



Alan Lloyd
Agency Secretary

California Regional Water Quality Control Board Colorado River Basin Region



Arnold Schwarzenegger
Governor

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

**ORDER NO. R7-2005-0021
NPDES NO. CA0104523**

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

Discharger	City of Brawley
Name of Facility	City of Brawley Wastewater Treatment Plant
Facility Mailing Address	1550 Best Road
	Brawley, CA 92227
	Imperial County

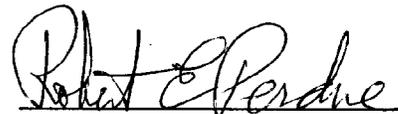
The discharger is authorized to discharge from the following discharge point set forth below:

Discharge Point	Discharge Quality	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Disinfected Equivalent to Secondary Effluent	33 ° 01' 20" N	115 ° 31' 00" W	New River

This Order was adopted by the Regional 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 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IT IS HEREBY ORDERED, that Order No. 00-087 is rescinded except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted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 herein.

I, Robert Perdue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 29, 2005.


 Robert Perdue, Executive Officer

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

**ORDER NO. R7-2005-0021
NPDES NO. CA0104523**

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I. FACILITY AND ORDER INFORMATION

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

Discharger	City of Brawley
Name of Facility	City of Brawley Wastewater Treatment Plant
Agency Mailing Address	400 Main Street
	Brawley, CA 92227
	Imperial County
Agency Contact and Phone Number	Oscar Rodriguez, (760) 344-9111
Facility Mailing Address	1550 Best Road
	Brawley, CA 92227
Facility Contact and Phone Number	Imperial County
	Ruben Mireles, (760) 344-5803
	Public Owned Treatment Works (POTW)
Facility Design Flow	5.9 million gallons per day (MGD)

II. FINDINGS

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

- A. **Background.** The City of Brawley, (hereinafter referred to as the Discharger) submitted a Report of Waste Discharge, dated January 14, 2005, and applied for a National Pollutant Discharge Elimination System (NPDES) permit renewal to discharge up to 5.9 million gallons per day (MGD) of disinfected equivalent to secondary treated wastewater from the City of Brawley WWTP (hereinafter referred to as the facility).
- B. **Facility Description.** The Discharger owns and operates the wastewater treatment plant (WWTP). The total design capacity of the WWTP is 5.9 MGD. The WWTP consists of a lagoon system. The treatment system is comprised of a headworks system, three primary clarifiers, five treatment ponds, an ultraviolet light (UV) disinfection system, and sludge drying beds. As a result of equipment degradation, the facility demolished their two steel egg-shaped anaerobic digesters in 2002. Pursuant to the removal of the sludge digesters, the primary clarifiers have not been in operation since 2002. The headworks system consists of bar screens, a vortex grit chamber and a flow splitter box. Four of the five ponds are aerated by mechanical turbine aerators, and the final pond is aerated by Solar Bee mixers. Effluent from the existing lagoon system is disinfected with a UV disinfection system prior to discharge to the New River, a water of the United States. Attachment B is a site plan for the WWTP. Attachment C.1 is a process flow diagram for the WWTP.

The City of Brawley has contracted with Nolte Associates, Inc. (Nolte) for the research, design and construction for improvements to the existing wastewater treatment facility. Improvements to the existing WWTP will include the reconfiguration of the existing treatment facilities flow distribution system and the installation of flow return pumps. The new pumping and piping system will be configured to optimize nitrification and denitrification of the wastewater flowing through the treatment system.

The City of Brawley has also contracted with the Citizen’s Congressional Task Force (Task Force) on the New River and Nolte to design and construct a Free Water Surface (FWS) constructed wetland. The FWS constructed wetland will receive undisinfected equivalent to secondary effluent from the City of Brawley’s existing WWTP and will provide enhanced treatment of the effluent from the treatment facility prior to discharge to the New River. The FWS constructed wetland will provide physical, chemical and biological treatment that will polish the effluent to further decrease the BOD, TSS and ammonia levels in the treated wastewater. The preliminary design and layout of the proposed FWS constructed wetland system consists of three lined wetlands ponds that will be operated in series. The FWS constructed

wetland will have a series of deep open water and shallow emergent vegetated sections. The shallow sections will be planted with native, emergent wetland plant species. Effluent from the wetland system will be redirected to the existing WWTP's UV disinfection system prior to the discharge to the New River. Attachment C.2 is a preliminary site plan for the FWS constructed wetlands.

Attachments B, C.1 and C.2 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, Division 7 of the CWC for discharges that are not subject to regulations under CWA Section 402.
- D. **Background and Rationale for Requirements.** The Regional 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 Equivalent to Secondary Treatment Standards for POTWs and on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. 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 (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.
- USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. According to the 2002 303(d) list, the New River is impaired for Bacteria, Dissolved Oxygen, Nutrients, Pesticides, Sediment/Silt, Trash, and Volatile Organic Compounds (VOCs). To date, only a Pathogen total daily maximum load (TMDL) and Sedimentation/Siltation TMDL has been approved by USEPA for this segment of water.
- H. **No More Stringent than Federal Law.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal Clean Water Act. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations are discussed in detail in the Fact Sheet (Attachment F). Restrictions on technology-based effluent limits are specified in federal regulations as stated in Findings F. Technology-based Effluent Limitations, and detailed in the Fact Sheet, and the permit's technology-based pollutant restrictions are no more stringent than required by the Clean Water Act. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations

were derived from the California Toxics Rule, the California Toxics Rule is the applicable standard pursuant to 40 C.F.R. 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 1, 2001. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the [Clean Water] Act" pursuant to 40 C.F.R. 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the Clean Water Act and the applicable water quality standards for purposes of the Clean Water Act.

- I. **California Department of Health Services.** The California Department of Health Services (Department) has established statewide reclamation criteria in Title 22, California Code of Regulations, Section 60301, et seq (hereinafter Title 22) for the use of reclaimed water and has developed guidelines for specific uses.
- J. **Water Quality Control Plans.** The Regional Board adopted a Water Quality Control Plan for the Colorado River Basin Region of California [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. Beneficial uses applicable to the New River are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	New River	<u>Existing:</u> Freshwater Replenishment (FRESH), Industrial Service Supply (IND) ¹ , Water Contact Recreation (REC I) ² , Non-Contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD), Preservation of Rare, Threatened or Endangered Species (RARE) ³ .

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

- K. **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.
- L. **State Implementation Policy.** On March 2, 2000, State 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 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.

¹ Potential Use

² Although some fishing occurs in the downstream reaches, the presently contaminated water in the river makes it unfit for any recreational use. An advisory has been issued by the Imperial County Health Department warning against the consumption of any fish caught from the river and the river has been posted with advisories against any body contact with the water.

