



Alan C. Lloyd, Ph.D.  
Agency Secretary

# California Regional Water Quality Control Board



Arnold Schwarzenegger  
Governor

## Colorado River Basin Region

73-720 Fred Waring Drive, Suite 100, Palm Desert, CA 92260  
Phone (760) 346-7491 • Fax (760) 341-6820  
<http://www.waterboards.ca.gov>

**ORDER NO. R7-2005-0082**  
**NPDES NO. CA0104973**

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

<b>Discharger</b>	Coachella Valley Water District
<b>Name of Facility</b>	Mid-Valley Water Reclamation Plant, Thermal
<b>Facility Address</b>	63-002 Fillmore Street
	Thermal, CA 92274
	Riverside County

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

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated wastewater	33 °, 35', 28" N	116 °, 07', 17" W	Coachella Valley Storm Water Channel

This Order was adopted by the Regional Water Board on:	June 29, 2005
This Order shall become effective on:	June 29, 2005
This Order shall expire on:	June 29, 2010
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements	

IT IS HEREBY ORDERED, that Order No. 00-014 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Robert E. Perdue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on \_\_\_\_\_.

\_\_\_\_\_  
Robert E. Perdue, Executive Officer

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

**ORDER NO. R7-2005-0082  
NPDES NO. CA0104973**

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**I. FACILITY INFORMATION**

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

<b>Discharger</b>	Coachella Valley Water District
<b>Name of Facility</b>	Mid-Valley Water Reclamation Plant, Thermal
<b>Facility Address</b>	63-002 Fillmore Street
	Thermal, CA 92274
	Riverside County
<b>Facility Contact and Phone</b>	Steve Robbins, (760) 398-2651
<b>Mailing Address</b>	SAME
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Design Flow</b>	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 submitted a Report of Waste Discharge, dated November 10, 2004, and applied for a National Pollutant Discharge Elimination System (NPDES) permit renewal to discharge treated wastewater from the wastewater treatment plant. 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 its facility and increase the design flow to 9.9 MGD.
  
- B. **Facility Description.** The Discharger owns and operates the water reclamation plant. The current total design capacity of the wastewater treatment plant is 7.0 MGD and, the Discharger plans to expand the treatment plant capacity to 9.9 MGD during this permit term. The wastewater treatment plant consists of a lagoon system. The treatment system is comprised of a headworks system that includes two preaeration ponds, automatic bar screens, conveyor, a washer-compactor, and a 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. Effluent from each module is combined, chlorinated in a flash mixing tank followed by a chlorine contact basin, and dechlorinated prior to discharge through Discharge 001. 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 is 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. Secondary sludge from the proposed plant expansion will be pumped to a belt thickener and will gravity flow into a sludge storage tank. Sludge from the storage tank will be pumped to a belt press for further dewatering. A private contractor will also haul the biosolids from the proposed plant expansion offsite to a landfill or to a composting facility. Wastewater is discharged from Discharge 001 (see table on cover) to the Coachella Valley Storm Drain Channel, a water of the United States. Attachment B is a topographic map of the area around the facility. Attachment C is a wastewater flow schematic of the facility. Attachment B and C are hereby incorporated into this Order.
  
- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

- D. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies. Attachments A through H contain background information and detailed rationale for Order requirements and are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.
- F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR § 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR Part 133, equivalent to secondary treatment standards for POTWs and protection of the beneficial uses of the receiving waters. The Regional Board has considered the factors listed in CWC § 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

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

- H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Coachella Valley Storm Water Channel are as follows:

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

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

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

<sup>1</sup> Section of perennial flow from approximately Indio to the Salton Sea.

<sup>2</sup> Unauthorized Use.

<sup>3</sup> 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.

- J. **State Implementation Policy.** On March 2, 2000, State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so.
- 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 Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does include compliance schedules and interim effluent limitations and discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and discharge specifications is included in the Fact Sheet (Attachment F).
- L. **Anti-Degradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16.
- M. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- N. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- O. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- P. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

- Q. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

### III. DISCHARGE PROHIBITIONS

- A. 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. Discharge of treated wastewater at a location or in a manner different from that described in Finding No. II.B, above, is prohibited. This prohibition does not limit flexibility in discharging different percentages of treated wastewater.
- D. The bypass or overflow of untreated wastewater or wastes to Coachella Valley Storm Water Channel is prohibited, except as allowed in the Standard Provisions for National Pollutant Discharge Elimination System Permit (hereinafter Standard Provisions), included as Attachment D.
- 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(l) and 13050(m) of Division 7 of the California Water Code.

#### IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

##### A. Effluent Limitations – Discharge Point 001

###### 1. Final Effluent Limitations

- a. Beginning June 29, 2005 the discharge of treated wastewater from the aeration lagoon treatment system shall maintain compliance with the following effluent limitations at Discharge Point 001 with compliance measured at monitoring location M-001A as described in the attached Monitoring and Reporting Program (Attachment E).

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	7.0	--	--	--	--
CBOD 5-day 20°C	mg/L	40	60	--	--	--
	lbs/day	2,300	3,500	--	--	--
Total Suspended Solids	mg/L	45	65	--	--	--
	lbs/day	2,600	3,800	--	--	--
pH	pH Units	--	--	--	6.0	9.0

- i. The average monthly percent removal of CBOD 5-day 20°C and total suspended solids shall not be less than 65 percent.
- b. Upon the commencement of discharges through the expanded portion of the activated sludge treatment plant, as certified as required by Provision VI.C.7.a, the discharge of treated wastewater from the activated sludge treatment system shall be in compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001B as described in the attached Monitoring and Reporting Program (Attachment E).

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	2.9	--	--	--	--
CBOD 5-day 20°C	mg/L	25	40	--	--	--
	lbs/day	600	1,000	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--
	lbs/day	730	1,100	--	--	--
pH	pH Units	--	--	--	6.0	9.0

- i. The average monthly percent removal of CBOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

- c. Beginning June 29, 2005, wastewater effluent discharged to the Coachella Valley Storm Water Channel shall be in compliance with the following effluent limitations at Discharge Point 001 with compliance measured at monitoring location M-001C (or M-001D when M-001C is not accessible due to flooding), as described in the attached Monitoring and Reporting Program (Attachment E).

Parameter	Units	Effluent Limitations		
		Average Monthly	Maximum Daily	Instantaneous Maximum
Copper <sup>1</sup>	µg/L	2.9	5.8	--
	lbs/day <sup>2</sup>	0.17	0.34	
	lbs/day <sup>3</sup>	0.24	0.48	--
Selenium	µg/L	4.1	8.2	--
	lbs/day <sup>2</sup>	0.24	0.48	
	lbs/day <sup>3</sup>	0.34	0.68	--
Cyanide <sup>1</sup>	µg/L	0.5	1.0	--
	lbs/day <sup>2</sup>	0.029	0.058	
	lbs/day <sup>3</sup>	0.041	0.083	--
Residual Chlorine	mg/L	0.01	--	0.02
	lbs/day <sup>2</sup>	0.58	--	1.2
	lbs/day <sup>3</sup>	0.83	--	1.7
Total Dissolved Solids	mg/L	--	2,500	--
	lbs/day <sup>2</sup>	--	150,000	--
	lbs/day <sup>3</sup>	--	200,000	--

<sup>1</sup> Limitations are applicable after May 18, 2010. The interim limitations establish in Section IV.A.2 are applicable from June 29, 2005 through May 18, 2010.

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

<sup>3</sup> The mass-based effluent limitations are based on a design capacity of 9.9 MGD and are only applicable after certification required under Provision VI.C.7.a is met and commencement of discharges through the expanded portion of the activated sludge treatment system.

- d. Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not have a Escherichia coli (E. coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters.
- e. Wastewater effluent discharged to the Coachella Valley Storm Water Channel shall not exceed an annual average of 2,000 mg/L of total dissolved solids (TDS).
- f. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water, as defined in Section V.E of the Monitoring and Reporting Program (Attachment E). All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Water Board.



