percent. Further, for TSS, the Discharger violated the minimum percent removal requirement three times during the permit term; reported values in compliance with the minimum percent removal effluent limitation ranged from 85.9 to 98.1 percent.

2. Effluent limitations contained in the previous Order 00-032 for discharges from the oxidation pond treatment system, and representative monitoring data from the term of the previous Order are as follows:

Parameter (units)	Effluent Limitation [1]			Monitoring Data (From May 2001 – To September 2004)		
	Average Monthly	Average Weekly	Maximum Daily	Maximum Average Monthly Discharge	Maximum Average Weekly Discharge	Maximum Daily Discharge
Discharge Flow (MGD)	--	--	0.9	1.3	--	1.6
BOD (mg/L)	45	65	--	167	333.7	751
TSS (mg/L)	45	65	--	93.6	193.3	300
Settleable Matter (ml/L)	0.3	0.5	--	0.2	0.5	0.5
pH (ph units)	--	--	6.0 – 9.0	--	--	7.29 [2]
Percent Removal, BOD (%)	65	--	--	29.3 [3]	--	--
Percent Removal, TSS (%)	65	--	--	21.6 [3]	--	--

[1] Order No. 00-032 also included maximum daily and annual average effluent limitations for total dissolved solids of 2,500 mg/L and 2,000 mg/L, respectively, for discharges to the Coachella Valley Storm Water Channel. Available effluent monitoring data indicate the Discharger has been in compliance with these effluent limitations.
[2] This represents the range of reported values of pH.
[3] This value represents the lowest reported value of the minimum percent removal of the pollutant. For BOD, the Discharger violated the minimum percent removal requirement twice (November 2002 and April 2003); reported values in compliance with the minimum percent removal effluent limitation ranged from 69.6 to 97.5 percent. For TSS, the Discharger violated the minimum percent removal requirement twice, during the same months; reported values in compliance with the minimum percent removal effluent limitation ranged from 68.9 to 95.9 percent.

3. The National Pollutant Discharge Elimination System Permit application described the proposed discharge as follows:

   Annual Average Effluent Flow – 1.13 MGD (activated sludge) and 0.83 MGD (oxidation pond)
   Maximum Daily Effluent Flow – 1.6 MGD (activated sludge) and 1.5 MGD (oxidation pond)

4. The National Pollutant Elimination System Permit application described the effluent characteristics as follows:

Parameter	Activated Sludge Treatment System	Oxidation Pond Treatment System
pH Maximum Daily (Minimum)	6.7 pH Units	6.7 pH Units
pH Maximum Daily (Maximum)	7.1 pH Units	7.1 pH Units

Parameter	Activated Sludge Treatment System	Oxidation Pond Treatment System
Flow Rate Maximum Daily	1.6 MGD	1.5 MGD
Flow Rate Average Daily	1.13 MGD	0.83 MGD
BOD Maximum Daily	42 mg/L	68 mg/L
BOD Average Daily	14.4 mg/L	22.83 mg/L
Total Suspended Solids Maximum Daily	48 mg/L	48 mg/L
Total Suspended Solids Average Daily	9.8 mg/L	41.74 mg/L
Temperature Maximum Daily (Winter/Summer)	66 °F/ 90 °F [1]	
Temperature Average Daily (Winter/Summer)	72.8 °F/ 82.5 °F [1]	
Fecal Coliform Maximum Daily	30 MPN/100 ml [1]	
Fecal Coliform Average Daily	4.16 MPN/100 ml [1]	

[1] These values represent the total combined discharge (effluent from the activated sludge treatment system and the oxidation pond and wetlands treatment systems).

D. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger for the period from May 2001 through September 2004, the wastewater discharged from the wastewater treatment facility was in chronic violation of effluent limitations for TSS, BOD, fecal coliform, and toxicity established in Order No. 00-032 for the activated sludge and oxidation pond treatment systems. The Regional Board issued a Cease and Desist Order (CDO), No. R7-2004-0028, on March 30, 2004.

The CDO stated the Discharger had a total of 25 violations in 2001 (BOD, TSS, fecal coliform, flow, and toxicity); 71 effluent discharge violations in 2002 (BOD and TSS); and 173 effluent discharge violations during 2003 (BOD and TSS). The CDO required the Discharger to implement a pollution prevention plan and achieve short-term and long-term goals as presented in the CDO. Short-term goals include submitting weekly sampling analyses for BOD and TSS; submitting a technical report detailing improvements to the automated chlorination system, expanding the district's lab certification, and researching the strategies for implementing a pretreatment program. The long-term goal is expansion of the wastewater treatment plant to 4.5 MGD.

The Discharger has provided status reports measuring compliance with the CDO in the monthly monitoring reports. The Discharger has modified the dechlorination section of the automated chlorination and dechlorination system; the flow meter for sodium bisulfite dosing has been replaced, and the chlorination system is operating in automatic mode. The district's lab is certified for TSS sampling and analysis, and additional TSS and BOD sampling has been implemented to determine if there is additional solids loading during the treatment process. The Discharger has installed a pump to convey effluent to irrigated pastureland. Further, the Discharger stated that chlorine contact chambers are cleaned quarterly or more often, as needed. The Discharger is also performing sludge volume reduction through remediation in the oxidation ponds.

The Discharger is also increasing treatment plant capacity to 4.5 MGD through the addition of oxidation ditches. The Discharger is also in the process of developing an Industrial Pretreatment Program; survey forms have been distributed to commercial and industrial users.

Since March 2004, the Discharger has been in compliance with effluent limitations for BOD, TSS, fecal coliform established in Order No. 00-032. In addition, since May 2004, the Discharger has been in compliance with toxicity discharge limitations.

E. Planned Changes

The City of Coachella and the Coachella Sanitary District plan to expand the capacity of the wastewater treatment plant through the addition of an oxidation ditch treatment system with a capacity of 3.0 MGD and the removal of the existing oxidation ponds (0.9 MGD). The Discharger is completing this project through the State Water Resources Control Board State Revolving Fund. Upon completion of the oxidation ditches, the proposed Order will no longer authorize discharges from the oxidation pond treatment system to the Coachella Valley Storm Water Channel. Further, upon completion of the oxidation ditches, the total design capacity of the facility will be 4.5 MGD (1.5 MGD for the activated sludge treatment system plus 3.0 MGD for the oxidation ditches). Construction is planned to begin in 2005 and is expected to be complete during the permit term.

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 for discharges that are not subject to regulation under CWA section 402.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

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 Colorado River Basin (hereinafter Basin Plan) that 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 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Coachella Valley Storm Water Channel are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Coachella Valley Storm Water Channel[1]	Existing: Freshwater replenishment (FRESH), Water Contact Recreation (REC I)[2], non-contact water recreation (REC-2)[2], warm freshwater habitat (WARM); wildlife habitat (WILD), Preservation of Rare, Threatened or Endangered Species (RARE)[3].