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

- M. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. In no case, unless an exception has been granted under Section 5.3 of the SIP, shall a compliance schedule exceed 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations or 20 years from the effective date of the SIP to develop and adopt a Total Maximum Daily Load (TMDL) and to establish and comply with Waste Load Allocations (WLAs) derived from a TMDL for a CTR criterion. Where a compliance schedule for a final effluent limitation exceeds one year, the permit must include interim numeric limitations for that constituent. Where permitted by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does include compliance schedules and interim effluent limitations and/or discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) is included in the Fact Sheet, Attachment F.
- N. Alaska Rule.** On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under U.S. EPA's new regulation (also known as the Alaska rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.
- O. Anti-Degradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an anti-degradation policy consistent with the federal policy. The State Board established California's anti-degradation policy in State Board Resolution 68-16, which incorporates the requirements of the federal anti-degradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The permitted discharge is consistent with the anti-degradation provision of 40 CFR § 131.12 and State Board Resolution 68-16.
- P. 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.
- Q. Monitoring and Reporting.** Section 122.48 of 40 CFR requires all NPDES permits to specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the 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 and is hereby incorporated into this Order.
- R. 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 Board has also included in this Order special provisions applicable to the Discharger. A detailed rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- S. Notification of Interested Parties.** The Regional 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.

- T. **Consideration of Public Comment.** The Regional 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. The bypass, overflow, 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 Nos. II.A and II.B, above, is prohibited. This prohibition does not limit the flexibility in discharging different percentages of treated wastewater.
- D. The discharger shall not accept waste in excess of the design treatment capacity of the WWTP.
- E. The discharge shall not cause degradation of any water supply.
- F. 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.
- G. The Discharger shall prohibit public access to the FWS constructed wetlands and WWTP through such means as fences, signs, and other acceptable alternatives.
- H. No irrigation with, or impoundment of, undisinfected secondary recycled water shall take place within 150 feet of any domestic water supply well.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations for Discharge Point 001

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

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD 5-day 20°C)	mg/L	45	65			
	lbs/day ¹	2,200	3,200			
Total Suspended Solids (TSS)	mg/L	45	65			
	lbs/day	2,200	3,200			
Total Dissolved Solids (TDS)	mg/L			4,500		
	lbs/day			220,000		
Flow	MGD	5.9				
Hydrogen ion (pH)	standard units				6.0	9.0

¹ Based on a flow of 5.9 MGD

- b. Either beginning on February 1, 2007 or if the commencement of discharges from the upgraded WWTP designed for nitrification and denitrification is completed prior to February 1, 2007, and as certified required by Provision VI.C.2.d, the discharge of treated wastewater shall maintain compliance with the following limitations at Discharge Point M-001, with compliance measured at monitoring location M-001A as described in the attached Monitoring and Reporting Program (Attachment E):

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD 5-day 20°C)	mg/L	45	65			
	lbs/day ¹	2,200	3,200			
Total Suspended Solids (TSS)	mg/L	45	65			
	lbs/day	2,200	3,200			
Total Dissolved Solids (TDS)	mg/L			4,500		
	lbs/day			220,000		
Total Ammonia as Nitrogen	mg/L	1.1		12		
	lbs/day	54		590		
Flow	MGD	5.9				
Hydrogen ion (pH)	standard units				6.0	9.0

¹Based on a flow of 5.9 MGD

- c. Beginning May 18, 2010, wastewater discharged from the treatment plant 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):

Constituent	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Copper ¹	µg/L	2.9	5.8
	lbs/day	0.14	0.29
Free Cyanide	µg/L	4.3	8.5
	lbs/day	0.21	0.42
Lead ¹	µg/L	7.0	14
	lbs/day	0.34	0.69
Selenium	µg/L	4.1	8.2
	lbs/day	0.20	0.40
Zinc ¹	µg/L	47	95
	lbs/day	2.3	4.7

¹ Total Recoverable

- d. The average monthly percent removal of the pollutant parameters BOD₅ and TSS shall not be less than 65 percent.
- e. Wastewater effluent discharged to the New River 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.
- f. Wastewater effluent discharged to the New River shall not exceed an annual average of 4,000 mg/L of total dissolved solids (TDS).
- g. There shall be no acute or chronic toxicity in the plant effluent nor shall the plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

2. Interim Effluent Limitations for Discharge Point 001

- a. During the period beginning **June 29, 2005** and ending on **May 18, 2010**, the discharge of effluent wastewater shall maintain compliance with the following limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001A as described in the attached Monitoring and Reporting Program (Attachment E):

Constituent	Units	Interim Effluent Limitations	
		Monthly Average	Maximum Daily
Copper ¹	µg/L	79	79
	lbs/day	3.9	3.9
Free Cyanide	µg/L	76	76
	lbs/day	3.7	3.7
Lead ¹	µg/L	180	180
	lbs/day	8.9	8.9
Selenium	µg/L	5.0	8.2
	lbs/day	0.25	0.40
Zinc ¹	µg/L	62	95
	lbs/day	3.1	4.7

¹ Total Recoverable

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

B. Groundwater Limitations

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 Board Standard Provisions

The Discharger shall comply with the following provisions:

- a. The City of Brawley WWTP 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 Water Board office at (760) 346-7491 and the Office of Emergency Services at (800) 852-7550 or (916) 845-8911. During non-business hours, the Discharger shall leave a message on the Water Board's 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 sewage spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Water Board office in accordance with the above time limits.
- f. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - i. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;

- ii. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - iv. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
- g. The Discharger shall provide a report to the Water Board when it determines that the treatment plant's average dry weather flow rate for any month exceeds 80 percent of the current design treatment capacity, specified in Finding No. II.B above. The report shall 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.
- h. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
- i. The Discharger shall provide adequate notice to the Regional Board's Executive Officer of the following:
- i. Any new introduction of pollutants into any of the treatment facilities described in the Findings of this Board Order from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act, in it were directly discharging the pollutants.
 - ii. Any substantial change in the volume or character of pollutants being introduced into any of the treatment facilities described in the Findings of this Board Order by an existing or new source.
 - iii. Any planned physical alterations or additions to the facilities described in this Board Order, or changes planned in the discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
- 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.
- l. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of 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 Board's Executive Officer, found in Attachment E of this Order.

The monitoring and reporting requirements in Monitoring and Reporting Program No. R7-2005-0021 are necessary to determine compliance with these waste discharge requirements and to determine the facility's impacts, if any, on receiving water.

