

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

COLORADO RIVER BASIN REGION

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ORDER NO. R7-2007-0001
NPDES NO. CA0104973

**WASTE DISCHARGE REQUIREMENTS FOR THE COACHELLA VALLEY WATER DISTRICT,
 MID-VALLEY WATER RECLAMATION PLANT NO. 4**

The following Discharger is subject to Waste Discharge Requirements (WDRs) as set forth in this Order:

Table 1. Discharger Information

Discharger	Coachella Valley Water District
Name of Facility	Mid-Valley Water Reclamation Plant No. 4, Thermal
Facility Address	63-002 Fillmore Street
	Thermal, CA 92274
	Riverside County

The discharge by the Coachella Valley Water District from the discharge point identified below is subject to WDRs as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary and equivalent to secondary treated domestic wastewater	33°, 35', 28" N	116°, 07', 17" W	Coachella Valley Storm Water Channel

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	May 16, 2007
This Order shall become effective on:	May 16, 2007
This Order shall expire on:	May 16, 2012
The USEPA and the Regional Water Quality Control Board have classified this discharge as a major discharge.	
The Discharger shall file a ROWD in accordance with title 23, CCRs, not later than 180 days in advance of the Order expiration date as an application for issuance of new WDRs.	

IT IS HEREBY ORDERED, that this Order supersedes Order No. 00-014 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with Section 13000) 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 Perdue, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 16, 2007.

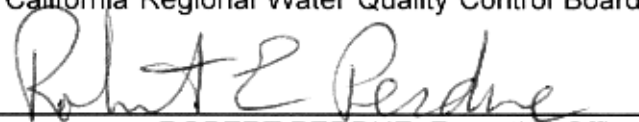

 ROBERT PERDUE, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to WDRs as set forth in this Order:

Table 4. Facility Information

Discharger	Coachella Valley Water District
Name of Facility	Mid-Valley Water Reclamation Plant No. 4
Facility Address	63-002 Fillmore Street
	Thermal, CA 92274
	Riverside County
Facility Contact, Title, and Phone	Steve Robbins, General Manager- Chief Engineer, (760) 398-2651
Mailing Address	P.O. Box 1058, Coachella, CA 92236
Type of Facility	Publicly Owned Treatment Works (POTW)
Facility Design Flow	7.0 million gallons per day (MGD), and up to 9.9 MGD following expansion

II. FINDINGS

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

A. Background. Coachella Valley Water District (hereinafter Discharger) is currently discharging pursuant to Order No. 00-014 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0104973. The Discharger submitted a Report of Waste Discharge (ROWD), dated November 11, 2004, and applied for an NPDES permit renewal to discharge up to 9.9 MGD of treated wastewater from the Mid-Valley Water Reclamation Plant No. 4, hereinafter Facility. The application was deemed complete on January 10, 2005. The current facility design flow is 7.0 MGD. During the term of this Order, the Discharger plans to upgrade the facility and increase the design flow to 9.9 MGD.

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

B. Facility Description. The Discharger owns and operates the Mid-Valley Water Reclamation Plant No. 4. The current total design capacity of the wastewater treatment plant is 7.0 MGD. The wastewater treatment plant consists of a lagoon system. The treatment system consists of a headworks system that includes two pre-aeration ponds, an automatic bar screen, trough, washer-compactor, and headworks building equipped with an air scrubber. Flow from the headworks is distributed to four treatment modules, each comprised of four lined aerated lagoons and two lined polishing ponds (for a total of 16 aeration lagoons and 8 polishing ponds). All ponds are lined with a synthetic membrane liner. Effluent from each module and the activated sludge treatment system is combined, chlorinated in the chlorine contact basin inlet box followed by a chlorine contact basin, and dechlorinated. Prior to discharge through Discharge Point No. 001, effluent is chlorinated and dechlorinated by using a chemical induction unit which employs a vacuum and gas system capable of dispersing the chlorine and sulfur dioxide gas with an airfoil-design propeller. Wastewater is discharged from Discharge Point No. 001 to the Coachella Valley Storm Water Channel, a water of the United States within the Coachella subunit of the Whitewater Hydrologic unit. Screening solids removed from the headworks and aeration basins are placed in waste management bins and disposed of at a landfill. The remaining solids are allowed to settle in the plant’s polishing ponds. Biosolids from these ponds are periodically dredged and placed in drying beds. After drying, a private contractor hauls the biosolids offsite to a landfill for disposal or to a composting facility. In the event that the Discharger’s private contractor is unable to provide service for secondary sludge removal and disposal from the Discharger’s other facility, Palm Desert Reclamation Plant No. 10, the Discharger may, in the interim, transport secondary sludge to Mid-Valley Water Reclamation Plant No. 4 as a contingency plan for temporary storage. Attachment C.1 provides a flow schematic of the aerated lagoon treatment operation.

The Discharger recently completed the construction of new chlorine contact channels, motor control center and the expansion of the existing chlorination building. The Discharger began operating the new systems in February 2007.

The Discharger also recently completed the construction of a vacuum truck debris disposal drying bed facility to receive sewage and other waste materials from vector trucks. Drainage from this facility is by means of a filtrate pump station to the Module 4 aeration lagoon for treatment. Solids remaining on the drying bed(s) are removed after drying and taken to a landfill

for disposal. Construction of this facility was completed in January 2007 and was put into service in February 2007.

The Discharger plans to increase the plant treatment capacity from 7.0 MGD to 9.9 MGD by constructing an activated sludge treatment system to run parallel with the lagoon system. The Discharger proposes to construct two activated sludge basins, two secondary clarifiers, and sludge handling facilities. The sludge handling facilities will include a biosolids dewatering building with a gravity belt thickener and a belt press, a sludge holding tank with a thickening waste activated sludge pump station, dewatering sludge conveyor system and truck loading facility, and a polymer facility. The treatment process will include an associated flume, flow distribution boxes, pump stations, yard piping, and a power supply system, which include electrical service, switchgear, motor control centers, and an emergency generator. The expansion project is expected to increase the treatment capacity by 2.9 MGD. Effluent limitations for activated sludge treatment system and the increased total flow have been established in the permit. See the Fact Sheet, Attachment F, for a detailed description of the activated sludge treatment system and rationale for the established effluent limitations. Attachment C.2 provides a flow schematic of the activated sludge treatment system expansion.

Attachment B provides a map of the area around the facility.

- C. Legal Authorities.** This Order is issued pursuant to Section 402 of the 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) (commencing with Section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the CWC (commencing with Section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through I are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under CWC Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, California Public Resources Code, Section 21100 et seq.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at Section 122.44(a), Title 40 of the CFR¹ (CFR), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at Part 133 and equivalent to secondary treatment standards. The Regional Water Board has considered the factors listed in CWC Section 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.

¹ All further statutory references are to title 40 of the CFR unless otherwise indicated.

G. Water Quality-based Effluent Limitations. Section 301(b) of the CWA and Section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established using: (1) USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in Section 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993, 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 (includes amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Coachella Valley Storm Water Channel are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Coachella Valley Storm Water Channel	<u>Existing:</u> Freshwater replenishment (FRSH), contact (REC1) ¹ and non-contact (REC2) ¹ water recreation, warm freshwater habitat (WARM), wildlife habitat (WILD), preservation or rare, threatened or endangered species (RARE). ²

¹ Unauthorized Use.

² 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 Water Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Water Board.

Requirements of this Order implement the Basin Plan.

The immediate receiving water is the Coachella Valley Storm Water Channel. The 2002 USEPA CWA Section 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Coachella Valley Storm Water Channel as impaired by pathogens. No Total Maximum Daily Loads (TMDLs) have been developed to date, although a TMDL for Bacterial Indicators in the Coachella Valley Stormwater Channel is being developed. The TMDL for Bacterial Indicators in the Coachella Valley Stormwater Channel is tentatively scheduled for Regional Water Board approval on May 16, 2007. In addition, the 303(d) List classifies the Salton Sea as impaired by nutrients, salt, and selenium. Tributaries to the Salton Sea, including the Coachella Valley Storm Water Channel, may be affected by future TMDLs. No TMDLs have been developed to

date for the Salton Sea, although a nutrient TMDL is under development for the Salton Sea that may impact the permitted discharges to tributaries to the Salton Sea (Coachella Valley Storm Water Channel). The Nutrient TMDL for the Salton Sea is tentatively scheduled for completion in 2009.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. 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 Water Quality Control Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes a compliance schedule and interim effluent limitations for cyanide. A detailed discussion of the basis for the compliance schedule and interim effluent limitation(s) is included in the Fact Sheet, Attachment F.
- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR §131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on flow, CBOD, total suspended solids, and pH. Restrictions on flow, CBOD, total suspended solids, and pH are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are no more stringent than

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

- N. Anti-degradation Policy.** Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California’s anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal anti-degradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the anti-degradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR, Section 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. Some effluent limitations in this Order are less stringent than those in the previous Order. Effluent limitations for fecal coliform and settleable solids have been removed, and numeric effluent limitations for total dissolved solids have been replaced by a narrative limitation. As discussed in detail in section IV.C.4 of the Fact Sheet (Attachment F), this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41, and additional conditions applicable to specified categories of permits in accordance with Section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42. 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.

- R. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections V.B, and VI.A.2, and VI.C.4 of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- S. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs 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 of this Order.
- T. 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 of this Order.

III. DISCHARGE PROHIBITIONS

- A.** Bypass, overflow, discharge or spill of untreated or partially treated waste is prohibited.
- B.** The discharge of waste to land not owned or controlled by the Discharger is prohibited.
- C.** The discharge of treated wastewater at a location or in a manner different from that described in the Findings of this Order is prohibited. This prohibition does not limit flexibility in discharging different percentages of treated wastewater.
- D.** Except as allowed under the Standard Provisions for NPDES permits (hereinafter Standard Provisions), included as Attachment D, the bypass or overflow of untreated wastewater or wastes to the Coachella Valley Storm Water Channel is prohibited.
- E.** 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.
- F.** The discharge shall not cause degradation of any water supply.
- G.** The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Section 13050, subdivisions (l) and (m), respectively, of the CWC.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached Monitoring and Reporting Program:

Table 6. Summary of Final Effluent Limitations - Aeration Lagoon Treatment System Discharge Point No. 001 at Monitoring Location EFF-001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	7.0	--	--	--	--
CBOD 5-day 20°C	mg/L	40	60	--	--	--
	lbs/day	2,300	3,500	--	--	--
Total Suspended Solids	mg/L	95	--	--	--	--
	lbs/day	5,500	--	--	--	--
Removal Efficiency for CBOD	%	65	--	--	--	--

- b. Upon the commencement of discharges through the activated sludge treatment system, the discharge of treated wastewater from the activated sludge treatment system shall be in compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-002 as described in the attached Monitoring and Reporting Program:

Table 7. Summary of Final Effluent Limitations – Activated Sludge Treatment System Discharge Point No. 001 at Monitoring Location EFF-002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	2.9	--	--	--	--
CBOD 5-day 20°C	mg/L	25	40	--	--	--
	lbs/day	600	970	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day	730	1,100	--	--	--
Removal Efficiency for CBOD and TSS	%	85	--	--	--	--

- c. The Discharger shall comply with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Locations EFF-003 and EFF-004 as described in the attached Monitoring and Reporting Program:

Table 8. Summary of Final Effluent Limitations – Combined Flow for all Treatment Systems, Discharge Point No. 001, Monitoring Locations EFF-003 and EFF-004

Parameters	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Selenium	µg/L	4.5	--	6.7	--	--
	lbs/day ¹	0.26	--	0.39	--	--
	lbs/day ²	0.37	--	0.55	--	--
Cyanide ³	µg/L	4.4	--	8.2	--	--
	lbs/day ¹	0.26	--	0.48	--	--
	lbs/day ²	0.36	--	0.68	--	--
Chlorine Residual	mg/L	0.01	--	--	--	0.02
	lbs/day ¹	0.58	--	--	--	1.2
	lbs/day ²	0.83	--	--	--	1.7
pH	s.u.	--	--	--	6.0	9.0

¹ The mass-based effluent limitations are based on a design capacity of 7 MGD.