2. **Thermal Plan.** The Thermal Plan does not apply to the Coachella Valley Storm Water Channel.

3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.

4. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so.

[1] Section of perennial flow from approximately Indio to the Salton Sea
[2] Unauthorized Use.
[3] Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

5. **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 detail 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.

6. **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.

7. **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 Boards 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.

8. **Storm Water Requirements.**

   a. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCT)) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.

   b. The State Water Resources Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit. Coverage under the General Permit is not required because there are no storm water flows from the facility.

D. Impaired Water Bodies on CWA 303(d) List

The 2002 USEPA 303(d) List classifies Coachella Valley Storm Water Channel impaired by pathogens. No TMDL has been developed to date.

E. Other Plans, Polices and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations. Section 122.44(a) of 40 CFR requires that permits include applicable technology-based limitations and standards. Section 122.44(d) of 40 CFR 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, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information; or an indicator parameter.

Effluent and receiving water limitations in this Board Order 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 best practicable waste treatment technology. While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. EPA NPDES Application Forms 1 and 2A dated December 28, 2004 (revised February 10, 2005).
2. Code of Federal Regulations – Title 40
3. Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date.
4. Regional Board files related to City of Coachella and Coachella Sanitary District WWTP NPDES permit CA0104493.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Board Order 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 best practicable waste treatment technology.

B. Technology-Based Effluent Limitations

1. Scope and Authority

a. Secondary Treatment Standards. Regulations promulgated in 40 CFR §125.3(a)(1) require technology-based effluent limitations for municipal dischargers to be placed in NPDES permits 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 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 (BOD_5), total suspended solids (TSS), and pH.

b. Equivalent Secondary Treatment Standards. Following publication of the secondary treatment regulations, legislative history indicates that Congress was concerned that USEPA had not "sanctioned" the use of certain biological treatment techniques that were effective in achieving significant reductions in BOD_5 and TSS for secondary treatment. Therefore to prevent unnecessary construction of costly new facilities, Congress included language in the 1981 amendment to the Construction Grants statues [Section 23 of Pub. L. 97-147] that required USEPA to provide allowance for alternative biological treatment technologies such as trickling filters or waste stabilization ponds. In response to this requirement, definition of secondary treatment was modified on September 20, 1984 and June 3, 1985, and published in the revised secondary treatment regulations contained in 40 CFR §133.105. These regulations allow alternative limitations for facilities using trickling filters and waste stabilization ponds that meet the requirements for "equivalent to secondary treatment." These "equivalent to secondary treatment" limitations are *up to* 45 mg/L (monthly average) and *up to* 65 mg/L (weekly average) for BOD_5 and TSS.

Therefore, POTWs that use waste stabilization ponds, identified in 40 CFR §133.103, as the principal process for secondary treatment and whose operation and maintenance data indicate that the TSS values specified in the equivalent-to-secondary regulations cannot be achieved, can qualify to have their minimum TSS levels adjusted upwards.

Furthermore, in order to address the variations in facility performance due to geographic, climatic, or seasonal conditions in different States, the Alternative State Requirements (ASR) provision contained in 40 CFR §133.105(d) was

written. ASR allows States the flexibility to set permit limitations above the maximum levels of 45 mg/L (monthly average) and 65 mg/L (weekly average) for TSS from lagoons. However, before ASR limitations for suspended solids can be set, the effluent must meet the BOD limitations as prescribed by 40 CFR §133.102(a). Presently, the maximum TSS value set by the State of California for lagoon effluent is 95 mg/L. This value corresponds to a 30-day consecutive average or an average over duration of less than 30 days.

In order to be eligible for equivalent-to-secondary limitations, a POTW must meet all of the following criteria [40 CFR §133.101(g)]:

- The principal treatment process must be either a trickling filter or waste stabilization pond.
- The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of 30 mg/L BOD_5 and TSS.
- Water quality is not adversely affected by the discharge.

The treatment works as a whole provides significant biological treatment such that a minimum 65 percent reduction of BOD_5 is consistently attained (30-day average).

2. Applicable Technology-Based Effluent Limitations

a. Previous Order 00-032 established technology-based effluent limits to meet applicable secondary treatment standards for the activated sludge treatment process and to meet alternative equivalent secondary treatment standards for the oxidation pond system. These effluent limitations have been carried over from the previous Order with some modification as discussed below:

1) During the construction phase of the expansion project (addition of the oxidation ditch treatment system), individual flow limitations and minimum percent reduction of BOD and TSS are maintained for the oxidation pond and activated sludge treatment systems. These limits are summarized in Tables F-1 and F-2.

2) During the construction phase of the expansion project (addition of the oxidation ditch treatment system), effluent limitations for the activated sludge treatment system and the oxidation pond treatment system will be combined using a flow-weighted approach and there shall be a single point for compliance monitoring (Monitoring Location M-001C). These limits are summarized in Table F-3. Upon completion of the construction and certification of the oxidation ditch treatment system and commencement of discharges from the system discharges from the oxidation ponds to the Coachella Valley Storm Water Channel will no longer be authorized by this Order and the limits summarized in Table F-3 will no longer apply. As

discussed below revised effluent limits will apply to the combined discharge from the activated sludge and oxidation ditch systems.

(a) Combined effluent limitations calculation example:

Using the average monthly effluent limitation for BOD and TSS as an example, the following demonstrates how the combined average monthly effluent limitations for BOD and TSS were established for combined discharges from the activated sludge and oxidation pond treatment systems.

Step 1: For each treatment system determine the proportion of flow:

Activated Sludge: 1.5 MGD / 2.4 MGD = 0.625
Oxidation Pond: 0.9 MGD / 2.4 MGD = 0.375

Step 2: For each treatment system determine the allowable concentration limit:

Activated Sludge: 0.625 * 30 mg/L = 19 mg/L
Oxidation Pond: 0.375 * 45 mg/L = 17 mg/L
Total allowable concentration limit = 36 mg/L

3) Mass-based effluent limitations have been established for the total combined wastewater flow from the activated sludge treatment system (1.5 MGD) and the oxidation ponds (0.9 MGD) beginning June 29, 2005 through completion of the construction of the oxidation ditch treatment system and upon commencement of discharges from the oxidation ditch treatment system.

b. Once construction of the oxidation ditch treatment system is complete and certified and upon discharge to the Coachella Valley Storm Water Channel, an effluent flow limit and a minimum percent reduction of BOD and TSS for the oxidation ditch treatment system will apply. This limitation is provided in Table F-4. Further, revised effluent limits summarized in Table F-5 will apply to the combined discharges from this facility. The oxidation ditch and the activated sludge treatment systems are secondary treatment systems capable of meeting federal secondary treatment standards. The effluent limitations for the oxidation ditch treatment system will be combined with the effluent limitations for the activated sludge treatment system. Mass-based limits for the combined flow will be based on a combined design flow of 4.5 MGD; 1.5 MGD for the activated sludge system and 3.0 MGD for the oxidation ditches.

c. Basis for Limitations

Constituents	Basis for Limitations
Biochemical Oxygen Demand (BOD)	Discharges to waters that support aquatic life, that is dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down.
Total Suspended Solids (TSS)	High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A range specified between 6 to 9 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Region.
Total Dissolved Solids	High levels of TDS can adversely impact aquatic life. The TDS limit is based on evaluation of plant performance data and consistent with the Basin Plan.
Flow	The design capacity of the treatment plant is 2.4 MGD, but upon completion of the oxidation ditch treatment system, the design capacity will be 4.5 MGD.