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

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 SIP. It is the Discharger's responsibility to provide all information requested by the Water Board for the 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 Board or the Regional Board, including revisions to the Basin Plan.
- c. The Clean Water Act requires the 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. TMDLs for Dissolved Oxygen, Nutrients, Pesticides, Trash and VOCs are to be developed by the Regional Board. The permit may be reopened and modified in future to include appropriate requirements necessary to fully implement the approved TMDL if needed.
- e. This Order may be reopened and the Whole Effluent Toxicity (WET) Testing Requirements contained in 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Toxicity Identification Evaluations or Toxicity Reduction Evaluations.** The discharger shall submit to the 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:
 - i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
 - ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
 - iii. If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or outside consultant).
- b. **Translator Study.** In addition, should the discharger request to use a translator for metals and selenium different than the U.S. EPA conversion factor, it shall complete a translator study within two years from the date of the issuance of this permit as stated in the SIP. In the event a

translator study is not completed within the specified time, the U.S. EPA conversion factor-based effluent limitation as specified in the CTR shall be effective as a default limitation.

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

- 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 the 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 increase in 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 Water Board will consider approving any adjustment in effluent limitations.
- e. **Constructed Wetland Operation and Maintenance Manual.** The Discharger shall develop an operation and maintenance manual for the management of the FWS constructed wetland system and submit a copy of the plan to the Regional Board's Executive Officer, or his designee, for review and approval within 90-days of the start-up of the constructed wetlands.
- 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:
- 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 domestic water sources contributing to 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 municipal discharge. Alternative plans should include:
 - (a) Description of system salt sources and alternative means of control; and
 - (b) 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:
 - (a) 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;
 - (b) Costs per ton of salt removed from discharge of each alternative plan;
 - (c) Capability of minimizing the salt discharge;
 - (d) A proposed value for the practical incremental increase; and
 - (e) 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.**

- i. Federal regulations for storm water discharges require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.
- ii. 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.
 - (1) 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.
 - (2) Storm water discharges from the facilities shall not cause or threaten to cause pollution or contamination.
 - (3) 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 developed a compliance plan (CP) for priority pollutants that was submitted to the Regional Board on April 15, 2005. The CP identified the measures that will be taken to reduce the concentrations of copper, lead, selenium, zinc and free cyanide in their discharge. The Discharger shall implement the developed CP to achieve compliance with Effluent Limitations and Discharge Specifications No. IV.A.1.c in this Order and shall submit annual progress reports due by August 1 of each year through year 2010 that summarize the status of the proposed pollutant minimization and action plan, as listed below:

Year(s)	Proposed Pollutant Minimization and Action Plan Schedule
1 & 2	Source reduction and evaluation thru the established pretreatment program
	Data acquisition on the priority pollutants identified
	Evaluation and analysis of data by staff and consulting firms
	Research types of available funding, including 1) Sludge handling facilities; and 2) Chemical injection/coagulants
	Wetland design, construction and startup
3 & 4	Funding acquisition/allocation
	Design and engineering of sludge handling facilities
5	Construction and startup of sludge handling facilities
	Startup of primaries with coagulant to minimize priority pollutants identified

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

The goal of the PMP shall be to reduce all potential sources of priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentrations at or below the water quality-based effluent limitations specified in Sections IV.A.1.c and IV.A.2.a of this Order. The PMP shall include, but not limited to, the following actions and submittals acceptable to the Regional Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
- iii. Implementation of appropriate cost-effective control measures consistent with the control strategy;

- iv. An annual status report that shall be sent to the Regional Water Board at the same time the annual summary report is submitted in accordance with section X.B.1 of MRP in Attachment D and include:
 - (1) All PMP monitoring results for the previous year
 - (2) A list of potential sources of copper, lead, selenium, zinc and cyanide
 - (3) A summary of all actions undertaken pursuant to the control strategy
 - (4) A description of actions to be taken in the following year.

5. Construction, Operation and Maintenance Specifications

a. Aeration Lagoons and FWS Constructed Wetlands

- i. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all aeration lagoons.
- ii. Aerated lagoons and constructed wetlands shall be managed to control breeding of flies, mosquitoes, and other vectors of public health significance, in particular:
 - (1) An erosion control program shall 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. On-site wastes, including windblown spray from recycled water applications, 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.
- iv. 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

- i. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
- ii. **Spill Response Plan.** The Discharger shall review and update its current Spill Response Plan (SRP), as needed, or develop a SRP and submit a copy of the SRP to the Water Board within 60 days after the effective date of this Order. Thereafter, the plan shall be updated annually, and shall be available for staff review during Water Board inspections. The Discharger shall ensure that all operational personnel are familiar with the content of the SRP. A copy of the SRP shall be maintained at the site and shall be accessible to all operating personnel.
- iii. The discharger shall, at all times, properly operate and maintain all systems and components of treatment system 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. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.

6. Special Provisions for Municipal Facilities

a. Sludge Disposal Requirements

- i. The discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Regional Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste materials using an alternative method.
- ii. The discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type, use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Board Order. The sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses should be submitted to the Regional Board as part of the Monitoring and Reporting Program.
- iii. The Discharger shall obtain prior written approval from the Water Board specifying location and method of disposal before disposing of Class B or lesser quality sludge, or similar solid waste materials. In addition, the discharger shall provide the results of any sludge analyses as specified by the Water Board's Executive Officer.
- iv. All sludge generated at the wastewater treatment plant will be disposed, treated, or applied to land in accordance with Federal Regulations 40 CFR 503.
- v. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Resources Control Board and Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Water Board's Executive Officer.

b. Pretreatment Program

- i. In the event that there are industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment plant or the Regional Board or its Executive Officer determines that circumstances warrant pretreatment requirements in order to prevent Interference [40 CFR 403.3(j)] with the wastewater treatment facility or Pass Through [40 CFR 403.3(n)], then:
 - (1) The Discharger shall notify the Regional Board within 30 days after there are discharges that trigger the pretreatment requirements.
 - (2) The Discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Regional Board's review and approval as soon as possible but not more than one year after Discharger's notification to Regional Board of pretreatment requirements.
 - (3) The Discharger shall enforce the federal categorical pretreatment standards on all Categorical Industrial Users (CIUs).
 - (4) The Discharger shall notify the CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 CFR Part 400 – 699). The Discharger may develop more stringent, technology-based local limit if it can show cause.
 - (5) The Discharger shall notify the RWQCB if the CIU violates its discharge effluent limits.