² The mass-based effluent limitations are based on a design capacity of 9.9 MGD and are only applicable after the commencement of discharges through the activated sludge treatment system.

³ These effluent limitations are applicable after May 18, 2010. The interim limitations described in Section IV.A.2 are applicable from May 16, 2007 through May 18, 2010. Compliance shall be determined by measuring free cyanide.

- d. **Toxicity:** 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.C 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.
- e. **Escherichia Coli:** Wastewater effluent discharged to the Coachella Valley Storm Water Channel 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.
- f. **Total Dissolved Solids:** Discharges of wastes or wastewater shall not increase the total dissolved solids content of receiving waters, unless it can be demonstrated to the satisfaction of the Regional Water Board that such an increase in total dissolved solids does not adversely affect beneficial uses of receiving waters.

2. Interim Effluent Limitations

- a. During the period beginning May 16, 2007, and ending on May 18, 2010, the Discharger shall maintain compliance with the following limitations at Discharge Point No. 001 with compliance measured at Monitoring Locations EFF-003, as described in the attached Monitoring and Reporting Program. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for cyanide during the time period indicated in this provision.

Table 9. Summary of Interim Effluent Limitations – Combined Flow for all Treatment Systems, Discharge Point No. 001, Monitoring Locations EFF-003

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Cyanide (interim) ¹	µg/L	11	20
	lbs/day ²	0.64	1.2
	lbs/day ³	0.91	1.7

¹ Compliance shall be determined by measuring free cyanide.

² The mass-based effluent limitations are based on a design capacity of 7 MGD.

³ The mass-based effluent limitations are based on a design capacity of 9.9 MGD and are only applicable after the commencement of discharges through the activated sludge treatment system.

B. Land Discharge Specifications

[Not Applicable]

C. Reclamation Specifications

[Not Applicable]

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

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:

1. Depress the concentration of dissolved oxygen 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.
2. 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.
3. Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affect beneficial uses.
4. Discoloration in the receiving water that adversely affects beneficial uses.
5. Waters shall not contain bio-stimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
6. Increase turbidity that results in adversely affecting beneficial uses.
7. The normal ambient pH to fall below 6.0 or exceed 9.0 units.
8. 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.
9. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
10. No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
11. 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.
12. Taste or odor-producing substances that adversely affect beneficial uses.
13. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303 or amendments thereto, the Regional Water Board will revise and modify this Permit in accordance with such more stringent standards.

14. The concentration of total dissolved solids in the Coachella Valley Storm Water Channel to exceed an annual average concentration of 2,000 mg/L or an instantaneous maximum concentration of 2,500 mg/L.

B. Groundwater Limitations

1. 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 POTW 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 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 WDRs; or denial of a permit renewal application.
 - c. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order, and shall maintain a copy of this 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 26, Division 3, Title 23 of the California Code of Regulations (CCRs). The Discharger shall ensure that all operating personnel are familiar with the contents of this Order.
 - e. The Discharger shall immediately notify the Regional Water Board by phone at (760) 346-7491 and the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the environment 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. During non-business hours, the Discharger shall leave a voice message on the Regional Water Board's 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 Water Board in accordance with the above time limits.

- f. The Discharger shall provide a report to the Regional Water Board upon determining that the treatment plant's monthly average flow rate for any month exceeds 80 percent of the design treatment capacity. 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 Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water 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 Water 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 Order does not authorize violation of any federal, state, or local laws or regulations.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP requirements and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

- a. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant identified by special conditions included in this Order. These special conditions may include, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- b. The Discharger shall submit data sufficient to determine if a WQBEL 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 Water Board for use in the analysis. The permit shall be reopened to establish WQBELs, if necessary.
- c. This Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for an Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any 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 Water Board or the Regional Water Board, including revisions to the Basin Plan.

- d. 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 a comment period are mandatory for these actions.
- e. This Order may be reopened and the Whole Effluent Toxicity (WET) Testing Requirements, contained in Section V of the MRP, may be modified to address changes to USEPA or State Water Board policies or guidance regarding the testing or reporting requirements for WET testing.
- f. TMDLs for bacterial indicators, nutrients, salt, and selenium are to be developed by the Regional Water Board. The permit may be reopened and modified to include appropriate requirements necessary to fully implement the approved TMDL, if needed.
- g. The Discharger has submitted for approval to the Regional Water Board and USEPA a biological assessment of the Coachella Valley Storm Channel in the vicinity of their discharge. USEPA reviewed the biological assessment and approved the application of water quality criteria for the protection of freshwater aquatic life on February 6, 2006. This assessment has determined that the applicable reach of the Coachella Valley Storm Channel is characterized as freshwater; therefore, water quality criteria for the protection of freshwater aquatic life are applicable. USEPA will be responding to comments on the freshwater biological assessment. If the freshwater biological assessment is not adopted, this Order may be reopened and interim and final effluent limitations for SIP priority pollutants may be incorporated as necessary. In addition, the development of a Pollutant Minimization Program will be required.
- h. The Discharger's Infeasibility Report proposed development of site-specific objectives for cyanide. This Order may be reopened to revise water quality-based effluent limitations pending development of site-specific objectives for cyanide.
- i. The Discharger requested in its May 25, 2005 comment letter permission from the Regional Water Board to develop a comprehensive mixing zone and dilution credit study to apply towards the Basin Plan's chronic toxicity objective for aquatic life. The Regional Water Board may grant approval of a mixing zone and dilution credit study in accordance with the provisions of the SIP. Upon the Regional Water Board's approval of a mixing zone and dilution credit study, the Order may be reopened to revise priority pollutant and chronic toxicity based effluent limitations.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Toxicity Identification Evaluations or Toxicity Reduction Evaluations.** The Discharger shall submit to the Regional Water Board a toxicity reduction evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this Order. This plan shall describe the steps the Discharger 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.** Should the Discharger request to use a translator for metals and selenium different than the USEPA conversion factor, it shall complete a translator study within 2 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 USEPA conversion factor-based water quality standard as specified in the CTR shall be effective as a default standard.
- c. **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 its discharge. This report shall be submitted to the Regional Water 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:
 - i. 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.
 - ii. Demonstration by the applicant must include information on the following factors relating to the potential discharge:
 - 1) Description of the municipal entity and facilities.
 - 2) Description of the quantity and salinity of various waste streams into the collection system and contributing to total dissolved solids (TDS) of the discharge.
 - 3) Description of significant salt sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.
 - 4) Description of water rights, including diversions and consumptive use quantities.
 - 5) Description of the wastewater discharge, receiving waters, quantity, salt load, and salinity.
 - 6) Alternative plans for minimizing salt contribution from the various sources affecting the TDS of the 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.
 - 7) Such other information pertinent to demonstration of non-practicability as the permitting authority may deem necessary.

- iii. In determining what permit conditions shall be required, the permit issuing authority shall consider the following criteria including, but not limited to:
 - 1) The practicability of achieving the 400 mg/L incremental increase.
 - 2) 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; including justification that it would not affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Following review of the report, this permit may be re-opened to establish an appropriate TDS effluent limit.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

In accordance with Section 2.4.5 of the SIP the Discharger shall conduct a Pollutant Minimization Program when there is evidence that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than reported ML; or
- ii. 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.

4. Construction, Operation and Maintenance Specifications

a. Aeration Lagoons

- i. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all aeration lagoons.
- ii. Aeration lagoons 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.
- iii. The aeration lagoons shall be maintained so they will be kept in aerobic conditions.
- iv. 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.
- v. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. 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.

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 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 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 Water Board upon demand.
- ii. Temporary power shall be provided to maintain the plant in operation in the event of commercial power failure.
- iii. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the wastewater disposal facilities.

c. Spill Response Plan

The Discharger shall review its current Spill Response Plan (SRP) developed under previous Order No. 00-014 and revise it if needed within 60 days after the effective date of this Order. Revised plans shall be submitted for Regional Water Board staff review. Thereafter, the plan shall be updated annually, and shall be available for staff review during Regional Water 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. Anti-degradation 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 changes 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 Water Board's anti-degradation 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 activated sludge treatment plant, 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 will identify 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 of a new or reconstructed wastewater treatment unit during a defined period of adjusting or testing not to exceed 90 days.

5. 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 Water Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste materials using an alternative method than that described in the Findings of the Order.
- 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 MRP of this 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 MRP of this Order and as required by Part 503. The results of the analyses should be submitted to the Regional Water Board as part of the MRP.
- iii. All sludge generated at the wastewater treatment plant will be disposed, treated, or applied to land in accordance with Part 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 in title 27 of the CCRs and that is approved by the Regional Water Board's Executive Officer.

b. Pretreatment

- i. In the event that (i) the facility has a treatment capacity greater than 5 MGD and Industrial Users [40 CFR § 403.3(h)] are discharging pollutants which Pass Through [40 C.F.R. § 403.3(n)] or Interfere [40 CFR § 403.3(i)] with the operation of the wastewater treatment facility or are otherwise subject to National Pretreatment Standards [40 CFR § 403.3(j)], (ii), Section 2233 of title 23 of the CCRs requires the facility to have and enforce an adequate pretreatment program, or (iii) the Regional Water Board or its Executive Officer determines that other circumstances warrant in order to prevent Interference with the wastewater treatment facility or Pass Through, then:
 - 1) The Discharger shall be responsible for compliance with all pretreatment requirements contained in CWA Part 403, and shall be subject to enforcement actions, penalties, and other remedies by the USEPA, or the Regional Water Board, as provided in the CWA, as amended (33 USC 1251 et. seq.) (hereafter "Act").

- 2) Within 365 days of the significant industrial wastewaters being discharged to the wastewater treatment plant, the Discharger shall seek a formal approval of its Pretreatment Plan from the Regional Water Board.
- 3) The Discharger must seek approval of its Pretreatment Program from the Regional Water Board subject to Provision VI.C.1.d of this Order in the event a Pretreatment Program is developed.

c. Collection System

- i. The State Water Board adopted Statewide General WDRs for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (Sanitary Sewer Order) on May 2, 2006. The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems that comprise of more than one mile of pipes or sewer lines which convey wastewater to a publicly owned treatment facility to develop and implement a sewer system management plan and report all sanitary sewer overflows (SSOs) to the State Water Board's online SSO database. The Discharger submitted a Notice of Intent and application fees to the State Water Board to obtain enrollment under the General WDRs and was granted enrollment under the General WDRs by the State Water Board on December 6, 2006. The Discharger shall comply with the General WDRs and shall properly operate and maintain its collection system, report any non-compliance, and mitigate any discharge from the collection system that are in violation of the General WDRs.