**2. Interim Effluent Limitations**

- a. During the period beginning June 29, 2005 and ending upon the commencement of discharges through the activated sludge treatment system as certified required by Provision VI.C.7.a, the discharge of wastewater from the aeration lagoon to the Coachella Valley Storm Water Channel from Discharge 001, Monitoring Location M-001D (or M-001C when M-001D is not accessible due to flooding), shall maintain compliance with the following limitations:

Parameter	Units	Maximum Daily Effluent Limitations	Average Monthly Effluent Limitations
Copper	µg/L	18	18
	lbs/day <sup>1</sup>	1.1	1.1
Cyanide	µg/L	22	22
	lbs/day <sup>1</sup>	1.3	1.3

<sup>1</sup> Mass-based effluent limitations are based on a design capacity of 7 MGD.

- b. Upon the commencement of discharges through the activated sludge treatment system as certified required by Provision VI.C.7.a and ending on May 18, 2010, the combined discharge of wastewater from the aerated lagoons and activated sludge systems to the Coachella Valley Storm Water Channel from Discharge 001, Monitoring Location M-001D (or M-001C when M-001D is not accessible due to flooding), shall maintain compliance with the following limitations:

Parameter	Units	Maximum Daily Effluent Limitations	Average Monthly Effluent Limitations
Copper	µg/L	18	18
	lbs/day <sup>1</sup>	1.5	1.5
Cyanide	µg/L	22	22
	lbs/day <sup>1</sup>	1.8	1.8

<sup>1</sup> Mass-based effluent limitations are based on a design capacity of 9.9 MGD.

**B. Land Discharge Specifications – Not applicable**

**C. Reclamation Specifications - Not applicable**

**V. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order. The discharge shall not cause the following in the Coachella Valley Storm Water Channel:
  - a. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
  - b. The presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
  - c. Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affect beneficial uses.
  - d. Aesthetically undesirable discoloration in the receiving water.
  - e. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
  - f. Increase turbidity that results in adversely affecting beneficial uses.
  - g. The normal ambient pH to fall below 6.0 or exceed 9.0 units.
  - h. The natural receiving water temperature of surface waters shall not be altered by discharges of wastewater unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
  - i. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
  - j. No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.
  - k. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
  - l. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause or otherwise adversely affect beneficial uses.
2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Water Board will revise and modify this Permit in accordance with such more stringent standards.

## 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 Coachella Valley Water District Mid-Valley Reclamation Plant No. 4 shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
  - b. The Discharger shall comply with all conditions of this Board Order. Noncompliance constitutes a violation of the Federal Clean Water Act and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification of waste discharge requirements; or denial of a Permit renewal application.
  - c. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
  - d. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Section 3680, Chapter 26, Division 3, Title 23 of the California Code of Regulations. The Discharger shall ensure that all operating personnel are familiar with the contents of this Board Order.
  - e. The Discharger shall report any noncompliance that may endanger human health or the environment. The Discharger shall immediately report orally information of the noncompliance as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, to the Regional Board office and the Office of Emergency Services. During non-business hours, the Discharger shall leave a message on the Regional Board office voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Board office in accordance with the above time limits.
  - f. The Discharger shall provide a report to the Regional Water Board upon determining that the treatment plant's monthly average flow rate for any month exceeds 80 percent of the current design treatment capacity and the design capacity following expansion, specified in Finding No. II.A above. The report should indicate what steps, if any the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
  - g. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional 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 Board and obtain revised requirements before any modifications are implemented.

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

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with Monitoring and Reporting Program, and future revisions thereto as specified by the Regional Water Board's Executive Officer, found in Attachment E of this Order.

## **C. Special Provisions**

### **1. Re-opener Provisions**

- a. The Discharger shall submit data sufficient to determine if a water quality-based effluent limitation is required in the discharge permit as required under the California Toxics Policy. 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 water quality-based effluent limitations, if necessary.
- b. This Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.
- c. The Clean Water Act requires the Regional Water Board to modify, or terminate and reissue, the NPDES permit if a discharger must implement a pretreatment program. Public notice and comment period is mandatory.
- d. This Order may be reopened and the Whole Effluent Toxicity (WET) Testing Requirements contained in the Attachment E, Monitoring and Reporting Program, Section V modified to address changes to USEPA or State Water Board policies or guidance regarding the testing or reporting requirements for WET testing.
- e. The Discharger's Infeasibility Report proposed development of site-specific objectives for copper and cyanide. This Order may be reopened to revise water quality-based effluent limitations pending development of site-specific objectives for copper and cyanide.
- f. TMDLs for pathogens are to be developed by the Regional Water Board. The permit may be reopened and modified in the future to include appropriate requirements necessary to fully implement the approved TMDL if needed.