- ii. The Discharger shall provide the Regional Board with an annual report describing the pretreatment program activities over the previous 12-month period. The report shall be transmitted to the Regional Board office no later than January 15 of each year and include:
 - (1) A summary of actions taken by the Discharger, which ensures industrial-user compliance;
 - (2) An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
 - (3) The name and address of each user that received a revised discharge limit.
- iii. The Regional Board retains the right to take legal action against an industrial user and/or the Discharger where a user fails to meet the approved applicable pretreatment standards
- c. Combined Sewer Overflows (CSOs) – Not Applicable
- d. Sanitary Sewer Overflows/Collection Systems – Not Applicable

7. Other Special Provisions

- a. No changes in the type or amount of treatment chemicals added to the process water as described in Finding No. II.B of this Board Order shall be made without the written approval of the Water Board's Executive Officer.
- b. The Discharger shall use the best practical cost effective control technique currently available to limit mineralization to no more than a reasonable increment approved by the 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 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:
 - i. 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.
 - ii. 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. 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 (as described in Special Provisions Section VI.C.4.c of this Order), the Discharger shall not be deemed out of compliance.

ATTACHMENT A – DEFINITIONS

20°C CBOD₅: 5-day carbonaceous biochemical oxygen demand at 20°C.

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

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

Daily Discharge: the total mass of the constituent discharged over the day for a constituent with limitations expressed in units of mass or the arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

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): the highest allowable daily discharge of a pollutant over a calendar day.

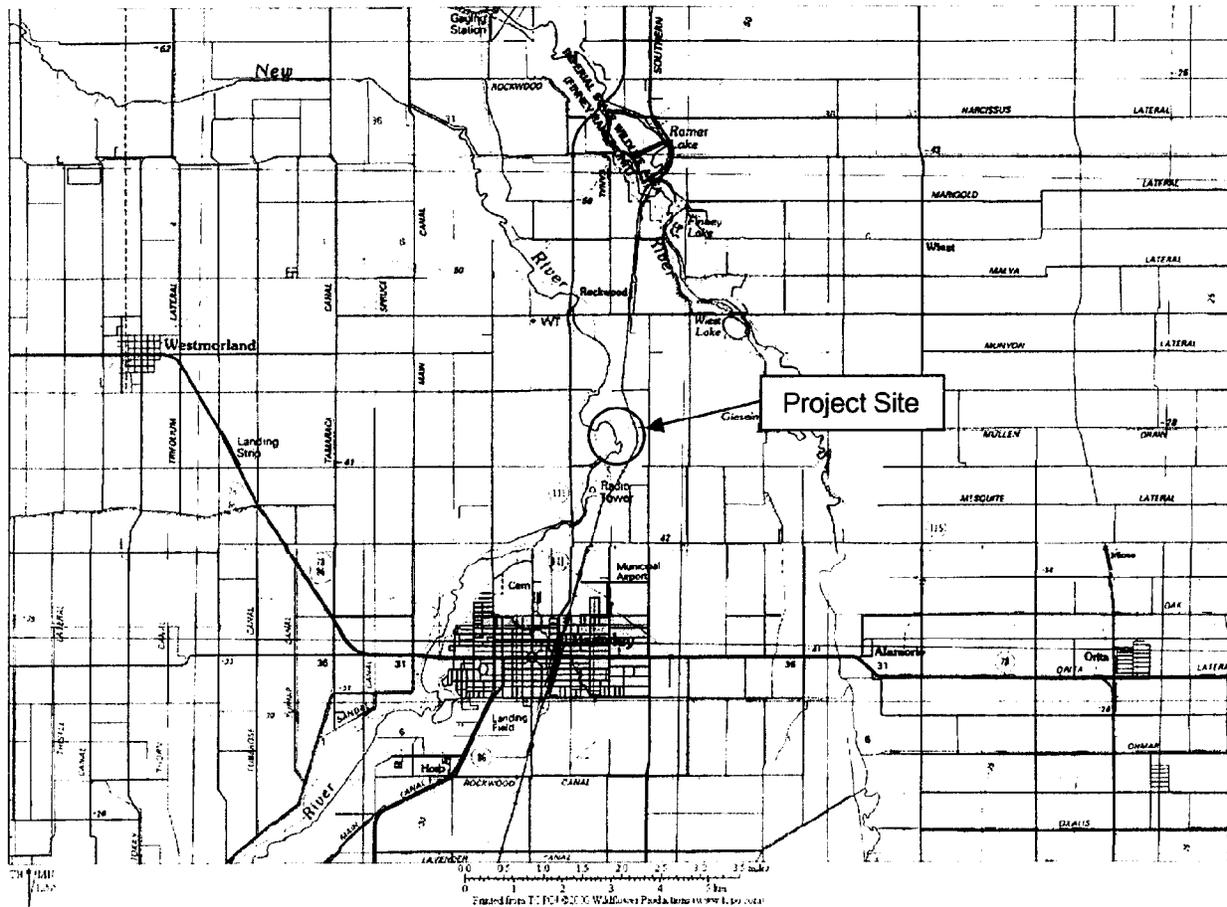
µg/L: micrograms per liter.

mg/L: milligrams per liter.

mg/kg: milligrams per kilogram.

MGD: million gallons per day.