Table F-1
Summary of Technology-based Effluent Limitations for Oxidation Pond Treatment System
Discharge Point 001 at Monitoring Location M-001A

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	0.9	--	--	--	--
Removal Efficiency for BOD and TSS	%	65	--	--	--	--

Table F-2
Summary of Technology-based Effluent Limitations for Activated Sludge Treatment System
Discharge Point 001 at Monitoring Location M-001B

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	1.5	--	--	--	--
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

Table F-3
Summary of Technology-based Effluent Limitations for Combined Flow From Activated Sludge and Oxidation Pond Treatment Systems Discharge Point 001 at Monitoring Location M-001C

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	36	52	--	--	--
	lbs/day	720	1,041	--	--	--
Total Suspended Solids	mg/L	36	52	--	--	--
	lbs/day	720	1,041	--	--	--
pH	standard units	--	--	--	6.0	9.0

[1] These effluent limitations apply only during the construction of the oxidation ditches. Mass-based effluent limitations are based on a total design capacity of 2.4 MGD. Upon completion and certification of the construction of the oxidation ditches and upon discharge to the Coachella Valley Storm Water Channel, these combined effluent limitations will no longer apply. Effluent limitations applicable to the combined activated sludge and oxidation ditch discharges are summarized in Table F-5.

Table F-4
Summary of Technology-based Effluent Limitations for Flow From Oxidation Ditch Treatment System Discharge Point 001 at Monitoring Location M-001D

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	3.0	--	--	--	--
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

Table F-5
Summary of Technology-based Effluent Limitations for Combined Flow From Activated Sludge and Oxidation Ditches Treatment Systems Discharge Point 001 at Monitoring Location M-001 [1]

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	--	--	--
	lbs/day	1,126	1,689	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day	1,126	1,689	--	--	--
pH	standard units	--	--	--	6.0	9.0

[1] These effluent limitations are applicable upon completion of construction of the oxidation ditches. Mass-based effluent limitations are based on a total design capacity of 4.5 MGD.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

a. Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States.

b. The U.S. Environmental Protection Agency published the adopted California Toxics Rule (CTR) (40 CFR §131.38). The CTR promulgates new criteria for both human health protection and protection of aquatic life. New numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants are listed. In addition, the CTR contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Table F-6 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

Table F-6
Water Quality Criteria
Coachella Valley Storm Water Channel

CTR No.	Parameter	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1	Antimony	4,300						4,300
2	Arsenic	36	340 [1]	150 [1]	69	36		
4	Cadmium	6.29	17.37 [1]	6.29 [1]	42.25	9.36		
5a	Chromium (III)	550.30	4,616.80 [1]	550.30 [1]				
5b	Chromium (VI)	11.43	16.29	11.43	1,107.75	50.35		
6	Copper	3.73	43.12 [1]	25.88 [1]	5.78	3.73		
7	Lead	8.52	373.25 [1]	14.54 [1]	220.82	8.52		
8	Mercury	0.051						0.051

CTR No.	Parameter	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
9	Nickel	8.28	1,288.24 [1]	143.23 [1]	74.75	8.28		4,600
10	Selenium	5		5	290.58	71.14		
11	Silver	2.24	31.64 [1]		2.24			
12	Thallium	6.3						6.3
13	Zinc	85.62	85.62 [1]	119.82 [1]	95.14	85.62		
14	Free Cyanide	5.2	22	5.2				220,000
16	2,3,7,8-TCDD	1.4E-08						1.4E-08
21	Carbon Tetrachloride	4.4						4.4
23	Chlorodibromomethane	34						34
24	Chloroethane	No Criteria						
26	Chloroform	No Criteria						
27	Dichlorobromomethane	46						46
34	Methyl Bromide	4,000						4,000
35	Methyl Chloride	No Criteria						
36	Methylene Chloride	1,600						1,600
39	Toluene	200,000						200,000
85	Bis(2-Ethylhexyl)phthalate	5.9						5.9
75	1,2-Dichlorobenzene	17,000						17,000
77	1,4-Dichlorobenzene	2,600						2,600
79	Diethyl Phthalate	120,000						120,000
105	gamma-BHC	0.063						0.063
108	4,4'-DDT	0.00059						0.00059
109	4,4'-DDE	0.00059						0.00059
118	Heptachlor Epoxide	0.00011						0.00011

[1] Based on a hardness value of 330 mg/L $CaCO_3$ in the Coachella Valley Storm Water Channel.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional 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 Board analyzed effluent and receiving water 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 NTR, and when applicable, water quality objectives specified in the Basin

Plan. To conduct the RPA, the Regional Board identified the maximum observed concentration influent to the pond (MEC) and maximum background concentration (B) in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

1) Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

2) Trigger 2 – If MEC<C and background water quality (B) > C, a limit is needed.

3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

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 Board to conduct the RPA. Upon review of the data, and if the Regional 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 Table F-4.

Table F-7
Summary Reasonable Potential Analysis

CTR No.	Parameter	Applicable Water Quality Criteria (C) µg/L	Maximum Effluent Concentration (MEC) µg/L	Maximum Receiving Water Concentration (B) µg/L	RPA Result – Need Limit?	Reason
1	Antimony	4,300	0.3	0.39	No	MEC<C, B<C
2	Arsenic	36	4	3	No	MEC<C, B<C
4	Cadmium	6.29	0.05	0.07 (DNQ)	No	MEC<C, B<C
5a	Chromium (III)	550.30	6.2	6.2	No	MEC<C, B<C
5b	Chromium (VI)	11.43	5 (DNQ)	6 (DNQ)	No	MEC<C, B<C
6	Copper	3.73	12	10	Yes	MEC>C, B>C
7	Lead	8.52	1.1	2.1	No	MEC<C, B<C
8	Mercury	0.051	0.04	0.06	Yes	B>C
9	Nickel	8.28	4	8	No	MEC<C, B<C
10	Selenium	5	2	5	Yes	B=C
11	Silver	2.24	0.03 (DNQ)	0.2	No	MEC<C, B<C
12	Thallium	6.3	0.02 (DNQ)	<0.01	No	MEC<C, B<C
13	Zinc	85.62	150	34	Yes	MEC>C
14	Free Cyanide	5.2	13	6	Yes	MEC>C, B>C