6. Other Special Provisions

- a. The Discharger may be required to submit technical reports as directed by the Regional Water Board's Executive Officer.
- b. 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.
- c. The Discharger shall provide written certification that the expansion through addition of the activated sludge treatment system has been completed and the total design capacity of the wastewater treatment plant has increased to 9.9 MGD. Upon written acceptance of the certification by the Regional Water Board's Executive Officer, the alternate effluent limitations for the activated sludge treatment plant treatment system shall be effective.

7. Compliance Schedules

- a. **Compliance Plan.** The Discharger shall implement its compliance plan provided with its Infeasibility Report submitted on February 22, 2005. That identified the measures that will be taken to achieve compliance with the permit limitations specified in Effluent Limitations, section IV.A.1.c. 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 achieve compliance with the limitations in this Order by the deadline specified in section IV.A.1.c of this Order. The Regional Water Board shall receive the first annual progress report at the same time the annual summary report is due, as required in section X.B.3 of the MRP (Attachment E).

VII. COMPLIANCE DETERMINATION

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

A. General.

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

B. Multiple Sample Data.

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

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

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, although 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). 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. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, although the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. 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. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one-calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge (or when applicable, the median determined by subsection B above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, this will represent a single violation, although the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

F. Instantaneous Minimum Effluent Limitation.

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

G. Instantaneous Maximum Effluent Limitation.

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

H. Acute and Chronic Narrative Effluent Limitations.

Compliance with whole effluent toxicity (WET) limitations established in the Order shall be determined in accordance with Section III.B of the State Water Board's Water Quality Enforcement Policy.

ATTACHMENT A – DEFINITIONS

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

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

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

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

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

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

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

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.

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

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

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA

guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

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

Estuaries mean waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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

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

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

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

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

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the CFR, Part 136, Attachment B, revised as of July 3, 1999.

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

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

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

Ocean Waters are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

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

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code Section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

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

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

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

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

where:

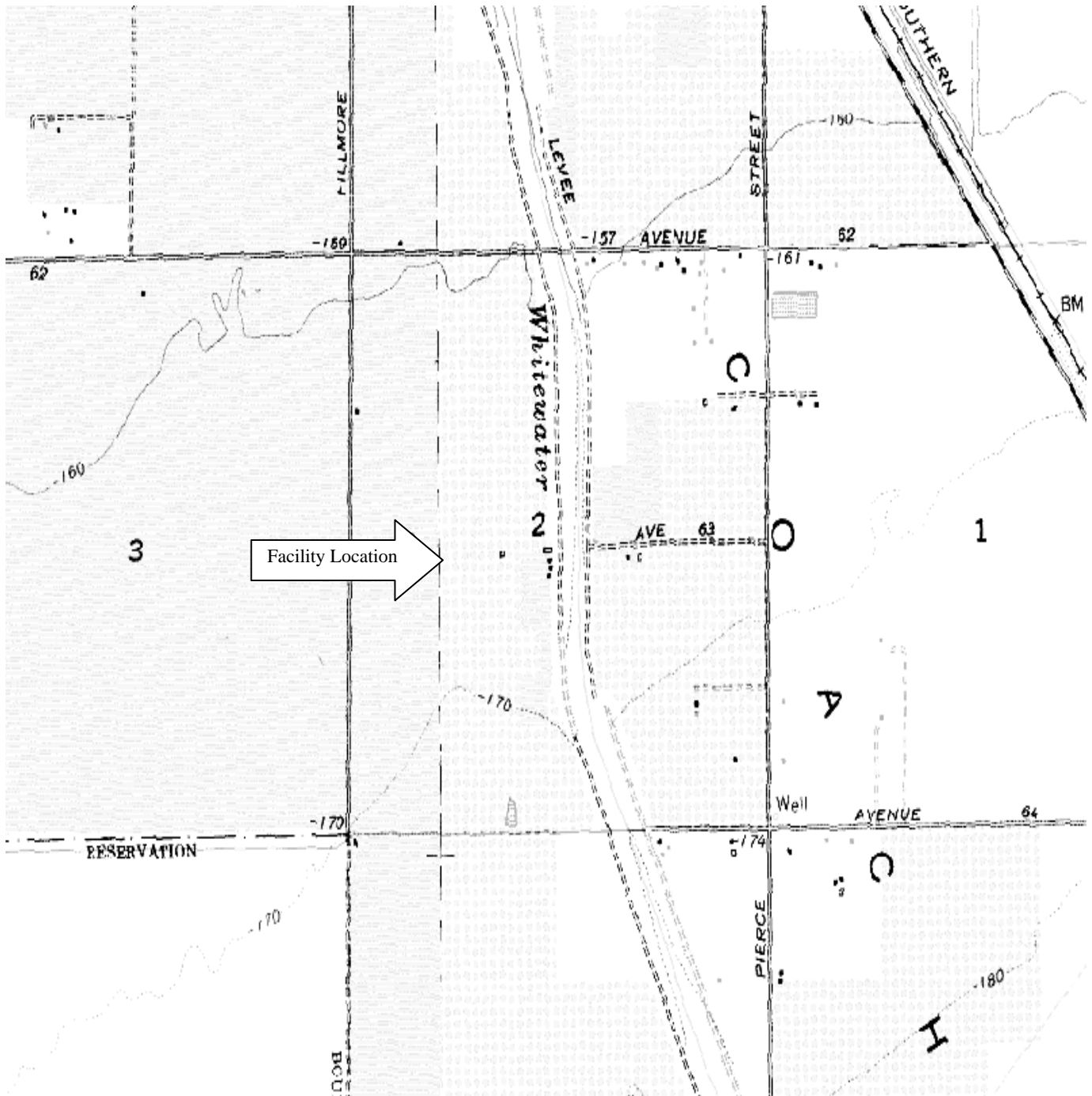
x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

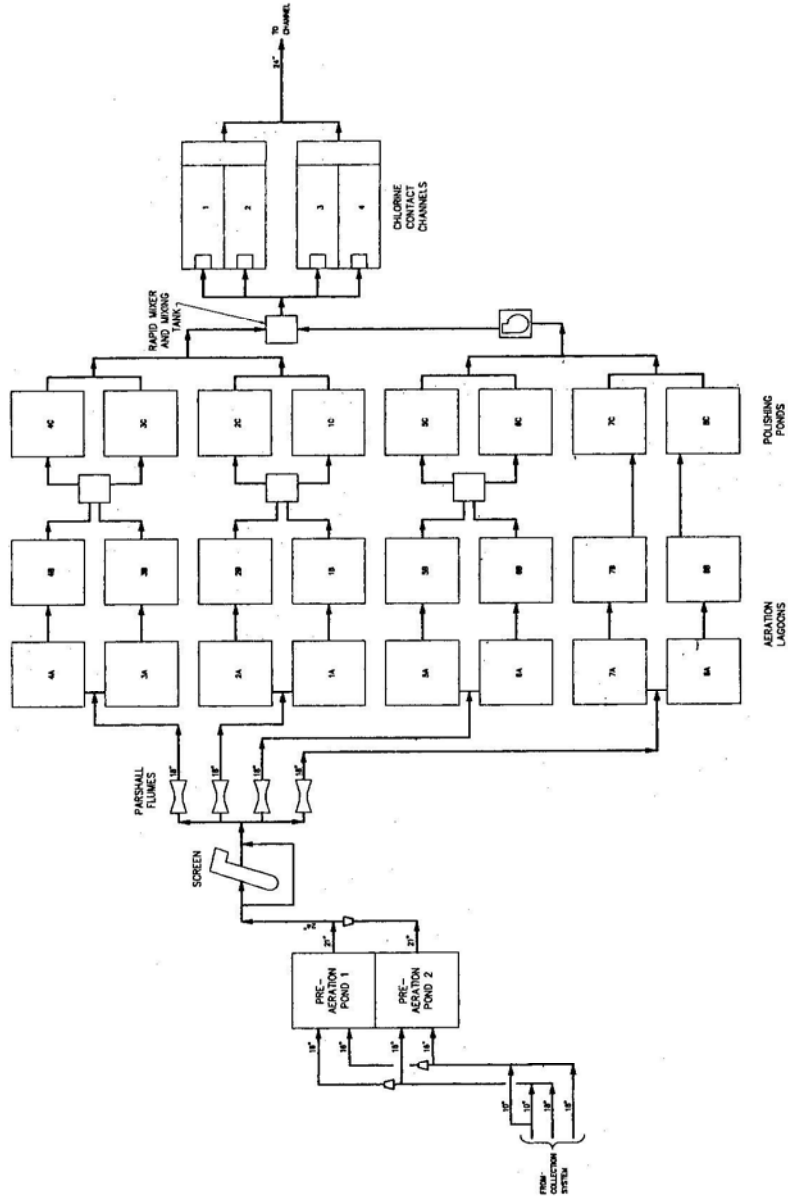
Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps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

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC

I. Flow Schematic of the Aerated Lagoon Treatment System



ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States 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); Wat. Code, § 13383):

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)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR § 122.41(i)(4).)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(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)(i)(B)); and
- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR § 122.41(l)(3); § 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 Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 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 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, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, 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, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental

matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board 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 Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(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 State Water Board 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 Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in Section 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 that are not subject to effluent limitations in this Order. (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 State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR § 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, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR § 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).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR § 122.42(b)(3).)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The CFR Section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) 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 Water 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," USEPA, 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 Water 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 MRP.
- F. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter to the Regional Water Board indicating that there has been no activity during the required reporting period.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Wastewater influent to the treatment facilities
001	EFF-001	Effluent wastewater from the aeration lagoon treatment system
001	EFF-002	Effluent wastewater from the activated sludge treatment system
001	EFF-003	Representative sample from the total combined effluent wastewater prior to discharge from Discharge Point 001; 33 °, 35', 28" N Latitude and 116 °, 07', 17" W Longitude, (located at the end of the chlorine contact channel)
001	EFF-004	Representative sample from the total combined effluent wastewater prior to discharge from Discharge Point 001, at the end of the discharge pipe in the Coachella Valley Storm Water Channel (composite sampler)
--	RSW-001	Not to exceed 200 feet upstream from the point of discharge
--	RSW-002	Not to exceed 200 feet downstream of the discharge pipe outlet at a point where the plume would be expected.
--	SLD-001	Sludge removed for disposal

The monitoring location for the combined effluent (EFF-003), located at the end of the chlorine contact channel, and the monitoring location at the end of the discharge pipe (EFF-004) may both be used for representative monitoring of the aerated lagoon treatment facility (EFF-001), prior to the completion of the plant expansion, and for the combined effluent once the 2.9 MGD activated sludge plant becomes operational. There are no treatment processes located between the monitoring location at the end of the chlorine contact channel and the monitoring location at the end of the discharge pipe. The composite sampler located at the end of the discharge pipe (EFF-004) is located in the Coachella Valley Storm Water Channel and is vulnerable to rare flooding events. Monitoring Location EFF-003 is used when EFF-004 is inaccessible due to flooding.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

- 1. The Discharger shall monitor influent to the treatment facility at INF-001 as follows:

Table E-2. Influent Monitoring at INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Metered ¹	Continuous	²
CBOD 5-day 20 °C	mg/L	24-Hr Composite	1x/Week	²
Total Suspended Solids	mg/L	24-Hr Composite	1x/Week	²

¹ Flows for INF-001 shall be calculated by combining the measured daily influent flows entering the aeration lagoon treatment system and the activated sludge treatment system.

² Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 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.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations EFF-001 and EFF-002

1. The Discharger shall monitor effluent wastewater at EFF-001 and EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-3. Effluent Monitoring at EFF-001 and EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	MGD	Metered ¹	Continuous	²
Total Suspended Solids	mg/L	24-Hr Composite ³	2x/Week	²
	lbs/day	Calculated	2x/Week	²
CBOD 5-day 20 °C	mg/L	24-Hr Composite ³	1x/Week	²
	lbs/day	Calculated	1x/Week	²

¹ Daily effluent flows for the aeration lagoon treatment system (EFF-001) shall be calculated by subtracting the sum of measured daily influent flows for the activated sludge treatment system (INF-001) and activated sludge treatment system return water from the total combined daily effluent flow measured at the chlorine contact channel (EFF-003). Daily effluent flows for the activated sludge treatment system (EFF-002) shall be equal to the measured daily influent flow for the activated sludge treatment system (INF-001).

² Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 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.

³ 24-hour composite samples collected from the modules 1-2 effluent pipe and modules 3-4 effluent pipe will be flow weighted and combined prior to analysis.

B. Monitoring Locations EFF-003 and EFF-004

1. The Discharger shall monitor the combined effluent from monitoring location EFF-003 or monitoring location EFF-004 as follows:

Table E-4. Effluent Monitoring at EFF-003 and EFF-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	MGD	Metered ¹	Continuous	²
Chlorine Residual ³	mg/L	Continuous	Continuous	²
	lbs/day	Calculated		
Dissolved Oxygen ⁴	mg/L	Grab	1x/Week	²
pH	pH Units	Grab	1x/Day ⁵	²
Temperature	°F	Grab	1x/Day ⁵	²
Escherichia Coli (E. Coli)	MPN/100 ml	Grab	2x/Week	²
Ammonia Nitrogen as Nitrogen (N)	mg/L	24-Hr Composite	1x/Month	²
Cyanide ⁶	µg/L	Grab	1x/Month	²
	lbs/day	Calculated		
Hardness (CaCO ₃)	mg/L	Grab	1x/Month	²
Nitrates as N	mg/L	24-Hr Composite	1x/Month	²
Selenium	µg/L	Grab	1x/Month	²
	lbs/day	Calculated		
Total Dissolved Solids	mg/L	24-Hr Composite	1x/Month	²
	lbs/day	Calculated		
Total Nitrogen as N	mg/L	24-Hr Composite	1x/Month	²
Total Phosphate as Phosphorus	mg/L	24-Hr Composite	1x/Month	²
Turbidity ⁴	NTU	Grab	1x/Month	²
Chloride	mg/L	24-Hr Composite	1x/Quarter	²
Sulfates	mg/L	24-Hr Composite	1x/Quarter	²
Volatile Organic Compounds ⁷	µg/L	Grab	1x/Quarter	²
Oil and Grease ⁴	mg/L	Grab	1x/Year	²
Priority Pollutants ^{4, 8}	µg/L	Grab	1x/Year	²

¹ Total combined daily effluent flow from the aeration lagoon and activated sludge treatment systems measured at the end of the chlorine contact channel.

² Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 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.

³ The Discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present.

⁴ These parameters shall be monitored at monitoring site EFF-004. When monitoring site EFF-004 is not accessible due to flooding, these parameters may be monitored at monitoring site EFF-003.

⁵ A minimum of five daily samples per week shall be collected.

⁶ Concentrations shall be analyzed and reported as Free Cyanide.

⁷ Including acrolein; acrylonitrile; benzene; bromoform; carbon tetrachloride; chlorobenzene; chlorodibromomethane; chloroethane; 2-chloroethylvinylether; chloroform; 1,2-dichlorobenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; dichlorobromomethane; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethene; 1,1-dichloroethylene; 1,2-

dichloropropane; 1,3-dichloropropene; ethylbenzene; methyl bromide; methyl chloride; methylene chloride; 1,1,2,2-tetrachloroethane; tetrachloroethene; toluene, 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; and vinyl chloride.

⁸ Priority Pollutants as defined by the California Toxics Rule as specified in 40 CFR §131.38 and discussed in Section IV.C.1.b of Attachment F.

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 Water 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 Water 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 total combined effluent measured at monitoring location EFF-004 as follows (when monitoring site EFF-004 is not accessible due to flooding, chronic and acute toxicity testing shall be measured at monitoring location EFF-003):

Table E-5. Whole Effluent Toxicity Testing

Test	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity	TU _c ¹	24-hr Composite	1x/Quarter
Acute Toxicity	TU _a ^{2,3,4}	24-hr. Composite	1x/Quarter

¹ Chronic toxicity units

² Acute toxicity units

³ Acute Bioassay results can be calculated from chronic bioassay test for *Pimephales promelas*

⁴ 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:

Table E-6. Approved Test for Acute and Chronic Toxicity

Species	Effect	Test Duration (days)	Reference
Fathead Minnow (<i>Pimephales promelas</i>)	Larval Survival and Growth	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 ¹ (Acute)
Water Flea (<i>Ceriodaphnia dubia</i>)	Survival and Reproduction	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 (Acute)

¹ Acute bioassay results can be calculated from chronic bioassay test for *Pimephales promelas*

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).
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 retesting period begins when the Discharger receives the test results that indicate retesting is needed or 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 (PMSD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

C. Accelerated Monitoring Requirements

When the numeric toxicity trigger is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.

The Discharger shall implement an accelerated monitoring frequency consisting of performing three (3) toxicity tests in a nine (9)-week period beginning from the date the Discharger receives 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 median (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.

The scope of accelerated monitoring shall be limited to the species and analytical method that failed the test.

The numeric toxicity triggers are not an effluent limitation, they are the toxicity threshold at which the Discharger is required to perform accelerated monitoring to confirm effluent toxicity, as well as, the threshold to initiate a toxicity reduction evaluation (TRE) if toxicity is confirmed.

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:
 - a. Two of the three accelerated chronic toxicity tests are reported as failed tests meeting any of the conditions specified in section V.C of this MRP; or
 - b. Two of the three acute toxicity tests are reported as failed tests meeting any of the conditions specified in section V.C of this MRP.
 - c. The TIE shall be initiated within 15 working 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 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 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 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]

VII. RECLAMATION MONITORING REQUIREMENTS

[Not Applicable]

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Location RSW-001

1. The Discharger shall monitor the Coachella Valley Storm Water Channel as specified in Table E-7a. In the event that no receiving water is present at station RSW-001, no receiving water monitoring data is required for station RSW-001:

Table E-7a. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen as Nitrogen (N)	mg/L	Grab	1x/Month	1
Dissolved Oxygen	mg/L	Grab	1x/Month	1
Escherichia Coli (E. Coli)	MPN/100 ml	Grab	1x/Month	1
Hardness	mg/L	Grab	1x/Month	1
Nitrates as N	mg/L	Grab	1x/Month	1
pH	s.u.	Grab	1x/Month	1
Temperature	°F	Grab	1x/Month	1
Total Chlorine Residual	mg/L	Grab	1x/Month	1
Total Nitrogen as N	mg/L	Grab	1x/Month	1
Total Phosphate as Phosphorus	mg/L	Grab	1x/Month	1
Turbidity	NTU	Grab	1x/Month	1
Priority Pollutants ²	µg/L	Grab	1x/Year	1

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

² Priority Pollutants as defined by the California Toxics Rule as specified in 40 CFR §131.38 and discussed in Section IV.C.1.b of Attachment F.

B. Monitoring Location RSW-002

1. The Discharger shall monitor the Coachella Valley Storm Channel as follows. In the event that no receiving water is present at station RSW-002, no receiving water monitoring data is required for station RSW-002:

Table E-7b. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen as Nitrogen (N)	mg/L	Grab	1x/Month	1
Dissolved Oxygen	mg/L	Grab	1x/Month	1
Escherichia Coli (E. Coli)	MPN/100 ml	Grab	1x/Month	1
Hardness	mg/L	Grab	1x/Month	1
Nitrates as N	mg/L	Grab	1x/Month	1
pH	s.u.	Grab	1x/Month	1
Temperature	°F	Grab	1x/Month	1
Total Chlorine Residual	mg/L	Grab	1x/Month	1
Total Nitrogen as N	mg/L	Grab	1x/Month	1
Total Phosphate as Phosphorus	mg/L	Grab	1x/Month	1
Turbidity	NTU	Grab	Monthly	1

¹ Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 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. 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 RSW-001 and RSW-002. In the event that no receiving water is present at station RSW-001, no receiving water monitoring data is required for station RSW-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; and
 - f. Potential nuisance conditions.

IX. OTHER MONITORING REQUIREMENTS

A. Water Supply Monitoring

The Discharger is required to obtain or acquire annual total dissolved solids concentrations of the source water, either through monitoring or obtaining the data from the drinking water purveyor. This information will be compiled and summarized in a report, in accordance with Provision VI.C.2.c of the Order.

B. Monitoring Location SLD-001 Sludge Monitoring

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

Table E-8. Sludge Monitoring for Monitoring Location SLD-001

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Reporting Level, units), respectively
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.

2. The Discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the wastewater treatment plant facility.

C. Pretreatment Monitoring – Not Applicable

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 section V, “Whole Effluent Toxicity Testing Requirements”.
3. The results of any analysis taken, more frequently than required using analytical methods, monitoring procedures and performed at the locations specified in this Monitoring and Reporting Program shall be reported to the Regional Water 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 (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-9. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Starts On...	Monitoring Period	Reporting Due with SMR on...
Continuous	May 17, 2007	All	First day of second month following month of sampling
1x/Day	May 17, 2007	Calendar day (Midnight through 11:59 PM)	First day of second month following month of sampling
1x/Week	May 20, 2007	Sunday through Saturday	First day of second month following month of sampling
2x/Week	May 20, 2007	Sunday through Saturday	First day of second month following month of sampling
1x/Month	June 1, 2007	1 st day of calendar month through last day of calendar month	First day of second month following month of sampling
1x/Quarter	July 1, 2007	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
1x/Year	May 17, 2007	January 1 through December 31	February 1

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

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

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

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

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 SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMRs and one copy of the DMRs to the address listed below:

Standard Mail	FedEx/UPS/ Other Private Carriers
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMRs forms (EPA Form 3320-1). Forms that are self-generated cannot be accepted unless they follow the exact same format as EPA form 3320-1. Forms that are self-generated or modified cannot be accepted.