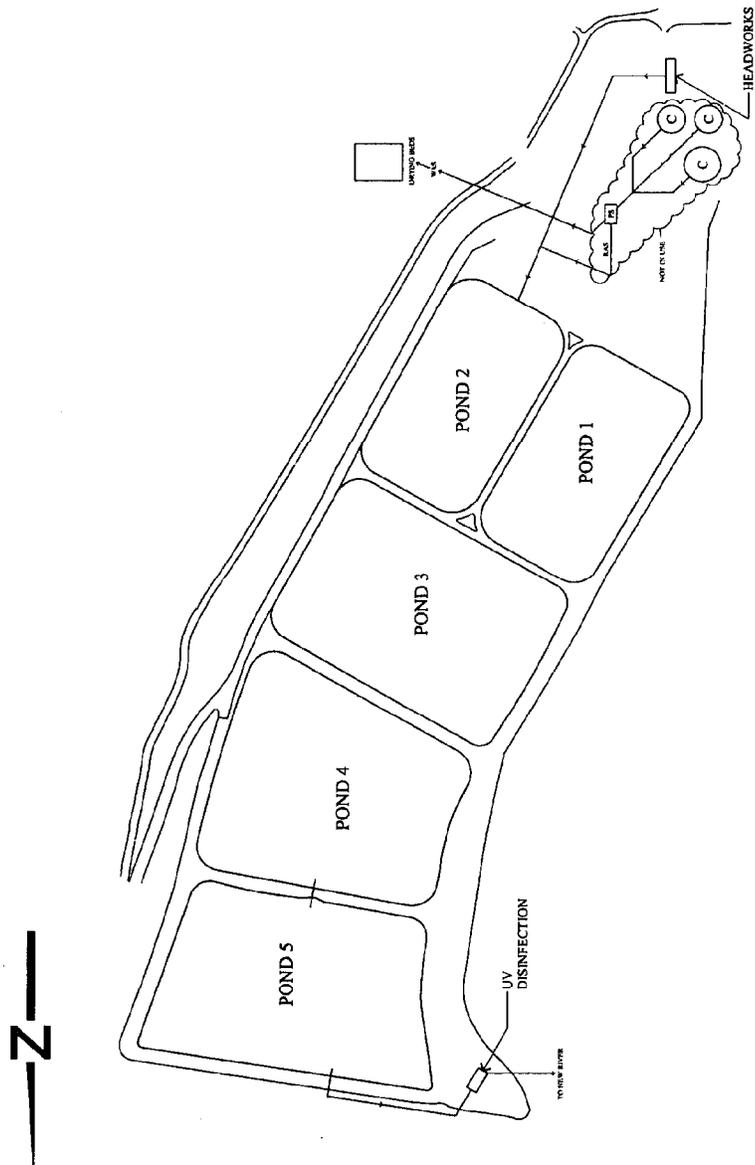
ATTACHMENT B – LOCATION MAP



CITY OF BRAWLEY, OWNER/OPERATOR
CITY OF BRAWLEY WASTEWATER TREATMENT PLANT
Brawley - Imperial County
Facility Location – SW ¼ of Section 15, T13S, R14E, SBB&M
Discharge to the New River – N 33° 01' 20" W 115° 31' 00"

Board Order No. R7-2005-0021

ATTACHMENT C.1 – SCHEMATIC OF WASTEWATER TREATMENT PLANT

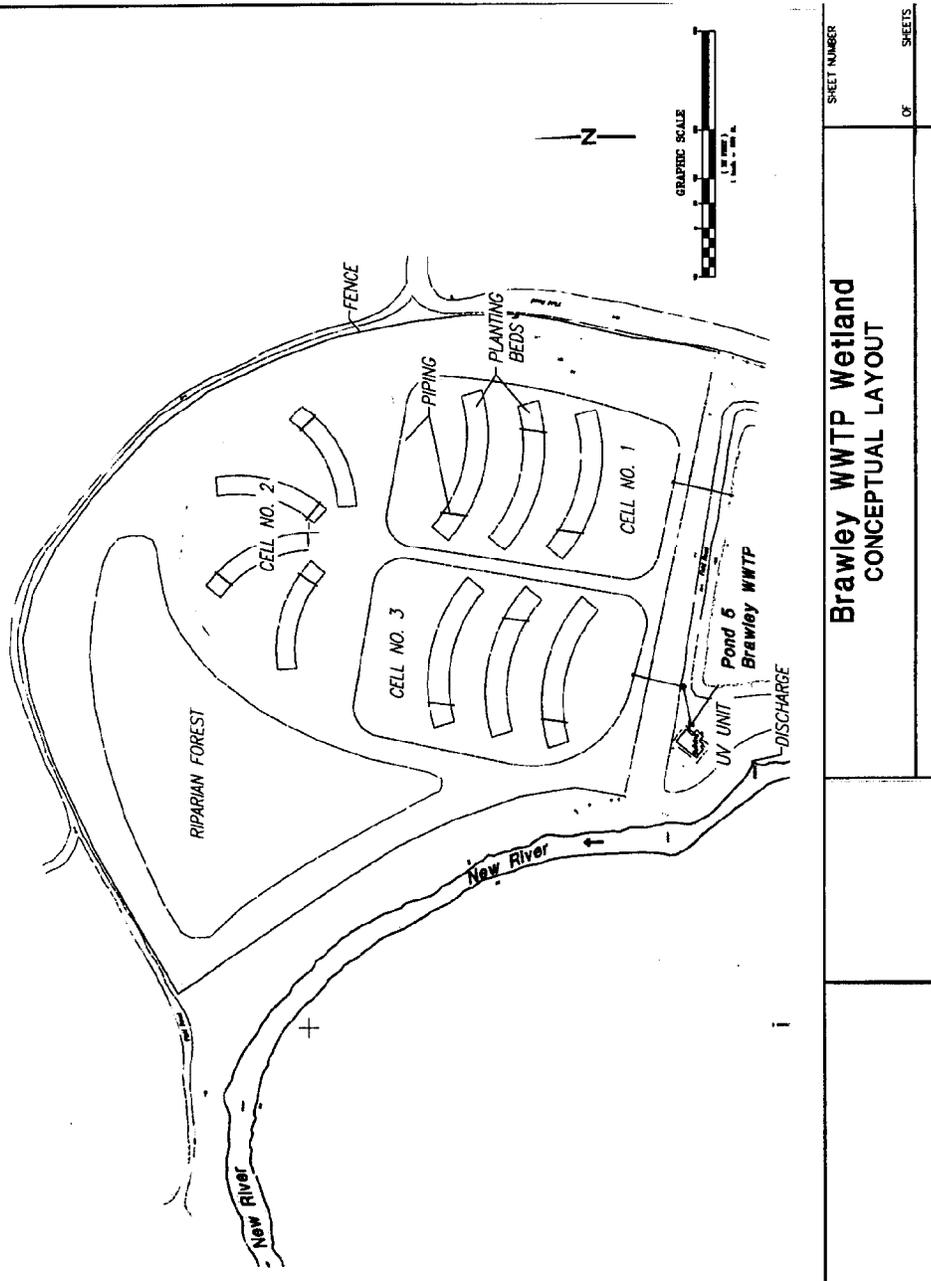


SHEET NUMBER	OF	SHEETS
BRAWLEY WWTP WETLAND Existing Wastewater Treatment Facility		

CITY OF BRAWLEY, OWNER/OPERATOR
 CITY OF BRAWLEY WASTEWATER TREATMENT PLANT
 Brawley - Imperial County
 Facility Location – SW ¼ of Section 15, T13S, R14E, SBB&M
 Discharge to the New River – N 33° 01' 20" W 115° 31' 00"

Board Order No. R7-2005-0021

ATTACHMENT C.2 – SCHEMATIC OF PROPOSED FWS CONSTRUCTED WETLANDS



CITY OF BRAWLEY, OWNER/OPERATOR
 CITY OF BRAWLEY WASTEWATER TREATMENT PLANT
 Brawley - Imperial County
 Facility Location – SW ¼ of Section 15, T13S, R14E, SBB&M
 Discharge to the New River – N 33° 01' 20" W 115° 31' 00"

Board Order No. R7-2005-0021

ATTACHMENT D – FEDERAL STANDARD PROVISIONS

I. FEDERAL STANDARD PROVISIONS

A. Standard Provisions – Permit Compliance

1. Duty to Comply

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

2. 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)]

3. 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)]

4. 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)]