CTR No.	Parameter	Applicable Water Quality Criteria (C) µg/L	Maximum Effluent Concentration (MEC) µg/L	Maximum Receiving Water Concentration (B) µg/L	RPA Result – Need Limit?	Reason
16	2,3,7,8-TCDD	1.4E-08	4.8E-09	No Data	No	MEC<C
21	Carbon Tetrachloride	4.4	0.5	<0.49	No	MEC<C, B<C
23	Chlorodibromomethane	34	2.3	<0.24	No	MEC<C, B<C
24	Chloroethane	No Criteria	0.42 (DNQ)	<0.21	No-Uc	No Criteria
26	Chloroform	No Criteria	22	0.8	No-Uc	No Criteria
27	Dichlorobromomethane	46	2.3	<0.32	No	MEC<C, B<C
34	Methyl Bromide	4,000	3	4.2	No	MEC<C, B<C
35	Methyl Chloride	No Criteria	2.8	3.5	No-Uc	No Criteria
36	Methylene Chloride	1,600	0.53	0.63	No	MEC<C, B<C
39	Toluene	200,000	8.8	0.31	No	MEC<C, B<C
68	Bis(2-Ethylhexyl)Phthalate	5.9	8.5	3.4	Yes	MEC>C
75	1,2-Dichlorobenzene	17,000	0.3	<0.12	No	MEC<C, B<C
77	1,4-Dichlorobenzene	2,600	1.6	<0.29	No	MEC<C, B<C
79	Diethyl Phthalate	120,000	1.99 (DNQ)	<1	No	MEC<C, B<C
105	gamma-BHC	0.063	0.02	<0.005	No	MEC<C, B<C
108	4,4'-DDT	0.00059	0.02	<0.006	Yes	MEC>C
109	4,4'-DDE	0.00059	0.0027 (DNQ)	<0.002	Yes	MEC>C
118	Heptachlor Epoxide	0.00011	0.01	<0.003	Yes	MEC>C

Uc = Undetermined due to lack of water quality criteria
DNQ = Detected, but not quantified; this represents an estimated concentration
"<" Indicates the reported value is less than the method detection limit listed in the table

4. WQBEL Calculations

a. Water quality based effluent limits (final) are based on monitoring results and following 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. Table F-5 summarizes the final WQBELs for this Order using the process described below. A table providing the calculation for all applicable water quality-based effluent limitations for this Order is provided in Attachment H of this Order.

b. WQBELS Calculation Example

Using cyanide as an example, the following demonstrates how water quality based effluent limits were established for this Order. The process for developing these limits is in accordance with Section 1.4 of the SIP. Attachment H summarizes the development and calculation of all water quality-based effluent limitations for this Order using the process described below.

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion determine the effluent concentration allowance (ECA) using the following steady state equation:

ECA = C + D(C-B) when C>B, and
ECA = C When C# B,

Where
C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 330 mg/L (as $CaCO_3$) was used for development of hardness-dependant criteria, and a pH of 7.2 was used for pH-dependant criteria.
D = The dilution credit, and
B = The ambient background concentration

As discussed below, for this Order, dilution was not allowed; therefore:

ECA = C

For free cyanide the applicable water quality criteria are (reference Table F-6):

ECA_{acute}= 22 µg/L
$ECA_{chronic}$= 5.2 µg/L
$ECA_{human\ health}$= 220,000 µg/L

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$LTA_{acute} = ECA_{acute} \times Multiplier_{acute}$

$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic}$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For free cyanide, the following data was used to develop the acute and chronic LTA using Table 1 of the SIP:

No. of Samples	CV	$Multiplier_{acute}$	$Multiplier_{chronic}$
9	0.6	0.321	0.527

LTA_{acute} = 22 µg/L x 0.321 = 7.06 µg/L

$LTA_{chronic}$ = 5.2 µg/L x 2.74 = 2.74 µg/L

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or $LTA_{chronic}$

For cyanide, the most limiting LTA was the LTA_{acute}

LTA = 2.74 µg/L

Step 4: Calculate the water quality based effluent limits by multiplying the LTA by a factor (multiplier). Water quality-based effluent limits are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$AMEL_{aquatic\ life}$ = LTA x $AMEL_{multiplier}$

$MDEL_{aquatic\ life}$ = LTA x $MDEL_{multiplier}$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For free cyanide, the following data was used to develop the AMEL and MDEL for aquatic life using Table 2 of the SIP:

No. of Samples	CV	$Multiplier_{MDEL}$	$Multiplier_{AMEL}$
9	0.6	3.11	1.55

$AMEL_{aquatic\ life}$ = 2.74 x 1.55 = 4.3 µg/L

$MDEL_{aquatic\ life}$ = 2.74 x 3.11 = 8.5 µg/L

Step 5: For the ECA based on human health, set the AMEL equal to the $ECA_{human\ health}$

$AMEL_{human\ health} = ECA_{human\ health}$

For free cyanide:

$AMEL_{human\ health}$ = 220,000 µg/L

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the $Multiplier_{MDEL}$ to the $Multiplier_{AMEL}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$MDEL_{human\ health} = AMEL_{human\ health}$ x ($Multiplier_{MDEL}$ / $Multiplier_{AMEL}$)

For free cyanide, the following data was used to develop the $MDEL_{human\ health}$:

No. of Samples	CV	$Multiplier_{MDEL}$	$Multiplier_{AMEL}$	Ratio
9	0.60	3.11	1.55	2.01

$MDEL_{human\ health}$ = 220,000 µg/L x 2.01 = 442,200 µg/L

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

For cyanide:

$AMEL_{aquatic\ life}$	$MDEL_{aquatic\ life}$	$AMEL_{human\ health}$	$MDEL_{human\ health}$
4.3 µg/L	8.5 µg/L	220,000 µg/L	442,200 µg/L

The lowest (most restrictive) effluent limits are based on aquatic toxicity and were incorporated into this Order. These limits will be protective of aquatic life.

5. WQBEL Based on Basin Plan Objectives

The Basin Plan states that any discharge to the Coachella Valley Storm Water Channel shall not cause concentration of TDS in the surface water to exceed a maximum of 2,500 mg/L and an annual average of 2,000 mg/L. Therefore, effluent limitations for TDS are included in the Order and are based on the maximum effluent limitation provided in the Basin Plan.

The Basin Plan states that any discharge to a waterbody with a REC1 designated use shall not have an Escherichia coli (E. coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters. Effluent limitations for E.coli are incorporated in this Order. In addition, the Basin Plan contains receiving water limitations for enterococci and fecal coliform. E.colif is an indicator parameter for enterococci and fecal coliform. Therefore, effluent limitations for enterococci and fecal coliform are not included in the Order.

The Basin Plan requires 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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, 96-hour bioassay or bioassays of appropriate duration or other appropriate methods as specified by the Regional Board. This Order establishes narrative toxicity limitations to comply with this requirement.

6. Final WQBELs

Summaries of the water quality effluent limitations required by this Order are described in Table F-8 below.