D. Other Reports

1. The Discharger shall report the results of any special studies, compliance reports, acute and chronic toxicity testing, TRE/TIE, and Pollution Prevention Plan required under the Special Provisions – VI.C of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date, or February 1 for annual reports, in compliance with SMR reporting requirements described in subsection X.B.5 above.
2. Operations and Maintenance Report

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 and mechanical equipment shall be performed in a timely manner and documented.	1x/Year
The amount of chemical used (i.e., chlorine, sulfur dioxide, etc.,) shall be monitored daily and reported monthly. Measured in pounds per day.	1x/Month

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	7A 33 0105 091
Discharger	Coachella Valley Water District
Name of Facility	Mid-Valley Water Reclamation Plant No. 4
Facility Address	63-002 Fillmore Street
	Thermal, CA 92274
	Riverside County
Facility Contact, Title and Phone	Steve Robbins, General Manager-Chief Engineer, (760) 398-2651
Authorized Person to Sign and Submit Reports	Steve Robbins, General Manager-Chief Engineer, (760) 398-2651 Mark Beuhler, Assistant General Manager, (760) 398-2651 Dan Parks, Assistant to the General Manager, (760) 398-2651 Mark Johnson, Director of Engineering, (760) 398-2651 Patti Reyes, Assistant Director of Engineering, (760) 398-2651
Mailing Address	P.O. Box 1058 Coachella, CA 92236
Billing Address	Same As Mailing Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	User Onsite
Facility Permitted Flow	7.0 MGD, and up to 9.9 MGD following expansion
Facility Design Flow	7.0 MGD, and up to 9.9 MGD following expansion
Watershed	Coachella Subunit of the Whitewater Hydrologic Unit
Receiving Water	Coachella Valley Storm Water Channel
Receiving Water Type	Inland Surface Water

A. Coachella Valley Water District (hereinafter Discharger) is the owner and operator of the Mid-Valley Water Reclamation Plant No. 4, a wastewater treatment plant (hereinafter Facility).

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

- B. The Facility discharges wastewater to Coachella Valley Storm Water Channel, a water or waters of the United States, and is currently regulated by Order No. 00-014 which was adopted on May 10, 2000 and expired on May 10, 2005 but was administratively extended upon receipt of the completed ROWD.
- C. The Discharger filed a ROWD and submitted an application for renewal of its WDRs and National Pollutant Discharge Elimination System (NPDES) permit on November 11, 2004. A site visit was conducted on March 2, 2006 to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Coachella Valley Water District owns the wastewater collection, treatment and disposal system (hereinafter referred to as facility) and provides sewerage service to a population of approximately 29,000 located in the City of La Quinta and surrounding areas. The wastewater treatment plant has a treatment capacity of 7.0 million gallons-per-day (MGD) and is located in Sections 2 and 11, T7S, R8E, SBB&M.

A. Description of Wastewater and Biosolids Treatment or Controls

The treatment system consists of a headworks system that includes two pre-aeration ponds, an automatic bar screen, trough, washer-compactor, and headworks building equipped with an air scrubber. Flow from the headworks is distributed to four treatment modules, each comprised of four lined aerated lagoons and two lined polishing ponds (for a total of 16 aeration lagoons and 8 polishing ponds). All ponds are lined with a synthetic membrane liner. Effluent from each module is combined, chlorinated in the chlorine contact basin inlet box followed by a chlorine contact basin, and dechlorinated. Prior to discharge through Discharge Point No. 001, effluent is chlorinated and dechlorinated by using a chemical induction unit which employs a vacuum and gas system capable of dispersing the chlorine and sulfur dioxide gas with an airfoil-design propeller. Wastewater is discharged from Discharge Point No. 001 (see table on cover) to the Coachella Valley Storm Water Channel, a water of the United States. A schematic of the aerated lagoon treatment system is provided in Section I. of Attachment C.

At the time Order No. R7-2007-0001 was drafted, the Facility was constructing an activated sludge treatment system to run parallel with the pond system at the facility. The expansion project is expected to increase treatment capacity by 2.9 MGD. See section E, planned changes, for facility expansion information. A schematic of the activated sludge treatment system expansion is provided in Section II of Attachment C.

The Discharger owns and operates the wastewater collection system, which provides conveyance of raw wastewater to the treatment facility. The collection system for the facility is a separate sanitary sewer system. In the event that the Discharger’s private contractor is unable to provide service for secondary sludge removal and disposal from the Discharger’s other facility, Palm Desert Reclamation Plant No. 10, the Discharger may, in the interim, transport secondary sludge to Mid Valley Water Reclamation Plant No. 4 as a contingency plan for temporary storage.

The Discharger reported in their ROWD that 500 dry metric tons of sewage sludge is generated on-site per year. The Discharger stockpiles the sludge to dry it to at least 90 percent solids. Sludge from the Facility is hauled away to a landfill for disposal or to a composting facility.

B. Discharge Points and Receiving Waters

1. The final effluent is discharged to the Coachella Valley Storm Water Channel at Latitude 33°, 35', 28" N and Longitude 116°, 07', 17" W. The Coachella Valley Storm Water Channel is a tributary to the Salton Sea. The previous permitted maximum daily flow limitation is equal to the design capacity of the wastewater treatment plant as 7.0 MGD.
2. The discharge consists of equivalent to secondary treated domestic wastewater.

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

1. Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 (Monitoring Location No. 001) and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From May 2000 – To May 2006)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
20 °C CBOD	mg/L	40	60	--	13.0	19.3	--
Percent Removal, CBOD	Percent	65	--	--	89.9 - 98.6 ¹	--	--
Total Suspended Solids	mg/L	95	--	--	43.9	--	67.7
Percent Removal, TSS	Percent	65	--	--	84.2 - 97.8 ¹	--	--
Total Dissolved Solids	mg/L	2,000	2,500	--	--	--	746
Settleable Matter	ml/L	0.3	0.5	--	<0.1 ²	<0.1 ²	--
pH	s.u.	6.0 – 9.0 ³			6.0 – 7.6 ⁴		
Flow	MGD	--	--	7.0	6.11	--	7.03
Fecal coliform	MPN/100 mL	⁵	--	⁵	28	--	300
Total Chlorine Residual	mg/L	0.01	--	0.02	ND	ND	ND
Acute Toxicity	% survival	--	--	⁶	--	--	⁷

ND = Not Detected

¹ Range of reported values

² All values were reported below detection limit of 0.1 ml/L.

³ pH values are instantaneous minimum and maximum.

⁴ This represents the range of reported values of pH.

⁵ Fecal Coliform concentrations shall not exceed a log mean of Most Probable Number (MPN) of 200 MPN/ 100 mL (based on a minimum of not less than five samples for any 30-day period) nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 mL.

⁶ Acute toxicity is defined as 90 percent survival, 50 percent of the time, and less than 70 percent survival, 10 percent of the time, of standard test organisms in undiluted effluent in a 96-hour static or continuous-flow test.

⁷ The Discharger reported a minimum percent survival rate of 50 percent with the species *C. Dubia*.

2. The ROWD described the existing discharge as follows:

Annual Average Effluent Flow – 4.09 MGD
Maximum Daily Effluent Flow – 4.84 MGD
Average Daily Effluent Flow – 4.14 MGD

3. The ROWD described the effluent characteristics as follows:

Table F-3. Effluent Characteristics

Constituent	Units	Maximum Daily	Average Daily
pH Lowest	s.u.	6.8	--
pH Highest	s.u.	7.0	--
Temperature (Winter)	°F	57.0	55.0
Temperature (Summer)	°F	89.0	86.0
CBOD	mg/L	11.3	7.9
Total Suspended Solids	mg/L	36	26
Fecal Coliform	MPN/100 mL	4.00	0.00
Ammonia as Nitrogen	mg/L	2.1	1.3
Total Residual Chlorine	mg/L	0.0	0.0
Dissolved Oxygen	mg/L	6.00	5.50
Total Kjeldahl Nitrogen	mg/L	4.80	3.80
Nitrate plus Nitrite as Nitrogen	mg/L	20.00	20.00
Oil and Grease	mg/L	0.0	0.0
Phosphorus	mg/L	4.90	4.20
Total Dissolved Solids	mg/L	445.00	434.00

D. Compliance Summary

Data submitted to the Regional Water Board indicate that the Discharger has complied with the existing effluent permit limitations established in Order No. 00-014.

Data submitted to the Regional Water Board indicate an exceedance of the existing receiving water limitations as outlined in the table below:

Table F-4. Summary of Compliance History

Date	Violation Type	Pollutant	Reported Effluent Value	Reported Downstream Value	Reported Upstream Value	Permit Limitation	Units
6/2003	Receiving Water	Temperature	86	79	73	5 ¹	°F
8/2002	Receiving Water	Dissolved Oxygen	--	4.4	4.6	5.0 ²	mg/L
11/2001	Receiving Water	Dissolved Oxygen	--	4.4	5.2	5.0 ²	mg/L
10/2000	Receiving Water	Dissolved Oxygen	--	3.7	3.9	5.0 ²	mg/L

¹ The discharge shall not cause the normal ambient receiving water temperature to be altered more than 5 °F.

² The discharger shall not depress the concentration of dissolved oxygen in the receiving water below 5.0 mg/L. When dissolved oxygen in receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.

E. Planned Changes

Coachella Valley Water District plans to increase the plant treatment capacity from 7.0 MGD to 9.9 MGD, through the addition of two activated sludge basins and two secondary clarifiers. The expansion project will increase the treatment capacity of the facility by 2.9 MGD. The expansion project also consists of a blower/motor control center building, a return activated sludge (RAS)/waste activated sludge (WAS) pump station, a belt filter press building, and a standby generator. According to the renewal application, the Discharger expects to complete the plant improvements and expansion during the permit term. The proposed effluent limitations for the activated sludge treatment facility are effective upon certification that the project has been completed and is operational as required by Provision VI.C.6.c of Order No. R7-2007-0001.

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 USEPA and chapter 5.5, division 7 of the CWC (commencing with Section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, California Public Resources Code, Sections 21100 et seq.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993, 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 (includes amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Coachella Valley Storm Water Channel are as follows:

Table F-5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Coachella Valley Storm Water Channel ¹	<u>Existing:</u> Freshwater replenishment (FRSH), contact (REC1) ² and non-contact (REC2) ² water recreation, warm freshwater habitat (WARM), wildlife habitat (WILD), preservation or rare, threatened or endangered species (RARE) ³ .

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 for 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 Water Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Water Board.

Requirements of this Order implement the Basin Plan.

2. **Thermal Plan.** The Thermal Plan does not apply to the Coachella Valley Storm Water Channel.
3. **Anti-degradation Policy.** Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California’s anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the State and federal anti-degradation policies. The permitted discharge is consistent with the anti-degradation provision of Section 131.12 and State Water Board Resolution No. 68-16.
4. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR Section 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. Some effluent limitations in this Order are less stringent than those in the previous Order. Effluent limitations for fecal coliform and settleable solids have been removed, and numeric effluent limitations for total dissolved solids has been replaced by a narrative limitation. As discussed in detail in section IV.C.4 of this Fact Sheet (Attachment F), this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
5. **Emergency Planning and Community Right to Know Act.** Section 13263.6(a), CWC, requires that “the Regional Water Board shall prescribe effluent limitations as part of the WDRs of a POTW for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec. 11023) (EPCRA) indicate as discharged into the POTW, for which the State Water Board or the Regional Water Board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water

quality

objective.”