5. Property Rights

- a. This Order does not convey any property rights of any sort or any exclusive privileges. [40 CFR §122.41(g)]
- b. 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)]

6. Inspection and Entry

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

- a. 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)];
- b. 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)];
- c. 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)];
- d. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. [40 CFR §122.41(i)(4)]

7. Bypass

a. Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. [40 CFR §122.41(m)(1)(i)]
- (2) "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)]

b. 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 A.7.c. and A.7.e below [40 CFR §122.41(m)(2)]

c. Prohibition of bypass – Bypass is prohibited, and the Regional Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; [40 CFR §122.41(m)(4)(A)];
- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; [40 CFR §122.41(m)(4)(B)]; and

- (3) The Discharger submitted notice to the Regional Board as required under Standard Provision A.7.e below. [40 CFR §122.41(m)(4)(C)]
- d. The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance A.7.c. above. [40 CFR §122.41(m)(4)(ii)]
- e. Notice
 - (1) 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)]
 - (2) Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting E.5. below. [40 CFR §122.41(m)(3)(ii)]

8. Upset

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

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 8.b of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. [40 CFR §122.41(n)(2)]
- b. 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)]:
 - (1) An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
 - (2) The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
 - (3) The Discharger submitted notice of the upset as required in Standard Provisions – Reporting E.5.b(2). [40 CFR §122.41(n)(3)(iii)]; and
 - (4) The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance A.3. above. [40 CFR §122.41(n)(3)(iv)].
- c. 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)].

B. Standard Provisions – Permit Action

1. 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)]

2. 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)]

3. Transfers

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

C. Standard Provisions – Monitoring

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

D. Standard Provisions – Records

1. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board Executive Officer at any time. [40 CFR §122.41(j)(2)]
2. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
 - b. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
 - c. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
 - d. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];

- e. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
 - f. The results of such analyses [40 CFR §122.41(j)(3)(vi)]
3. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:
- a. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)];
 - b. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

E. Standard Provisions – Reporting

1. Duty to Provide Information

The Discharger shall furnish to the Regional Board, SWRCB, or U.S. EPA within a reasonable time, any information which the Regional Board, SWRCB, or U.S. EPA 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 Board, SWRCB, or U.S. EPA copies of records required to be kept by this Order. [40 CFR §122.41(h)] [CWC 13267]

2. Signatory and Certification Requirements

- a. All applications, reports, or information submitted to the Regional Board, SWRCB, and/or U.S. EPA shall be signed and certified in accordance with paragraph (b) and (c) of this provision. [40 CFR §122.41(k)]
- b. All permit applications shall be signed as follows:
 - (1) For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. [40 CFR §122.22(a)(1)]
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; [40 CFR §122.22(a)(2)] or
 - (3) For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). [40 CFR §122.22(a)(3)]

- c. All reports required by this Order and other information requested by the Regional Board, SWRCB, or U.S. EPA shall be signed by a person described in paragraph (b) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in paragraph (b) of this provision [40 CFR §122.22(b)(1)];
 - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position); [40 CFR §122.22(b)(2)] and,
 - (3) The written authorization is submitted to the Regional Board, SWRCB, or U.S. EPA. [40 CFR §122.22(b)(3)]
- d. If an authorization under paragraph (c) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (c) of this provision must be submitted to the Regional Board, SWRCB or U.S. EPA prior to or together with any reports, information, or applications, to be signed by an authorized representative. [40 CFR §122.22(c)]
- e. Any person signing a document under paragraph (b) or (c) of this provision shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” [40 CFR §122.22(d)]

3. Monitoring Reports

- a. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order. [40 CFR §122.41(l)(4)]
- b. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Board or SWRCB for reporting results of monitoring of sludge use or disposal practices. [40 CFR §122.41(l)(4)(i)]
- c. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Board. [40 CFR §122.41(l)(4)(ii)]

- d. 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)]

4. 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)]

5. Twenty-four Hour Reporting

- a. 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)]
- b. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
 - (1) Any unanticipated bypass that exceeds any effluent limitation in this Order. [40 CFR §122.41(l)(6)(ii)(A)]
 - (2) Any upset that exceeds any effluent limitation in this Order. [40 CFR §122.41(l)(6)(ii)(B)]
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours. [40 CFR §122.41(l)(6)(ii)(C)]
- c. The Regional 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)]

6. Planned Changes

The Discharger shall give notice to the Regional 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)]:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); [40 CFR §122.41(l)(1)(i)] or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions - Notification Levels G.1.a) [40 CFR §122.41(l)(1)(ii)]

- c. 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)]

7. Anticipated Noncompliance

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

8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Provision E.5. [40 CFR §122.41(l)(7)]

9. 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 Board, SWRCB, or U.S. EPA, the Discharger shall promptly submit such facts or information. [40 CFR §122.41(l)(8)]

F. Standard Provisions – Enforcement

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

\$2,000,000 for second or subsequent convictions. [40 CFR §122.41(a)(2)] [CWC Sections 13385 and 13387]

2. Any person may be assessed an administrative penalty by the Regional Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000. [40 CFR §122.41(a)(3)]
3. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. [40 CFR §122.41(j)(5)].
4. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. [40 CFR §122.41(k)(2)]

G. Additional Provisions – Notification Levels

1. Non-Municipal Facilities

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

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
 - (1) 100 micrograms per liter ($\mu\text{g/L}$) [40 CFR §122.42(a)(1)(i)];
 - (2) 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
 - (4) The level established by the Regional Board in accordance with 40 CFR §122.44(f). [40 CFR §122.42(a)(1)(iv)]
- b. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:

- (1) 500 micrograms per liter ($\mu\text{g/L}$) [40 CFR §122.42(a)(2)(i)];
- (2) 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
- (3) Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
- (4) The level established by the Regional Board in accordance with 40 CFR §122.44(f). [40 CFR §122.42(a)(2)(iv)]

2. Publicly-owned Treatment Works

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

- a. 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
- b. 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)]
- c. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. [40 CFR §122.42(b)(3)]

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (CFR) at 40 CFR § 122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Quality Control Board to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements to 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," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)
- C. Unless otherwise approved by the Regional 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 Monitoring and Reporting Program.
- 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 demonstration compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	M-INF	Wastewater influent to the treatment facilities
001	M-001A	Representative sample from the total combined effluent wastewater flow prior to discharge from Discharge Point 001; 33 °, 01', 20" N Latitude and 115 °, 31', 00" W Longitude (located at the end of the UV disinfection system)
--	M-001B	FWS constructed wetland bottom sediment
--	R-001	Receiving water monitoring location not to exceed 100 feet upstream from the point of discharge.
--	R-002	Receiving water monitoring location not to exceed 200 feet downstream of the discharge pipe outlet at a point where the plume would be expected.
--	S-001	Sludge removed for disposal