Table F-8
Summary of Water Quality-based Effluent Limitations
Monitoring Location M-001C

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Total Dissolved Solids	mg/L	--	2,500
Residual Chlorine	mg/L	0.01	--
Copper [1]	µg/L	2.9	5.8
Mercury	µg/L	0.051	0.102
Selenium	µg/L	4.1	8.2
Zinc [1]	µg/L	47	95
Free Cyanide	µg/L	4.3	8.5
Bis(2-Ethylhexyl)Phthalate	µg/L	5.9	12
4,4'-DDT	µg/L	0.00059	0.0012
4,4'-DDE	µg/L	0.00059	0.0012
Heptachlor Epoxide	µg/L	0.00011	0.00022

[1] Total Recoverable

- Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not have a Escherichia coli (E.coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples during the calendar month) nor shall any sample exceed 400 MPN per 100 milliliters.

Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not have a residual chlorine concentration in excess of an instantaneous maximum of 0.02 mg/L.

There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment 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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

7. Whole Effluent Toxicity (WET)

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 for discharges to the Coachella Valley Storm Water Channel. 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.

D. Final Effluent Limitations

Summaries of the water quality effluent limitations required by this Order are described in Tables F-9 through F-13 and the text below.

Proposed effluent limitations are based on secondary treatment standards, and equivalent to secondary treatment standards, CTR, Colorado River Basin Plan Water Quality Standards, and effluent limitations established in the previous Order.

1. **Mass-based Effluent Limitations**

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)
where: Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (MGD)

Table F-9
Summary of Final Effluent Limitations – Oxidation Pond Treatment System
Discharge Point 001 at Monitoring Location M-001A

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	MGD	0.9	--	--	--	--	
BOD Percent Removal	%	> / = 65	--	--	--	--	40 CFR 133
TSS Percent Removal	%	> / = 65	--	--	--	--	40 CFR 133

Table F-10
Summary of Final Effluent Limitations – Activated Sludge Treatment System
Discharge Point 001 at Monitoring Location M-001B

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	MGD	1.5	--	--	--	--	
BOD Percent Removal	%	> / = 85	--	--	--	--	40 CFR 133
TSS Percent Removal	%	> / = 85	--	--	--	--	40 CFR 133

Table F-11
Summary of Final Effluent Limitations – Combined Activated Sludge and Oxidation Pond Treatment Systems Discharge Point 001 at Monitoring Location M-001C

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	36	52	--	--	--	40 CFR 133
	lbs/day	720	1,041	--	--	--	
Total Suspended Solids	mg/L	36	52	--	--	--	40 CFR 133
	lbs/day	720	1,041	--	--	--	
Total Dissolved Solids	mg/L	--	--	2,500	--	--	Basin Plan
	lbs/day	--	--	50,040	--	--	
pH	standard units	--	--	--	6.0	9.0	Basin Plan
Residual Chlorine	mg/L	0.01	--	--	--	0.02	E, BPJ
	lbs/day	0.20	--	--	--	0.40	
Copper [1]	µg/L	2.9	--	5.8	--	--	CTR, SIP
	lbs/day	0.06	--	0.12	--	--	
Mercury	µg/L	0.051	--	0.102	--	--	CTR, SIP
	lbs/day	0.001	--	0.002	--	--	
Selenium	µg/L	4.1	--	8.2	--	--	CTR, SIP
	lbs/day	0.08	--	0.16	--	--	
Zinc [1]	µg/L	47	--	95	--	--	CTR, SIP
	lbs/day	0.95	--	1.9	--	--	
Free Cyanide [1]	µg/L	4.3	--	8.5	--	--	CTR, SIP
	lbs/day	0.09	--	0.17	--	--	
Bis(2-Ethylhexyl)Phthalate [1]	µg/L	5.9	--	11.8	--	--	CTR, SIP
	lbs/day	0.12	--	0.24	--	--	
4,4'-DDE [1]	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
	lbs/day	0.000012	--	0.000024	--	--	

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
4,4'-DDT [1]	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
	lbs/day	0.000012	--	0.000024	--	--	
Heptachlor Epoxide [1]	µg/L	0.00011	--	0.00022	--	--	CTR, SIP
	lbs/day	0.0000022	--	0.0000044	--	--	

[1] Limitations are applicable after June 29, 2009. The interim limitations described in Section IV.E are applicable from the date of adoption of the Order through June 29, 2009.

Table F-12
Summary of Final Effluent Limitations – Oxidation Ditch Treatment System
Discharge Point 001 at Monitoring Location M-001D

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	MGD	3.0	--	--	--	--	
BOD Percent Removal	%	> / = 85	--	--	--	--	40 CFR 133
TSS Percent Removal	%	> / = 85	--	--	--	--	40 CFR 133

Table F-13
Summary of Final Effluent Limitations – Combined Activated Sludge and Oxidation Ditch Treatment Systems Discharge Point 001 at Monitoring Location M-001C

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	--	--	--	40 CFR 133
	lbs/day	1,126	1,689	--	--	--	
Total Suspended Solids	mg/L	30	45	--	--	--	40 CFR 133
	lbs/day	1,126	1,689	--	--	--	
Total Dissolved Solids	mg/L	--	--	2,500	--	--	Basin Plan
	lbs/day	--	--	93,825	--	--	
pH	standard units	--	--	--	6.0	9.0	Basin Plan
Residual Chlorine	mg/L	0.01	--	--	--	0.02	E, BPJ
	lbs/day	0.12	--	--	--	0.25	
Copper [1]	µg/L	2.9	--	5.8	--	--	CTR, SIP
	lbs/day	0.11	--	0.22	--	--	
Mercury	µg/L	0.051	--	0.102	--	--	CTR, SIP
	lbs/day	0.002	--	0.004	--	--	
Selenium	µg/L	4.1	--	8.2	--	--	CTR, SIP
	lbs/day	0.15	--	0.31	--	--	
Zinc [1]	µg/L	47	--	95	--	--	CTR, SIP
	lbs/day	1.8	--	3.6	--	--	
Free Cyanide [1]	µg/L	4.3	--	8.5	--	--	CTR, SIP
	lbs/day	0.16	--	0.32	--	--	

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Bis(2-Ethylhexyl)Phthalate [1]	µg/L	5.9	--	12	--	--	CTR, SIP
	lbs/day	0.22	--	0.44	--	--	
4,4'-DDE [1]	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
	lbs/day	0.000022	--	0.000044	--	--	
4,4'-DDT [1]	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
	lbs/day	0.000022	--	0.000044	--	--	
Heptachlor Epoxide [1]	µg/L	0.00011	--	0.00022	--	--	CTR, SIP
	lbs/day	0.0000041	--	0.0000083	--	--	

[1] Limitations are applicable after June 29, 2009. The interim limitations described in Section IV.E are applicable from the date of adoption of the Order through June 29, 2009.

a. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water, as defined in Section V.E of the Monitoring and Reporting Program (Attachment E). 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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Water Board.

b. Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not exceed an annual average of 2,000 mg/L of total dissolved solids (TDS).

c. Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not have a Escherichia coli (E. coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples during the calendar month) nor shall any sample exceed 400 MPN per 100 milliliters.