### **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 permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
  - 1) 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;

- 2) 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;
  - 3) If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or outside consultant).
- b. **Translator Study.** In addition, should the Discharger request to use a translator for metals and selenium different than the U.S. EPA conversion factor, it shall complete a translator study within two years from the date of the issuance of this permit as stated in the California Toxics Policy. In the event a translator study is not completed within the specified time, the U.S. EPA conversion factor-based effluent limitation as specified in the CTR shall be effective as a default limitation.
- c. **Pollutant Minimization Study.** The Discharger shall conduct a Pollutant Minimization Program in accordance with the California Toxics Policy when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and a sample result is reported as detected and not quantified and the effluent limitation is less than the reported minimum level; or a sample result is reported as not detected and the effluent limitation is less than the method detection limit. Details of the requirements of the study are available at Special Provision VI.C.4.c. of this Order.
- d. **Engineering Report for Proposed Plant Expansion.** All proposed changes to the facility that will result in the increase in flows, facility changes, and/or change in the nature and character of the discharge, must be reviewed and approved by the Executive Officer, prior to the start of construction of changes to the treatment facility. The Discharger shall submit a technical report that provides an analysis and justification to support the proposed plant expansion and improvement project. At a minimum, the report will evaluate treatment capacity, address mass increases of pollutants discharged, and propose additional units as necessary to enable adequate treatment. The report shall include time schedules for the ongoing and planned projects and address project status. The report shall also include documentation that any proposed increases in discharges will not violate the State Water Board's antidegradation policy. This analysis is necessary before the Board will consider approving any adjustment in effluent limitations.
- e. **Operations Plan for Proposed Plant Expansion.** At least 30 days in advance of the operation of the new oxidation ditch treatment system the Discharger shall submit an Operations Plan in accordance with Section 13385(j)(1)(D) of the CWC. The Operations Plan will describe the actions the Discharger will take during the period of adjusting or testing, including steps to prevent violations and identifies the shortest reasonable time required for the period of adjusting and testing, not to exceed 90 days. Upon written acceptance of the Operations Plan by the Executive Officer, Sections 13385(h) and 13385(i) of the CWC do not apply, in accordance with Section 13385(j)(1) of the CWC, if a violation is caused by the operation or a new or reconstructed wastewater treatment unit during a defined period of adjusting or testing, not to exceed 90 days.
- f. **Total Dissolved Solids Study.** The Discharger shall perform a study to evaluate whether a 400 mg/L incremental increase in salinity above the source water is practical and if not, what incremental increase is practical for their discharge. This report shall be submitted to the Regional Board's Executive Officer prior to the filing date for re-application. The following items describe the purpose and description of the minimum requirements for the report:
- 1) The permitting authority may permit a discharge in excess of the 400 mg/L incremental increase at the time of issuance or reissuance of a NPDES discharge permit, upon satisfactory demonstration by the permittee that it is not practicable to attain the 400 mg/L limit.
  - 2) Demonstration by the applicant must include information on the following factors relating to the potential discharge:

- (a) Description of the municipal entity and facilities.
  - (b) Description of the quantity and salinity of domestic water sources contributing to discharge.
  - (c) Description of significant salt sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.
  - (d) Description of water rights, including diversions and consumptive use quantities.
  - (e) Description of the wastewater discharge, receiving waters, quantity, salt load, and salinity.
  - (f) Alternative plans for minimizing salt contribution from the municipal discharge. Alternative plans should include:
    - (1) Description of system salt sources and alternative means of control; and
    - (2) Cost of alternative plans in dollars per ton, of salt removed from discharge
  - (g) Such other information pertinent to demonstration of non-practicability as the permitting authority may deem necessary.
- 3) In determining what permit conditions shall be required, the permit issuing authority shall consider the following criteria including, but not limited to:
- (a) The practicability of achieving the 400 mg/L incremental increase.
  - (b) Where the 400 mg/L incremental increase is not determined to be practicable, the Discharger shall provide the following:
    - (1) The impact of the proposed salt input of each alternative on the beneficial uses of the surface water in terms of tons per year and concentration;
    - (2) Costs per ton of salt removed from discharge of each alternative plan;
    - (3) Capability of minimizing the salt discharge;
    - (4) A proposed value for the practical incremental increase; and
    - (5) A justification for the proposed practical incremental increased value.