6. **Storm Water Requirements.** USEPA promulgated Federal Regulations for storm water on November 16, 1990 in 40 CFR Parts 122, 123, and 124. The NPDES Industrial Storm Water Program regulates storm water discharges from wastewater treatment facilities. Wastewater treatment plants are applicable industries under the storm water program and are obligated to comply with the Federal Regulations.
7. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (California Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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

The 2002 USEPA CWA Section 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Coachella Valley Storm Water Channel as impaired by pathogens. No TMDLs have been developed to date for the channel. In addition, the 303(d) List classifies the Salton Sea as impaired by nutrients, salt, and selenium. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel, may be affected by future TMDLs. No TMDLs have been developed to date, although a TMDL for Bacterial Indicators in the Coachella Valley Stormwater Channel is being developed. The TMDL for Bacterial Indicators in the Coachella Valley Stormwater Channel is tentatively scheduled for Regional Water Board approval on May 16, 2007. In addition, a nutrient TMDL is under development for the Salton Sea that may have adverse impacts on permitted discharges to tributaries to the Salton Sea (e.g., Coachella Valley Storm Water Channel). The Nutrient TMDL for the Salton Sea is tentatively scheduled for completion in 2009. As appropriate, the Order may need to be modified to address the requirements of these TMDLs.

E. Other Plans, Policies and Regulations

Federal regulations for storm water discharges require specific categories of facilities, which discharge storm water associated with industrial activity (storm water), to obtain 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.

The State Water Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying WDRs 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. Storm water is retained on-site by berms and grading and does not discharge from the facility.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in title 40 of the CFR: Section 122.44(a) requires that permits include applicable technology-based limitations and standards; and Section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in Section 122.44(d)(1)(vi).

Effluent and receiving water limitations in this Order are based on the federal CWA, Basin Plan, State Water Board's plans and policies, USEPA 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. USEPA NPDES Application Forms 1, 2A, and 2S dated November 11, 2004.
2. Code of Federal Regulations – Title 40
3. Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date.
4. Regional Water Board files related to Mid-Valley Water Reclamation Plant No. 4 NPDES permit CA0104973

A. Discharge Prohibitions

Effluent and receiving water limitations in this Order are based on the Federal CWA, Basin Plan, State Water Board's plans and policies, USEPA 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 Section 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 (Public Law 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, at a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

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

At the option of the NPDES permitting authority, in lieu of the parameter BOD₅ and the levels of the effluent quality specified in 40 CFR Section 133.102 paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD₅ may be substituted for BOD₅. The secondary treatment standards for CBOD₅ are 25 mg/L (monthly average), 40 mg/L (weekly average), and 85 percent removal. Consistent with the effluent limitations in the existing Order, limitations for CBOD₅ were incorporated into the permit in lieu of BOD₅ limitations.

- b. 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 BOD₅ 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 Public Law 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 Section 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 BOD₅ and TSS.

Therefore, POTWs that use waste stabilization ponds, identified in Section 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 levels of effluent quality for TSS 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 Section 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 Section 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:

- 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 BOD₅ and TSS.
- Water quality is not adversely affected by the discharge. (Section 133.101(g).)

The treatment works as a whole provides significant biological treatment such that a minimum 65 percent reduction of BOD₅ is consistently attained (30-day average).

2. Applicable Technology-Based Effluent Limitations

- The Discharger plans to increase plant capacity through the addition of an activated sludge treatment system, which will have a capacity of approximately 2.9 MGD. This facility meets the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand BOD₅, TSS, and pH as summarized in Table F-6. Therefore, the effluent from the activated sludge treatment system will be subject to effluent limitations based on secondary treatment standards. Further, mass-based effluent limitations for the activated sludge treatment system are based on a design flow rate of 2.9 MGD.
- This facility meets the technology based regulations for the minimum level of effluent quality attainable by equivalent to secondary treatment in terms of BOD₅ and pH as summarized in Table F-2. Previous Order No. 00-014 established technology-based effluent limits to meet applicable equivalent to secondary treatment standards. These effluent limitations have been carried over from the previous Order. Further, mass-based effluent limitations are based on a design flow rate of 7 MGD.
- This facility meets the technology-based regulations for the minimum level of effluent quality attainable by equivalent to secondary treatment with Alternative State Requirements in terms of BOD₅ and TSS as summarized in Table F-2 for the aeration lagoon treatment system.
- Basis for Limitations

Table F-6. Basis for Limitations

Constituents	Basis for Limitations
Carbonaceous Biochemical Oxygen Demand (CBOD)	Discharges to waters that support aquatic life and are dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down. Nitrifying bacteria consume oxygen to convert nitrogen to nitrate. CBOD limits are allowable to minimize false indications of poor facility performance as a result of nitrogenous pollutants.
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 6.0 and 9.0 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Region.
Flow	The design capacity of the treatment plant is currently 7.0 MGD. The proposed expansion of 2.9 MGD will bring the total treatment capacity to 9.9 MGD.

The technology-based effluent limitations for the discharge from the aeration lagoon treatment system through Discharge Point No. 001 at Monitoring Location EFF-001 are summarized in Table F-7 below:

Table F-7. Summary of Technology-based Effluent Limitations for Aeration Lagoon Treatment System Equivalent to Secondary Treatment Standards Discharge Point No. 001 at Monitoring Location EFF-001.

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	7.0	--	--	--	--
5-day CBOD	mg/L	40	60	--	--	--
	lbs/day ¹	2,300	3,500	--	--	--
Total Suspended Solids	mg/L	95	--	--	--	--
	lbs/day ¹	5,500	--	--	--	--
pH	s.u.	--	--	--	6.0	9.0
Removal Efficiency for BOD	%	65	--	--	--	--

¹ Mass based effluent limitations are based on a flow of 7.0 MGD

The technology-based effluent limitations for discharges from the activated sludge treatment system through Discharge Point No. 001 at Monitoring Location EFF-002 are summarized in Table F-8 below:

Table F-8. Summary of Technology-based Effluent Limitations for Activated Sludge Treatment System Secondary Treatment Standards Discharge Point No. 001 at Monitoring Location EFF-002.

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	2.9	--	--	--	--
5-day CBOD	mg/L	25	40	--	--	--
	lbs/day ¹	600	970	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day ¹	730	1,100	--	--	--
pH	s.u.	--	--	--	6.0	9.0
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

¹ Mass based effluent limitations are based on a flow of 2.9 MGD

It should be noted that the technology-based effluent limitations specified in Tables F-7 and F-8 are applicable only to the specified effluent streams from each treatment system, and are not applicable to the combined effluent stream.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

- 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 Water Boards are required to issue WDRs for discharges that could affect the quality of the State's waters. Furthermore, 40 CFR Section 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States.
- b. The USEPA published the adopted California Toxics Rule (CTR) (Section 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-9 summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the effluent or receiving water. The hardness value used to conduct the Reasonable Potential Analysis was 292 mg/L, as reported for RSW-001 during the July 2005 self-monitoring period. The Regional Water Board evaluated the minimum hardness data for RSW-001 from the June 2000 through the November 2006 monitoring and reporting periods. In accordance with Section 1.2 of the SIP, the Regional Water Board shall have discretion to consider if any data are inappropriate. The Regional Water Board determined the reported hardness concentration of 170 mg/L during the August 2002 monitoring and reporting period was not a representative sample of the hardness for RSW-001. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

Table F-9. Applicable Beneficial Uses and Water Quality Criteria and Objectives

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria		
			Freshwater		Human Health for Consumption of:
			Acute	Chronic	Organisms only
			µg/L	µg/L	µg/L
1	Antimony	4,300			4,300
2	Arsenic	150	340	150	
5a	Chromium (III)	497.83	4176.63	497.83	
5b	Chromium (VI)	11.43	16.29	11.43	
6	Copper	23.30	38.42	23.30	
7	Lead	12.44	319.42	12.44	
8	Mercury	0.051	Reserved	Reserved	0.051
9	Nickel	129.14	1161.57	129.14	4,600
10	Selenium	5		5	
11	Silver	25.63	25.63		
13	Zinc	297.05	297.05	297.05	
14	Cyanide	5.2	22	5.2	220,000
16	2,3,7,8-TCDD	1.4E-08			0.000000014
21	Carbon Tetrachloride	4.4			4.4
23	Chlorodibromomethane	34			34
24	Chloroethane	No Criteria			
26	Chloroform	No Criteria			
27	Dichlorobromomethane	46			46
35	Methyl Chloride	No Criteria			
36	Methylene Chloride	1,600			1,600
68	Bis(2-Ethylhexyl)Phthalate	5.9			5.9
104	beta-BHC	0.046			0.046
109	4,4'-DDE	0.00059			0.00059

3. Determining the Need for WQBELs

In accordance with section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identified the maximum observed effluent concentration (MEC) 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 background water quality (B) > C and the pollutant is detected in the effluent, a limit is needed.
- 3) Trigger 3 – If other related information, such as a 303(d) listing for a pollutant, discharge type, compliance history, etc., indicates that a WQBEL is required.

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

The RPA was performed for the priority pollutants for which effluent data were available. These data were used in the RPA and are summarized in Table F-10. Based on the RPA selenium and cyanide demonstrated reasonable potential to cause or contribute to an excursion above a water quality standard.

The Regional Water Board evaluated monitoring data for mercury, bis (2-ethylhexyl)phthalate, and 4,4'-DDE and determined water quality-based effluent limitations were not required for these pollutants. The Discharger provided data collected in 2001 and 2002 to evaluate reasonable potential and contends in the February 22, 2005 Feasibility Report that the effluent and receiving water samples collected June 26, 2001, were contaminated and stated the data were invalid. In accordance with Section 1.2 of the SIP, the Regional Water Board shall have discretion to consider if any data are inappropriate for use in determining reasonable potential. The Regional Water Board determined the data that triggered reasonable potential for mercury, bis(2-ethylhexyl)phthalate, and 4,4',-DDE were inappropriate for evaluating reasonable potential. Further, the Discharger continued to analyze samples of the treatment plant effluent and receiving water for these pollutants and determined mercury, bis(2-ethylhexyl)phthalate, and 4,4'-DDE were not present in the effluent at concentrations exceeding CTR water quality criteria. Therefore, water quality-based effluent limitations for mercury, bis(2-ethylhexyl)phthalate, and 4,4'-DDE are not established in the proposed Order. The Discharger is required to continue monitoring for these pollutants to determine their presence in the effluent.