E. Interim Effluent Limitations

The Discharger may not be able to consistently comply with the new effluent limitations for copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4,'-DDE, 4,4'-DDT, and heptachlor epoxide. Therefore, interim limitations have been set as follows:

1. The governing Water Quality Criteria (WQC) for copper is 3.73 µg/L, the freshwater aquatic life criteria contained in the CTR. Copper has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 2.9 µg/L average monthly and 5.8 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for copper is required. The previous permit did not contain an effluent limit for copper, and it is not possible to statistically determine current plant performance based on seven data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 12 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

2. The governing WQC for zinc is 85.62 µg/L, the saltwater aquatic life criteria contained in the CTR. Zinc has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 47 µg/L and 95 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for zinc is required. The previous permit did not contain an effluent limit for zinc, and it is not possible to statistically determine current plant performance based on seven data points. Therefore, the interim effluent limit is the MEC, 150 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

3. The governing WQC for free cyanide is 5.2 µg/L, the freshwater aquatic life criteria contained in the CTR. Free cyanide has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 4.3 µg/L average monthly and 8.5 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for free cyanide is required. The previous permit did not contain an effluent limit for free cyanide, and it is not possible to statistically determine current plant performance based on two detected data points. Therefore, the interim effluent limit is the MEC, 13 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

4. The governing WQC for bis(2-ethylhexyl)phthalate is 5.9 µg/L, the human health criteria for the consumption of water and organisms contained in the CTR. Bis(2-ethylhexyl)phthalate has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 5.9 µg/L average monthly and 11.8 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for bis(2-ethylhexyl)phthalate is required. The previous permit did not contain an effluent limit for bis(2-ethylhexyl)phthalate, and it is not possible to statistically determine current plant performance based on three detected data points. Based on the monitoring data provided by the Discharger, the MEC was 8.5 µg/L. The MEC is greater than the proposed final average monthly effluent limit, but less than the proposed final daily maximum effluent limit. Therefore the monthly average interim limit is set equal to the MEC or 8.5 µg/L, and the daily maximum interim limit is set equal to the final limit of 11.8 µg/L. These interim effluent limits are based on the best professional judgment of Regional Board staff.

5. The governing WQC for 4,4'-DDE is 0.00059 µg/L, the human health criteria for the consumption of water and organisms contained in the CTR. 4,4'-DDE has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 0.00059 µg/L and 0.00118 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for 4,4'-DDE is required. The previous permit did not contain an effluent limit for 4,4'-DDE, and it is not possible to statistically determine current plant performance based on one detected data point. Therefore, the interim effluent limit is the MEC, 0.0027 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

6. The governing WQC for 4,4'-DDT is 0.00059 µg/L, the human health criteria for the consumption of water and organisms contained in the CTR. 4,4'-DDT has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 0.00059 µg/L and 0.00118 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for 4,4'-DDT is required. The previous permit did not contain an effluent limit for 4,4'-DDT, and it is not possible to statistically determine current plant performance based on one detected data point. Therefore, the interim effluent limit is the MEC, 0.02 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

7. The governing WQC for heptachlor epoxide is 0.00011 µg/L, the human health criteria for the consumption of water and organisms contained in the CTR. Heptachlor epoxide has reasonable potential to exceed water quality objectives,

and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 0.00011 µg/L and 0.00022 µg/L maximum daily. The Discharger indicated in its February 10, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for heptachlor epoxide is required. The previous permit did not contain an effluent limit for heptachlor epoxide, and it is not possible to statistically determine current plant performance based on one detected data point. Therefore, the interim effluent limit is the MEC, 0.01 µg/L, for both the monthly average and daily maximum interim limit. These interim effluent limits are based on the best professional judgment of Regional Board staff.

Parameter	Unit	Date Effluent Limit Becomes Effective	Average Monthly Effluent Limit	Maximum Daily Effluent Limit
Copper (interim)	µg/L	June 29, 2005	12	12
Copper (final)	µg/L	June 29, 2009	2.9	5.8
Zinc (interim)	µg/L	June 29, 2005	150	150
Zinc (final)	µg/L	June 29, 2009	47	95
Free Cyanide (interim)	µg/L	June 29, 2005	13	13
Free Cyanide (final)	µg/L	June 29, 2009	4.3	8.5
Bis(2-Ethylhexyl)Phthalate (interim)	µg/L	June 29, 2005	8.5	12
Bis(2-Ethylhexyl)Phthalate (final)	µg/L	June 29, 2009	5.9	12
4,4'-DDE (interim)	µg/L	June 29, 2005	0.02	0.02
4,4'-DDE (final)	µg/L	June 29, 2009	0.00059	0.0012
4,4'-DDT (interim)	µg/L	June 29, 2005	0.0027	0.0027
4,4'-DDT (final)	µg/L	June 29, 2009	0.00059	0.0012
Heptachlor Epoxide (interim)	µg/L	June 29, 2005	0.01	0.01
Heptachlor Epoxide (final)	µg/L	June 29, 2009	0.00011	0.00022

F. Land Discharge Specifications (Not Applicable)

G. Reclamation Specifications (Not Applicable)

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater

The groundwater receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a 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 California Water Code authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, 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 Monitoring and Reporting Program for this facility.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements without change.

B. Effluent Monitoring

Monitoring for those pollutants expected to be present in the combined discharge from the treatment systems, M-001, will be required as shown on the proposed monitoring and reporting program (Attachment E) and as required in the "*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" adopted March 2, 2000.

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 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 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.

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

This requirement establishes conditions and protocol by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and in accordance with Section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

The Whole Effluent Toxicity (WET) Testing Requirements contained in the Attachment E, Monitoring and Reporting Program, Section V were developed based on the Draft National Whole Effluent Toxicity Implementation Guidance Under the NPDES Program developed by USEPA (Docket ID. No. OW-2004-0037). This is the most current guidance available to the Regional Board. This Order includes a reopener to allow the requirements of this section to be revised pending the issuance of final guidance or policies developed by either the USEPA or State Water Board.

D. Receiving Water Monitoring

1. Surface Water

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

E. Other Monitoring Requirements

Water Supply Monitoring

The Discharger, in conjunction with the Total Dissolved Solids Study required in Special Provision VI.C.2.f, shall obtain or acquire monthly source water data for total dissolved solids, either through monitoring or obtaining the data from the drinking water purveyor.

Biosolids/Sludge Monitoring

The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Board Order. The sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses should be submitted to the Regional Board as part of the Monitoring and Reporting Program.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

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

2. Regional Board Provisions

Regional Board Standard Provisions are based on the Clean Water Act, U.S. EPA regulations, and the California Water Code.