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-INF

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

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
BOD 5-day 20°C	mg/L	24-Hr. Composite	1x/Week	¹
Total Suspended Solids (TSS)	mg/L	24-Hr. Composite	1x/Week	¹
Total Ammonia as Nitrogen	mg/L	24-Hr. Composite	1x/Week	¹
Oil and Grease	mg/L	Grab	1x/Month	¹
Selenium	µg/L	Grab	1x/Quarter	¹

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

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

- The Discharger shall monitor the effluent wastewater from the facility at M-001A as follows:

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Daily Effluent Discharge	MGD	Flow Meter Reading	1x/Day ¹	
Hydrogen Ion (pH)	pH units	Grab	1x/Day ³	²
Temperature	°F	Grab	1x/Day ³	²
Dissolved Oxygen	mg/L	Grab	1x/Day ³	²
Total Suspended Solids (TSS)	mg/L	24-Hr. Composite	2x/Week	²
20°C BOD ₅	mg/L	24-Hr. Composite	2x/Week	²

Escherichia Coli (E. Coli)	MPN	Grab	5x/Month	⁴
Nitrates as Nitrogen (N)	mg/L	24-Hr. Composite	1x/Week	²
Nitrites as N	mg/L	24-Hr. Composite	1x/Week	²
Total Ammonia as N	mg/L	24-Hr. Composite	1x/Week	²
Total Nitrogen as N	mg/L	24-Hr. Composite	1x/Week	²
Copper ⁵	µg/L	Grab	1x/Month	²
Lead ⁵	µg/L	Grab	1x/Month	²
Selenium	µg/L	Grab	1x/Month	²
Zinc ⁵	µg/L	Grab	1x/Month	²
Free Cyanide	µg/L	Grab	1x/Month	²
Total Dissolved Solids (TDS)	mg/L	24-Hr. Composite	1x/Month	²
Oil and Grease	mg/L	Grab	1x/Month	²
Total Phosphate as Phosphorus (P)	mg/L	24-Hr. Composite	1x/Month	²
Hardness (as CaCO ₃)	mg/L	Grab	1x/Month	²
Sulfates	mg/L	24-Hr. Composite	1x/Quarter	²
Chloride	mg/L	24-Hr. Composite	1x/Quarter	²
Volatile Organic Compounds	µg/L	Grab	1x/Quarter	EPA Methods 624 and 625
Selenium	µg/L	Grab	1x/Quarter	²
Priority Pollutants ⁶	µg/L	Grab	1x/year	²

- 1 Report total daily flow.
- 2 Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.
- 3 Five samples per week shall be collected.
- 4 The discharger may monitor for E. coli using analytical methods, Standard Method 9221.F or 9223, (APHA. 1998, 1995, 1992. Standard Methods for the Examination of Water and Wastewater. American Public Health Association, 20th, 19th and 18th Editions. Amer. Publ. Hlth. Assoc., Washington, D.C.).
- 5 Measured and reported as total recoverable.
- 6 Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment H.

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 final effluent discharged to the New River at monitoring point M-001A as follows:

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

1 Chronic Toxicity Units

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

3 Acute Toxicity Units

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:

Species	Effect	Test Duration (days)	Reference ^{1,2}
Fathead Minnow (<i>Pimephales promelas</i>)	Larval Survival and Growth	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 (Acute)
Water Flea (<i>Ceriodaphnia dubia</i>)	Survival and Reproduction	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 (Acute)

¹ Additional references listed in Attachment E, MRP Section V.A.4

² Acute Bioassay results can be calculated from chronic bioassay tests.

4. Toxicity Test References for Conduction Toxicity Tests

- a. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA/821-R-02-012, October, 2002 or subsequent editions.
- b. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October, 2002 or subsequent editions.

B. Quality Assurance

1. Dilution and control waters may be obtained from an unaffected area of receiving waters. Synthetic (standard) dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 TU_c.
2. A series of at least five dilutions and a control shall be tested for chronic toxicity testing and may be used for acute toxicity testing. The series shall include the following concentrations: 12.5, 25, 50, 75, and 100 percent effluent.
3. For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an LC50).
4. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
5. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the permittee must re-sample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger receives the test results that indicate retesting is needed and ends when the Discharger collects the first sample required to complete the retest.

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

C. Accelerated Monitoring Requirements

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

Any chronic toxicity test that exceeds 2 chronic toxicity units (TU_c) or a three (3)-sample median¹¹ (consecutive samples) that exceeds 1 TU_c shall trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity shall trigger an accelerated monitoring frequency. High acute toxicity is defined as follows:

- a. Less than 80% survival when acute toxicity is calculated from results of the chronic toxicity test (only for *Pimephales promelas*), or
- b. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test, or
- c. Results of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.

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

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

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

D. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations

1. A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
 - a. Two of the three accelerated chronic toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, Section V.C; or
 - b. Two of the three acute toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, Section V.C.
 - c. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
 - d. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

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

2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:
 - a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);
 - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);
 - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a);
 - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b);
3. As part of the TIE investigation, the Discharger shall be required to implement its Toxicity Reduction Evaluation (TRE) workplan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:
 - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002;
 - b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

E. Definition of Toxicity

1. Chronic toxicity measures sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms.
2. Chronic toxicity shall be measured in TU_c , where $TU_c = 100/NOEC$. The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significantly different from the controls).
3. Acute toxicity is a measure of primarily lethal effects that occur over a ninety-six (96) hour period. Acute toxicity for *Pimephales promelas* can be calculated from the results of the chronic toxicity test for *Pimephales promelas* and reported along with the results of each chronic test. Acute toxicity for *Ceriodaphnia dubia* cannot be calculated from the results of the chronic toxicity test for *Ceriodaphnia dubia* because the test design is not amenable to calculation of a lethal concentration (LC50) value as needed for the acute requirement.
4. Acute toxicity shall be measured in TU_a , where $TU_a = 100/LC50$ or as pass/fail using a t-test. LC50 is the toxicant concentration that would cause death in 50 percent of the test organisms.

F. Reporting

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

2. If a Toxicity Identification Evaluation (TIE) is conducted the Discharger shall submit the results of the TIE with the discharge monitoring reports for the month in which the final report is completed.
3. If the Toxicity Reduction Evaluation (TRE) Workplan has been initiated, the Discharger shall report on the progress of the actions being taken and include this information with each monthly monitoring report.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. MONITORING LOCATION M-001B

- 1 The Discharger shall monitor the bottom sediment of the FWS constructed wetland treatment cells as follows:

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Selenium	mg/kg	Composite ¹	1x/Quarter	²

1 The Discharger shall composite several grab samples collected from recently deposited bottom sediment from sites within the Wetland cells that have lower hydrologic energy. The Discharger shall establish sampling locations near the inlets and outlets of the Wetland Cell Nos. 1, 2 and 3. Samples shall be collected from the established sampling location in a consistent manner.