Table F-10. Summary of Reasonable Potential Analysis

CTR No.	Priority Pollutant	Applicable Water Quality Criteria (C)	Max Effluent Conc (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		ug/L	ug/L	ug/L		
1	Antimony	4,300	0.5	0.44	No	MEC and B < C
2	Arsenic	150	4	4	No	MEC and B < C
5a	Chromium (III)	497.83	3.7	5.9	No	MEC and B < C
5b	Chromium (VI)	11.43	4	5	No	MEC and B < C
6	Copper	23.30	13	11	No	MEC and B < C
7	Lead	12.44	0.5	1.8	No	MEC and B < C
8	Mercury	0.051	0.02	0.054	No	BPJ ¹
9	Nickel	129.14	3	8	No	MEC and B < C
10	Selenium	5	2	6	Yes	B > C, and detected in effluent
11	Silver	25.63	0.6	0.06	No	MEC and B < C
13	Zinc	297.05	61	29	No	MEC and B < C
14	Cyanide	5.2	13	8	Yes	MEC and B > C
16	2,3,7,8-TCDD	1.4E-08	5E-09	No data	No	MEC < C
21	Carbon Tetrachloride	4.4	1.6	0.49	No	MEC and B < C
23	Chlorodibromomethane	34	2.2	0.41	No	MEC and B < C
24	Chloroethane	No Criteria	0.4	0.41	No	No Criteria
26	Chloroform	No Criteria	18	6.4	No	No Criteria
27	Dichlorobromomethane	46	9.7	2.2	No	MEC and B < C
35	Methyl Chloride	No Criteria	0.6	0.3	No	No Criteria
36	Methylene Chloride	1,600	0.54	0.5	No	MEC and B < C
68	Bis(2-Ethylhexyl)Phthalate	5.9	23	2.76	No	BPJ ²
104	beta-BHC	0.046	0.008	0.005	No	MEC and B < C
109	4,4'-DDE	0.00059	0.004	0.0055	No	BPJ ³

¹ Mercury: The value that triggered reasonable potential is the ambient background concentration (estimated concentration = 0.054 µg/L) collected June 26, 2001. All the effluent concentrations were reported as not detected or detected but not quantified. The MEC shown is an estimated value. Additional effluent and receiving water monitoring conducted in 2004 for mercury has resulted in concentrations below detection limits. The Regional Water Board determined there are insufficient data available to determine reasonable potential; therefore, no water quality-based effluent limitations are required for mercury.

² Bis(2-Ethylhexyl)Phthalate: The value that triggered reasonable potential (23 µg/L) was collected June 26, 2001. In the Discharger's Infeasibility Report dated February 2005, the Discharger contends the effluent sample was contaminated. Additional effluent monitoring conducted in 2004 for bis(2-ethylhexyl)phthalate has resulted in concentrations below detection limits. The Regional Water Board determined there are insufficient data available to determine reasonable potential; therefore, no water quality-based effluent limitations are required for bis(2-ethylhexyl)phthalate.

³ 4,4'-DDE: The value that triggered reasonable potential (estimated concentration = 0.004 µg/L) collected June 26, 2001. Additional effluent and receiving water monitoring conducted in 2004 for 4,4'-DDE has resulted in concentrations below detection limits. The Regional Water Board determined there are insufficient data available to determine reasonable potential; therefore, no water quality-based effluent limitations are required for 4,4'-DDE.

4. WQBEL Calculations

- a. Final WQBELs are based on monitoring results and following the calculation process outlined in section 1.4 of the SIP. A table providing the calculation for all applicable WQBELs for this Order is provided in Attachment G of this Order.
- b. WQBELs Calculation Example

Using cyanide as an example, the following demonstrates how WQBELs based on a human health criterion were established for Order No. R7-2007-0001. The process for developing these limits is in accordance with section 1.4 of the SIP. Attachment G summarizes the development and calculation of all WQBELs 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:

$$ECA = C + D(C-B) \quad \text{when } C > B, \text{ and}$$

$$ECA = C \quad \text{when } C \leq B,$$

- Where
- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 292 mg/L (as CaCO₃) was used for development of hardness-dependant criteria, and a pH of 7.0 was used for pH-dependant criteria.
 - D = The dilution credit, and
 - B = The ambient background concentration

For this Order, dilution was not allowed due to the nature of the receiving water and quantity of the effluent; therefore:

$$ECA = C$$

For cyanide, the applicable water quality criteria are:

$$ECA_{acute} = 22 \mu\text{g/L}$$

$$ECA_{chronic} = 5.2 \mu\text{g/L}$$

$$ECA_{human\ health} = 220,000 \mu\text{g/L}$$

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.

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic}$$

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

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{acute}</u>	<u>Multiplier_{chronic}</u>
19	0.52	0.363	0.571

$$LTA_{acute} = 22 \mu\text{g/L} \times 0.363 = 7.99 \mu\text{g/L}$$

$$LTA_{chronic} = 5.2 \mu\text{g/L} \times 0.571 = 2.97 \mu\text{g/L}$$

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

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

For cyanide, the most limiting LTA was the $LTA_{chronic}$

$$LTA = 2.97 \mu\text{g/L}$$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitations (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.

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

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

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

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{MDEL}</u>	<u>Multiplier_{AMEL}</u>
19	0.52	2.76	1.47

$$AMEL_{\text{aquatic life}} = 2.97 \times 1.47 = 4.37 \text{ } \mu\text{g/L}$$

$$MDEL_{\text{aquatic life}} = 2.97 \times 2.76 = 8.20 \text{ } \mu\text{g/L}$$

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

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

For cyanide:

$$AMEL_{\text{human health}} = 220,000 \text{ } \mu\text{g/L}$$

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.

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

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

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{MDEL}</u>	<u>Multiplier_{AMEL}</u>	<u>Ratio</u>
19	0.52	2.76	1.47	1.88

$$MDEL_{\text{human health}} = 220,000 \text{ } \mu\text{g/L} \times 1.88 = 413,600 \text{ } \mu\text{g/L}$$

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:

<u>AMEL_{aquatic life}</u> 4.37 $\mu\text{g/L}$	<u>MDEL_{aquatic life}</u> 8.20 $\mu\text{g/L}$	<u>AMEL_{human health}</u> 220,000 $\mu\text{g/L}$	<u>MDEL_{human health}</u> 413,600 $\mu\text{g/L}$
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The lowest (most restrictive) effluent limits, those based on aquatic life criteria, were incorporated into this Order.

Table F-11. Summary of Water Quality-based Effluent Limitations Monitoring Point M-003

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Selenium	$\mu\text{g/L}$	4.5	6.7
Cyanide	$\mu\text{g/L}$	4.4	8.2

c. WQBELs Based on Basin Plan Objectives

Previous Order No. 00-014 established WQBELs for TDS. These WQBELs were based on receiving water quality objectives established in the Basin Plan that state any discharge to the Coachella Valley Storm Water Channel shall not cause the

concentration of TDS in the surface water to exceed a maximum daily of 2,500 mg/L and an annual average of 2,000 mg/L. The previous Order included an average monthly and maximum daily effluent limitation for TDS. Due to the misapplication of the Basin Plan receiving water quality objectives for TDS as numeric effluent limitations, this Order replaces the numeric effluent limitations for TDS of the previous permit with a narrative effluent limitation and establishes a receiving water limitation for TDS to accurately apply the WQO of the Basin Plan. The replacement of those numeric effluent limitations with a narrative effluent limitation and receiving water limitation for TDS does not constitute backsliding due to the exception contained in Section 402(o)(2)(B)(ii) of the CWA, which states that if the Administrator determines that a technical mistake or mistake in interpretation of the law were made when establishing the limits, the appropriate application of those laws is justified. Further, the effluent data were used to conduct an RPA; the discharge does not demonstrate reasonable potential to exceed water quality objectives for TDS.

The Basin Plan states that any discharge to a water body 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. coli*, fecal coliform and enterococci are used as indicators to estimate the presence of pathogens. *E. coli* has been used as the principal indicator for the presence of human fecal matter. Effluent limitations for *E. coli* shall be used as indicators to determine the effectiveness of the municipal wastewater treatment facilities disinfection system. Therefore, the establishment of effluent limitations for *E. coli* shall be sufficient indicators to monitor the wastewater discharge to the Coachella Valley Storm Water Channel and the establishment of additional effluent limitations or monitoring requirements for enterococci and fecal coliform are not necessary and have not been included in the Order.

The Basin Plan states that discharges of wastes or wastewater shall not contain settleable solids in concentrations that increase turbidity. The effluent limitation established in Order No. 00-014 for settleable solids of a 30-day mean of 0.3 ml/L and a 7-day mean of 0.5 ml/L has not been carried over to Order No. R7-2007-0001. Because TSS and settleable solids are both measurements of residual solids in the effluent, regulation of one of the parameters will result in compliance for both TSS and settleable solids. Thus, compliance with effluent limitations for TSS is expected to ensure compliance with the Basin Plan water quality objective.

The Basin Plans general surface water objectives state that 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. Chlorine is known to be toxic to aquatic life. The previous Order establishes numeric effluent limitations for total chlorine. These effluent limitations are carried over to the proposed Order. Wastewater discharged to Coachella Valley Storm Water Channel shall not contain a total chlorine residual greater than 0.2 mg/L as an instantaneous maximum and 0.01 mg/L as a monthly average.

5. 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.

This Order implements the narrative objective for toxicity, requiring there be no acute or chronic toxicity in the treatment plant effluent. In addition, the Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity identification evaluation (TIE) and toxicity reduction evaluations studies.

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 Channel.

D. Final Effluent Limitations

The proposed effluent limitations for the discharge from the aeration lagoon treatment system are summarized in Table F-12. The proposed effluent limitations for the discharge from the activated sludge treatment system are summarized in Table F-13. As required in Provision VI.C.6.c of Order No. R7-2007-0001, the Discharger shall provide written certification that the expansion through addition of the activated sludge treatment system has been completed and the design capacity of the facility has increased to 9.9 MGD. Upon written acceptance of the certification by the Executive Officer, the effluent limitations presented in Table F-13 for the activated sludge treatment system shall be effective. The proposed water quality-based effluent limitations for the discharge from the facility are summarized in Table F-14. Proposed effluent limitations are based on secondary treatment standards, equivalent to secondary treatment standards, the California Toxics Rule, and the Colorado River Basin Plan Water Quality Standards.

1. Mass-based Effluent Limitations

Title 40 CFR Section 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some

effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g. CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

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)

2. Satisfaction of Anti-Backsliding Requirements.

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR Section 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. Some effluent limitations in this Order are less stringent than those in the previous Order. Effluent limitations for fecal coliform and settleable solids have been removed, and numeric effluent limitations for total dissolved solids has been replaced by a narrative limitation. As discussed in detail in section IV.C.4 of this Fact Sheet (Attachment F), this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

3. Satisfaction of Anti-degradation Policy

Title 40 CFR Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal anti-degradation policies. The permitted discharge is consistent with the anti-degradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

The final effluent limitations applicable to the aeration lagoon treatment system at Discharge Point No. 001 at Monitoring Location EFF-001 are summarized in Table F-12.

Table F-12. Summary of Final Effluent Limitations - Aeration Lagoon Treatment System Discharge Point No. 001 at Monitoring Location EFF-001

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	MGD	7.0	--	--	--	--	1
CBOD 5-day 20°C	mg/L	40	60	--	--	--	2
	lbs/day	2,300	3,500	--	--	--	
Total Suspended Solids	mg/L	95	--	--	--	--	2
	lbs/day	5,500	--	--	--	--	
Removal Efficiency for BOD	%	65	--	--	--	--	2

¹ Approved treatment capacity.

² Equivalent to Secondary Treatment Standards contained in 40 CFR Part 133

The final effluent limitations applicable to the new expansion activated sludge treatment system at Discharge Point No. 001, Monitoring Location EFF-002 are summarized in Table F-13.

Table F-13. Summary of Final Effluent Limitations – Activated Sludge Treatment System Discharge Point No. 001 at Monitoring Location EFF-002 Effective upon commencement of discharges from the Activated Sludge Treatment System

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Flow	MGD	2.9	--	--	--	--	1
CBOD 5-day 20°C	mg/L	25	40	--	--	--	2
	lbs/day	600	970	--	--	--	
Total Suspended Solids	mg/L	30	45	--	--	--	2
	lbs/day	730	1,100	--	--	--	
Removal Efficiency for CBOD and TSS	%	85	--	--	--	--	2

¹ Approved treatment capacity.