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional 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 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. **Translator Study.** This provision is based on the SIP that allows the use of a translator for metals and selenium different than the U.S. EPA conversion factor, provided the Discharger requests this action and completes a translator study within two years from the date of the issuance of this permit as stated in the SIP.

c. **Pollutant Minimization Study.** This provision is based on the SIP, Section 2.1, Compliance Schedules.

d. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion.** 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. This provision requires the Discharger to certify that it has increased plant capacity through the addition of a newly constructed oxidation ditch treatment system for

it to obtain alternative effluent limitations for the discharge from the oxidation ditch treatment system. This provision requires the Discharger to report specific time schedules for the ongoing and planned projects. This provision requires the Discharger to submit the report to the Regional Water Board for approval.

e. **Operations Plan for Proposed Plant Expansion.** This provision is based on Section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the oxidation ditch treatment system. This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

f. **Total Dissolved Solids (TDS) Study.** The purpose of this section is to provide more detailed information on the Regional Board's development of salinity standards pursuant to Section 303 and through the NPDES permitting authority in the regulation of municipal and industrial sources (See Section 402 of the Federal Water Pollution Control Act.). As part of the Regional Board's development of salinity standards, the Regional Board is requiring a study to determine what is a reasonable increase in salinity for municipal discharges to surface waters and its impact on the beneficial uses of waters of the United States. As part of the 1996 Review of the Water Quality Standards for Salinity of the Colorado River System dated June 1996, the study proposed that an incremental increase in salinity shall be 400 mg/L or less, which is considered to be a reasonable incremental increase above the flow weighted average salinity of the source water supply. As part of this permit, the discharger is required to perform a study to evaluate whether a 400 mg/L incremental increase in salinity above the source water is practical and if not, what incremental increase is practical for their discharge. This report shall be submitted to the Regional Board's Executive Officer prior to the filing date for re-application.

3. Best Management Practices and Pollution Prevention (Not Applicable)

4. Compliance Schedules

a. This Order establishes final effluent limitations for copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDE, 4,4'-DDT, and heptachlor epoxide that are new limits for the facility. This Order also contains interim effluent limitations and a compliance schedule that provides the Discharge time to bring their facility into compliance with the newly established final limits. In accordance with Section 2.1 of the SIP, interim limits and compliance schedules can only be provided by the Board after the Discharger has submitted a report that demonstrates and justifies that it is infeasible for the Discharger to achieve immediate compliance with newly established final effluent limitations. 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. The Discharger submitted an Infeasibility Report on February 10, 2005 and provided a compliance plan that identified the measures that will be taken to reduce the concentrations of copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDT, 4,4'-DDE, and heptachlor epoxide in their discharge.

The provision for compliance schedule is based on Section 2.1 (Compliance Schedules) of the SIP. The proposed permit allows the Discharger up to 4 years from the date of issue of the proposed permit to be in compliance with the final effluent limitations for copper, zinc, free cyanide, bis(2-ethylhexyl)phthalate, 4,4'-DDE, 4,4'-DDT, and heptachlor epoxide. Based on Regional Board's BPJ, 4 years is sufficient for the Discharger to achieve the final effluent limitations for the pollutants. The Discharger is required to implement its compliance plan submitted with the Infeasibility Report (February 10, 2005) and develop a pollution minimization plan to ensure that the Discharger achieves compliance with the final limitations. Annual 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. During the interim period, the Discharger is required to meet the interim limitations derived from facility performance data.

5. Construction, Operation, and Maintenance Specifications

These provisions are based on the requirements of 40 CFR 122.41(e) and the previous Order.

6. Special Provisions for Municipal Facilities (POTWs Only)

a. **Sludge Disposal Requirements.** Requirements are based on the previous Order and 40 CFR Part 503.

b. **Pretreatment Program Requirements.** Requirements are based on the previous Order and 40 CFR Part 403.

7. Other Special Provisions

Special Provisions VI.C.7.a through VI.C.7.f, included to ensure the compliance with requirements established in the Order, are based on the previous Order, the Clean Water Act, U.S. EPA regulations, California Water Code, and Regional Board plans and policies.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Colorado River Basin 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 Coachella Sanitary District Wastewater Treatment Plant. 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 following newspapers: Desert Sun, Imperial Valley Press, Riverside Press Enterprise, and Salton Searfarer.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should 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 31, 2005.

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:	June 29, 2005
Time:	10:00 a.m.
Location:	City Council Chambers City of La Quinta 78-495 Calle Tampico La Quinta, CA 92253

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 is **http://www.waterboards.ca.gov/coloradoriver/** 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 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

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 Jon Rokke at (760) 776-8959.

ATTACHMENT G – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	EPA 6020/200.8
2	Arsenic	7440382	EPA 1632
3	Beryllium	7440417	EPA 6020/200.8
4	Cadmium	7440439	EPA 1638/200.8
5a	Chromium (III)	16065831	EPA 6020/200.8
5a	Chromium (VI)	18540299	EPA 7199/1636
6	Copper	7440508	EPA 6020/200.8
7	Lead	7439921	EPA 1638
8	Mercury	7439976	EPA 1669/1631
9	Nickel	7440020	EPA 6020/200.8
10	Selenium	7782492	EPA 6020/200.8
11	Silver	7440224	EPA 6020/200.8
12	Thallium	7440280	EPA 6020/200.8
13	Zinc	7440666	EPA 6020/200.8
14	Cyanide	57125	EPA 9012A
15	Asbestos	1332214	EPA/600/R-93/116(PCM)
16	2,3,7,8-TCDD	1746016	EPA 8290 (HRGC) MS
17	Acrolein	107028	EPA 8260B
18	Acrylonitrile	107131	EPA 8260B
19	Benzene	71432	EPA 8260B
20	Bromoform	75252	EPA 8260B
21	Carbon Tetrachloride	56235	EPA 8260B
22	Chlorobenzene	108907	EPA 8260B
23	Chlorodibromomethane	124481	EPA 8260B
24	Chloroethane	75003	EPA 8260B
25	2-Chloroethylvinyl Ether	110758	EPA 8260B
26	Chloroform	67663	EPA 8260B
27	Dichlorobromomethane	75274	EPA 8260B
28	1,1-Dichloroethane	75343	EPA 8260B
29	1,2-Dichloroethane	107062	EPA 8260B
30	1,1-Dichloroethylene	75354	EPA 8260B
31	1,2-Dichloropropane	78875	EPA 8260B
32	1,3-Dichloropropylene	542756	EPA 8260B
33	Ethylbenzene	100414	EPA 8260B
34	Methyl Bromide	74839	EPA 8260B
35	Methyl Chloride	74873	EPA 8260B
36	Methylene Chloride	75092	EPA 8260B
37	1,1,2,2-Tetrachloroethane	79345	EPA 8260B
38	Tetrachloroethylene	127184	EPA 8260B
39	Toluene	108883	EPA 8260B
40	1,2-Trans-Dichloroethylene	156605	EPA 8260B
41	1,1,1-Trichloroethane	71556	EPA 8260B