### 3. Best Management Practices and Pollution Prevention

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

b. **Stormwater**

- 1) In the event that there are storm water discharges associated with industrial activities, the Discharger shall submit a Notice of Intent and/or maintain coverage under the General Storm Water Permit.
  - (a) All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
  - (b) Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.

- (c) Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

#### 4. 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 reduce the concentrations of copper and cyanide in their discharge to achieve compliance with the permit limitations specified in Effluent Limitations, 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 reduce copper and cyanide in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified in section IV.A.2.b. 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.C.2 of MRP in Attachment E.
- c. **Pollutant Minimization Plan (PMP).** The Discharger shall develop a PMP to maintain effluent concentrations of copper and cyanide at or below the effluent limitations specified in Sections IV.A.1.c, IV.A.2.a and IV.A.2.b of this Order. The PMP shall include the following:
  - 1) Annual review and quarterly monitoring of the potential sources of copper and cyanide;
  - 2) Submittal of a control strategy designed to proceed toward the goal of maintaining effluent concentrations at or below the effluent limitation;
  - 3) Implementation of appropriate cost-effective control measures consistent with the control strategy;
  - 4) An annual status report that shall be sent to the Regional Water Board at the same time the annual summary report is submitted in accordance with section X.B.1 of MRP in Attachment E, and include:
    - All PMP monitoring results for the previous year
    - A list of potential sources of copper and cyanide
    - A summary of all actions undertaken pursuant to the control strategy
    - A description of actions to be taken in the following year.

#### 5. Construction, Operation and Maintenance Specifications

- a. Aeration Lagoons
  - 1) A minimum depth of freeboard of two (2) feet shall be maintained at all times in all aeration lagoons.
  - 2) Aeration lagoons shall be managed to control breeding of mosquitoes, in particular:
    - (a) An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface;
    - (b) Weeds shall be minimized through control of water depth, harvesting, or herbicides.
    - (c) Dead algae, vegetation, and debris shall not accumulate on the water surface.
  - 3) The aeration lagoons shall be maintained so they will be kept in aerobic conditions.

- 4) 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.
- 5) Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

b. Facility and Treatment Operation

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

c. Spill Response Plan

- 1) The Discharger shall review its current Spill Response Plan (SRP) developed under previous Order 00-014 and revise 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. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the wastewater disposal facilities.

**6. Special Provisions for Municipal Facilities (POTWs Only)**

a. Sludge Disposal Requirements

- 1) 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.
- 2) The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Board Order. The sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses should be submitted to the Regional Water Board as part of the Monitoring and Reporting Program.



- 3) All sludge generated at the wastewater treatment plant will be disposed, treated, or applied to land in accordance with Federal Regulations 40 CFR 503.
- 4) Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Resources Control Board and Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Regional Water Board's Executive Officer.

b. Pretreatment

- 1) 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 CFR 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) Cal. Code of Regs, Title 23, section 2233 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:
  - (a) The Discharger shall be responsible for the performance of all pretreatment requirements contained in the Code of Federal Regulations, Part 40, Section 403, and shall be subject to enforcement actions, penalties, and other remedies by the United States Environmental Protection Agency, or the Regional Water Board, as provided in the Federal Clean Water Act, as amended (33 USC 1251 et. seq.) (hereafter "Act").
  - (b) 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.
  - (c) 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.

## 7. Other Special Provisions

- a. 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.
- b. The Discharger may be required to submit technical reports as directed by the Regional Water Board's Executive Officer.
- c. 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.

## VII. COMPLIANCE DETERMINATION

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

### A. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of

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

**B. Average Weekly Effluent Limitation (AWEL).**

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

**C. Maximum Daily Effluent Limitation (MDEL).**

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

**D. Instantaneous Minimum Effluent Limitation.**

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

**E. Instantaneous Maximum Effluent Limitation.**

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

**F. Water Quality-Based Effluent Limitations.**

1. In accordance with Section 2.4.5 of the SIP, compliance with water quality-based effluent limitations shall be determined as follows:
  - a. Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
  - b. When determining compliance with an average monthly effluent limitation and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

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