² Secondary Treatment Standards contained in 40 CFR Part 133

The final effluent limitations applicable to the total combined flow of both the aerated treatment system and the activated sludge treatment system at Discharge Point No. 001 and Monitoring Location EFF-003 and EFF-004 are summarized in Table F-14.

Table F-14. Summary of Final Effluent Limitations – Combined Flow all treatment systems Discharge Point No. 001 at Monitoring Location EFF-003 and EFF-004

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Selenium	µg/L	4.5	--	6.7	--	--
	lbs/day ₁	0.26	--	0.39	--	--
	lbs/day ₂	0.37	--	0.55	--	--
Cyanide ³	µg/L	4.4	--	8.2	--	--
	lbs/day ₁	0.26	--	0.48	--	--
	lbs/day ₂	0.36	--	0.68	--	--
Chlorine Residual	mg/L	0.01	--	--	--	0.02
	lbs/day ₁	0.58	--	--	--	1.2
	lbs/day ₂	0.83	--	--	--	1.7
pH	s.u.	--	--	--	6.0	9.0

¹ The mass-based effluent limitations are based on a design capacity of 7 MGD.

² The mass-based effluent limitations are based on a design capacity of 9.9 MGD.

³ Limitations are applicable after May 18, 2010. The interim limitations described in Section IV.E are applicable from May 16, 2007 through May 18, 2010. Compliance shall be determined by measuring free cyanide.

- a. Discharges of wastes or wastewater shall not increase the total dissolved solids content of receiving waters, unless it can be demonstrated to the satisfaction of the Regional Water Board that such an increase in total dissolved solids does not adversely affect beneficial uses of receiving waters.
- b. 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 Water Board.
- c. Wastewater effluent discharged to the Coachella Valley Storm Water Channel 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.

E. Interim Effluent Limitations

The Discharger may not be able to consistently comply with the new effluent limitations for cyanide. Therefore, interim limits have been set as follows:

1. 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 criteria, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 4.4 µg/L AMEL and 8.2 µg/L MDEL. The Discharger documented in its February 22, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. The Regional Water Board verified this assertion of infeasibility by comparing the MEC to the AMEL and MDEL. Therefore, pursuant to the provisions of the SIP, an interim effluent limitation for cyanide is required. Section 2.2 of the SIP states numeric interim limitations must be based on current treatment Facility performance or on existing permit limitations, whichever is more stringent. The previous permit did not contain an effluent limitation for free cyanide. The Regional Water Board evaluated effluent monitoring data submitted for free cyanide for the period from June 2001 through December 2004. Interim effluent limitations may be based on the 99th percentile of the effluent concentrations. The equations used for calculating effluent limitations, outlined in Section 5.4.1 of the EPA/505/2-90-001 - *Technical Support Document for Water Quality-based Toxics Control* (TSD), were used to develop the interim effluent limitations. The MEC value for free cyanide of 13 mg/L was set equal to the ECA. Based on the calculations summarized in section 5 of the TSD, the $LTA_{\text{chronic } 99} (7.43)$ was multiplied by the $MDEL_{\text{multiplier}99} (2.76)$ to result in a MDEL of 20 mg/L. The $LTA_{\text{chronic}} (7.43)$ was multiplied by the $AMEL_{\text{multiplier}95} (1.47)$ to result in an AMEL of 11 mg/L. These interim effluent limitations are based on the best professional judgment of Regional Water Board staff and the procedures specified in section 5 of the TSD.

Table F-15. Effluent Limitations for Cyanide.

Parameter	Unit	Date Effluent Limitation Becomes Effective	Maximum Daily Effluent Limitation	Average Monthly Effluent Limitation
Cyanide (interim) ¹	µg/L	May 16, 2007	20	11
	lbs/day ²		1.2	0.64
	lbs/day ³		1.7	0.91
Cyanide (final) ¹	µg/L	May 18, 2010	8.2	4.4
	lbs/day ²		0.48	0.26
	lbs/day ³		0.68	0.36

¹ Compliance shall be determined by measuring free cyanide.

² The mass-based effluent limitations are based on a design capacity of 7 MGD.

³ The mass-based effluent limitations are based on a design capacity of 9.9 MGD and are only applicable after the commencement of discharges through the activated sludge treatment system.

F. Land Discharge Specifications (NOT APPLICABLE)

G. Reclamation Specifications (NOT APPLICABLE)

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The 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.

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 and are carried forward from the previous Order. As such, they are a required part of the proposed Order.

Also, a new receiving water limitation was added for TDS based on the Regional Water Board's Basin Plan as follows:

The concentration of total dissolved solids in the Coachella Valley Storm Water Channel shall not exceed an annual average concentration of 2,000 mg/L or an instantaneous maximum concentration of 2,500 mg/L.

Further, the Basin Plan states that Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. To ensure compliance, Order No. 00-014 established an effluent limitation for turbidity of no increase by more than 10 percent over background levels, a limitation that is carried over to Order No. R7-2007-0001.

The concentration of dissolved oxygen shall not be reduced below 5.0 mg/L at any time.

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.

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

Title 40 CFR Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements. In addition, influent flow monitoring has been established to determine if adequate treatment capacity is available at the facility and determine compliance with Provision VI.A.2.f of the Order.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR Sections 122.44(i), 122.62, 122.63 and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the CWC, and the Regional Water Board's policies. The MRP also contains a 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 WET testing requirements contained in the MRP, 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 Water 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

Surface water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water pursuant to the SIP and Basin Plan. Monitoring frequencies for all constituents carried forward from the previous Order have been retained. Due to insufficient data for priority pollutants, the annual monitoring frequency has been included in this Order. In the event that no receiving water is present at stations RSW-001 or RSW-002, receiving water monitoring may be suspended until receiving water flow is present at stations RSW-001 or RSW-002.

2. Groundwater

[Not Applicable]

E. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger is required to obtain or acquire annual total dissolved solids concentrations of the source water, either through monitoring or obtaining the data from the drinking water purveyor. This information will be compiled and summarized in a quarterly report in accordance with Provision VI.C.2.c of the proposed Order.

2. Biosolids/Sludge Monitoring

This section establishes monitoring and reporting requirements for the storage, handling and disposal practices of sludge generated from the operation of this Facility.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR Section 122.41, and additional conditions applicable to specified categories of permits in accordance with Section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42.

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

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, to modify or add effluent limitations, monitoring requirements and other requirements to address USEPA's approval of the biological assessment submitted by the Discharger, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. **Toxicity Identification Evaluations or Toxicity Reduction Evaluations.** This provision is based on the SIP, section 4, Toxicity Control Provisions.
- b. **Translator Study.** This provision is based on the SIP. This provision allows the Discharger to conduct an optional translator study, based on the SIP at the Discharger's discretion. This provision is based on the need to gather site-specific information in order to apply a different translator from the default translator specified in the CTR and SIP. Without site-specific data, the default translators are used with the CTR criteria.
- c. **Total Dissolved Solids (TDS) Study.** The purpose of this study is to provide more detailed information on the Regional Board's development of salinity standards pursuant to Section 303 of the CWA 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 its discharge. This report shall be submitted to the Regional Water Board's Executive Officer prior to the filing date for re-application.

3. Best Management Practices and Pollution Prevention

- a. **Pollutant Minimization Program.** This provision is based on the requirements of section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

- a. **Aeration Lagoons.** This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.
- b. **Facility and Treatment Operation.** This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.
- c. **Spill Response Plan.** This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.
- d. **Anti-degradation and Analysis and Engineering Report for Proposed Plant Expansion.** This requirement is based on the Discharger's proposal to expand plant capacity and upgrade existing treatment systems. The Discharger is required to evaluate treatment capacity, address mass increases of pollutants discharged, and propose additional units as necessary to enable adequate treatment. This Discharger must also provide certification that the activated sludge treatment system is completed and operational before effluent limitations are applicable.
- 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 activated sludge 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.

5. 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.

6. Other Special Provisions

Special Provisions VI.C.6.a, VI.C.6.b, and VI.C.6.c are included to ensure the compliance with requirements established in Order No. R7-2007-0001, and are based on the previous Order, the CWA, USEPA regulations, CWC, and Regional Water Board plans and policies.

7. Compliance Schedules

- a. This Order establishes final effluent limitations for cyanide that are new limitations for the facility. This Order also contains interim effluent limitations and a compliance schedule that provides the Discharger time to bring their facility into compliance with the newly established final limitations for cyanide. In accordance with section 2.1 of the SIP, interim limitations and compliance schedules can only be provided by the Regional Water 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. As required by Special Provision VI.C.7.a in the proposed Order, the Discharger must execute the cyanide Compliance Plan that identifies the measures that will be taken to reduce the concentrations of cyanide 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 until May 18, 2010, to be in compliance with the final effluent limitations for cyanide. Annual reporting is required to inform the Regional Water 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.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as an NPDES permit for the Mid-Valley Water Reclamation Plant No. 4. 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 WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following newspapers: Riverside Press Enterprise and the Desert Sun on March 16, 2007.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Persons wishing to file written comments on, or objections to, the limitations or provisions of these tentative WDRs, or other aspects of this matter, should be submitted in writing, by April 18, 2007, to the Executive Office at the Regional Water Board at the address above on the cover page of this Order, or faxed to the office at (760) 341-6820, so that the comments may be considered in preparing this matter for presentation to the Regional Water Board.

In conjunction with this public notice for the proposed permit; EPA is taking comments on that the use of freshwater criteria be applied to the receiving waters of the Coachella Valley Storm Water Channel within 200 meters upstream and downstream of the wastewater discharge location from the Mid-Valley Water Reclamation Plant in Thermal, California.

All comments on EPA's tentative approval of this action should be sent to EPA, Region IX, CWA Standards and Permits Office, WTR-5, 75 Hawthorne Street, San Francisco, California, 94105.

C. Public Hearing

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

Date: May 16, 2007
Time: 10:00 a.m.
Location: City of 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 decision to the following address:

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

E. Information and Copying

The ROWD, 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 Kirk Larkin at (760) 776-8964.

Attachment G – 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, and are contained in Section IV.A.1.c of this Order.

Priority Pollutant	Human Health Calculations			Aquatic Life Calculations											Selected Limits	
	Human Health			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	ug/L	ug/L	
Selenium	N/A	N/A	N/A	N/A	N/A	N/A	5	0.730	3.65	3.65	1.24	4.55	1.82	6.66	4.5	6.7
Cyanide	220,000	1.87	412,000	22	0.362	7.97	5.2	0.571	2.97	2.97	1.47	4.37	2.75	8.19	4.4	8.2

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

ATTACHMENT H – 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
42	1,1,2-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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
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
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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
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 I – STATE WATER BOARD MINIMUM LEVELS

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table I-1. Volatile Substances

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

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

Table I-2. Semi-Volatile Substances

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

- * With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.
- ** Phenol by colorimetric technique has a factor of 1.

Table I-3. Inorganics

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

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

Table I-4. Pesticides and PCBs

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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

Techniques:

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