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
42	1,12-Trichloroethane	79005	EPA 8260B
43	Trichloroethylene	79016	EPA 8260B
44	Vinyl Chloride	75014	EPA 8260B
45	2-Chlorophenol	95578	EPA 8270C
46	2,4-Dichlorophenol	120832	EPA 8270C
47	2,4-Dimethylphenol	105679	EPA 8270C
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C
49	2,4-Dinitrophenol	51285	EPA 8270C
50	2-Nitrophenol	88755	EPA 8270C
51	4-Nitrophenol	100027	EPA 8270C
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C
53	Pentachlorophenol	87865	EPA 8270C
54	Phenol	108952	EPA 8270C
55	2,4,6-Trichlorophenol	88062	EPA 8270C
56	Acenaphthene	83329	EPA 8270C
57	Acenaphthylene	208968	EPA 8270C
58	Anthracene	120127	EPA 8270C
59	Benzidine	92875	EPA 8270C
60	Benzo(a)Anthracene	56553	EPA 8270C
61	Benzo(a)Pyrene	50328	EPA 8270C
62	Benzo(b)Fluoranthene	205992	EPA 8270C
63	Benzo(ghi)Perylene	191242	EPA 8270C
64	Benzo(k)Fluoranthene	207089	EPA 8270C
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C
70	Butylbenzyl Phthalate	85687	EPA 8270C
71	2-Chloronaphthalene	91587	EPA 8270C
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C
73	Chrysene	218019	EPA 8270C
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C
75	1,2-Dichlorobenzene	95501	EPA 8260B
76	1,3-Dichlorobenzene	541731	EPA 8260B
77	1,4-Dichlorobenzene	106467	EPA 8260B
78	3,3'-Dichlorobenzidine	91941	EPA 8270C
79	Diethyl Phthalate	84662	EPA 8270C
80	Dimethyl Phthalate	131113	EPA 8270C
81	Di-n-Butyl Phthalate	84742	EPA 8270C
82	2,4-Dinitrotoluene	121142	EPA 8270C
83	2,6-Dinitrotoluene	606202	EPA 8270C
84	Di-n-Octyl Phthalate	117840	EPA 8270C
85	1,2-Diphenylhydrazine	122667	EPA 8270C
86	Fluoranthene	206440	EPA 8270C
87	Fluorene	86737	EPA 8270C
88	Hexachlorobenzene	118741	EPA 8260B
89	Hexachlorobutadiene	87863	EPA 8260B

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
90	Hexachlorocyclopentadiene	77474	EPA 8270C
91	Hexachloroethane	67721	EPA 8260B
92	Indeno(1,2,3-cd)Pyrene	193395	EPA 8270C
93	Isophorone	78591	EPA 8270C
94	Naphthalene	91203	EPA 8260B
95	Nitrobenzene	98953	EPA 8270C
96	N-Nitrosodimethylamine	62759	EPA 8270C
97	N-Nitrosodi-n-Propylamine	621647	EPA 8270C
98	N-Nitrosodiphenylamine	86306	EPA 8270C
99	Phenanthrene	85018	EPA 8270C
100	Pyrene	129000	EPA 8270C
101	1,2,4-Trichlorobenzene	120821	EPA 8260B
102	Aldrin	309002	EPA 8081A
103	alpha-BHC	319846	EPA 8081A
104	beta-BHC	319857	EPA 8081A
105	gamma-BHC	58899	EPA 8081A
106	delta-BHC	319868	EPA 8081A
107	Chlordane	57749	EPA 8081A
108	4,4'-DDT	50293	EPA 8081A
109	4,4'-DDE	72559	EPA 8081A
110	4,4'-DDD	72548	EPA 8081A
111	Dieldrin	60571	EPA 8081A
112	alpha-Endosulfan	959988	EPA 8081A
113	beta-Endosulfan	33213659	EPA 8081A
114	Endosulfan Sulfate	1031078	EPA 8081A
115	Endrin	72208	EPA 8081A
116	Endrin Aldehyde	7421934	EPA 8081A
117	Heptachlor	76448	EPA 8081A
118	Heptachlor Epoxide	1024573	EPA 8081A
119	PCB-1016	12674112	EPA 8082
120	PCB-1221	11104282	EPA 8082
121	PCB-1232	11141165	EPA 8082
122	PCB-1242	53469219	EPA 8082
123	PCB-1248	12672296	EPA 8082
124	PCB-1254	11097691	EPA 8082
125	PCB-1260	11096825	EPA 8082
126	Toxaphene	8001352	EPA 8081A

Attachment H – Summary Water Quality-Based Effluent Limit Calculations

The water quality-based effluent limits developed for this Order are summarized below and were calculated as described in the methodology summarized in Attachment F, Fact Sheet Section IV.C.4 of this Order.

Priority Pollutant	Human Health Calculations			Aquatic Life Calculations											Selected Limits	
	Human Health			Saltwater / Freshwater												
	AMEL = ECA = C hh	MDEL/AMEL multiplier	MDEL hh	ECA acute = C acute	ECA acute multiplier	LTA acute	ECA chronic = C chronic	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aquatic life	MDEL multiplier 99	MDEL aquatic life	AMEL	MDEL
	ug/L		ug/L	ug/L		ug/L	ug/L		ug/L	ug/L					ug/L	ug/L
Copper	n/a	n/a	n/a	5.78	0.32	1.86	3.7	0.53	1.97	1.86	1.55	2.88	3.11	5.78	2.88	5.78
Mercury	0.051	2.01	0.102	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.051	0.102
Selenium	n/a	n/a	n/a	20	0.32	6.42	5	0.53	2.64	2.64	1.55	4.09	3.11	8.21	4.09	8.21
Zinc	n/a	n/a	n/a	95.14	0.32	30.55	85.62	0.53	45.16	30.55	1.55	47.42	3.11	95.14	47.42	95.14
Free Cyanide	220,000	2.01	441,362	22	0.32	7.06	5.2	0.53	2.74	2.74	1.55	4.3	3.11	8.5	4.3	8.5
Bis(2-Ethylhexyl)Phthalate	5.9	2.01	11.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5.9	11.8
4,4'-DDT	0.00059	2.01	0.0012	0.13	0.32	0.04	0.001	0.53	0.00053	0.00053	1.55	0.00082	3.11	0.0016	0.00059	0.00118
4,4'-DDE	0.00059	2.01	0.0012	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.00059	0.00118
Heptachlor Epoxide	0.00011	2.01	0.0002	0.05	0.32	0.02	0.0036	0.53	0.0019	0.0019	1.55	0.0029	3.11	0.0059	0.00011	0.00022

Notes:

C = Water Quality Criteria
hh = human health
AMEL = Average monthly effluent limitation
MDEL = Maximum daily effluent limitation
ECA = Effluent concentration allowance
LTA = Long-term average concentration