2 Selenium shall be analyzed using an approved analytical method listed in EPA Publication SW-846, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods"

VII. RECLAMATION MONITORING REQUIREMENTS -NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location R-001 Upstream Receiving Water Sampling Point

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

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Temperature	°F	Grab	1x/Month	1
Dissolved Oxygen	mg/L	Grab	1x/Month	1
pH	pH units	Grab	1x/Month	1
Hardness (CaCO ₃)	mg/L	Grab	1x/Month	1
Nitrates as Nitrogen (N)	mg/L	Grab	1x/Month	1
Total Ammonia as N	mg/L	Grab	1x/Month	1
Total Nitrogen as N	mg/L	Grab	1x/Month	1
Total Phosphorus (P)	mg/L	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 sections 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

2 Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment H.

B. Monitoring Location R-002 Downstream Receiving Water Sampling Point

1. The Discharger shall monitor the New River at R-002 as follows. In the event that no receiving water is present at station R-001, no receiving water monitoring data is required for station R-002:

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Temperature	°F	Grab	1x/Month	1
Dissolved Oxygen	mg/L	Grab	1x/Month	1
pH	pH units	Grab	1x/Month	1
Hardness (CaCO ₃)	mg/L	Grab	1x/Month	1
Nitrates as Nitrogen (N)	mg/L	Grab	1x/Month	1
Total Ammonia as N	mg/L	Grab	1x/Month	1
Total Nitrogen as N	mg/L	Grab	1x/Month	1
Total Phosphorus (P)	mg/L	Grab	1x/Month	1

1 Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given 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 R-001 and R-002. In the event that receiving water is present at station R-001, no receiving water monitoring data is required for stations R-001 and R-002. Notes on receiving water conditions shall be summarized in the monitoring report. Attention shall be given to the presence or absence of:
 - a. Floating or suspended matter
 - b. Discoloration
 - c. Aquatic life (including plants, fish, shellfish, birds)
 - d. Visible film, sheen or coating
 - e. Fungi, slime, or objectionable growths
 - f. Potential nuisance conditions

D. Monitoring Location Groundwater [Not Applicable]

IX. OTHER MONITORING REQUIREMENTS

A. Water Supply Monitoring

The Discharger is required to obtain or acquire quarterly 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.f of the Order.

B. Monitoring Location S-001 Sludge Monitoring

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

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

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. Operation and Maintenance

1. 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

D. Pretreatment Monitoring - Not applicable

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. At any time during the term of this permit, the State or Regional Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.
2. The Discharger shall comply with all Standard Provisions (Attachment D) relating to monitoring, reporting and recordkeeping.
3. The discharger shall report the results of acute and chronic toxicity testing, TRE and TIE as required in the previous section entitled, "Effluent Toxicity Testing".
4. The results of any analysis take, more frequently than required at the locations specified in this Monitoring and Reporting Program shall be reported to the Regional Water Board.

B. Self Monitoring Reports

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

Sampling Frequency	Monitoring Period Starts On...	Monitoring Period	Reporting Due with SMR on...
Continuous	June 30, 2005	All	First day of second month following month of sampling
1 / day	June 30, 2005	Calendar day (Midnight through 11:59 PM)	First day of second month following month of sampling
1 / week	July 3, 2005	Sunday through Saturday	First day of second month following month of sampling
2 / week	July 3, 2005	Sunday through Saturday	First day of second month following month of sampling
1 / month	July 1, 2005	1 st day of calendar month through last day of calendar month	First day of second month following month of sampling
1 / quarter	July 1, 2005	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1 / year	January 1, 2006 ¹	January 1 through December 31	February 1

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

3. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the laboratory current Method Detection Limit (MDL) as determined by the procedure in 40 CFR Part 136.
4. The Discharger shall arrange all reported data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
5. The Discharger shall attach a cover letter to its Self Monitoring Report. 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 of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.

6. 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:

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

C. Discharge Monitoring Reports (DMRs)

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

Submit monitoring reports to:
State Water Resources Control Board Discharge Monitoring Report Processing Center Post Office Box 671 Sacramento, CA 95812

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

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Attachment F – Fact Sheet

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

WDID	7A 13 0100 011
Discharger	City of Brawley
Name of Facility	City of Brawley WWTP
Facility Address	1550 Best Road
	Brawley, CA 92227
	Imperial County
Agency Mailing Address	180 South Western Avenue
	Brawley, CA 92227
	Imperial County
Billing Address	400 Main Street
	Brawley, CA 92227
	Imperial County
Facility Contact, Title and Phone	Ruben Mireles, Superintendent of Operation, (760) 344-5803
Authorized Person to Sign and Submit Reports	Ruben Mireles
Type of Facility	POTW
Classification	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	User Onsite
Facility Permitted Flow	5.9 MGD
Facility Design Flow	5.9 MGD
Watershed	West Colorado River Basin
Waterbody	New River
Receiving Water Type	Drain

The City of Brawley (hereinafter Discharger) is the owner and operator of the City of Brawley wastewater treatment plant (hereinafter Facility).

The Facility discharges wastewater to the New River, a water of the United States and is currently regulated by 00-087 which was adopted on June 28, 2005. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on February 17, 2005. Order 00-014 was scheduled to expire on June 28, 2005 but was administratively extended upon receipt of the completed report of waste discharge.

II. FACILITY DESCRIPTION

A. Description of Wastewater Treatment or Controls

1. The City of Brawley owns the wastewater collection, treatment and disposal system (hereinafter referred to as facility) and provides sewerage service to the City of Brawley, a population of approximately 29,000. The wastewater treatment plant has a treatment capacity of 5.9 million gallons-per-day (MGD) and is located in the SW ¼ of Section 15, T13S, R14E, SBB&M.
2. The Discharger owns and operates the wastewater treatment plant (WWTP). The total design capacity of the WWTP is 5.9 MGD. The WWTP consists of a lagoon system. The treatment system is comprised of a headworks system, three primary clarifiers, five treatment ponds, an ultraviolet light (UV) disinfection system, and sludge drying beds. As a result of equipment degradation, the facility demolished their two steel egg-shaped anaerobic digesters in 2002. Pursuant to the removal of the sludge digesters, the primary clarifiers have not been in operation since 2002. The headworks system consists of bar screens, a vortex grit chamber and a flow splitter box. Four of the five ponds are aerated by mechanical turbine aerators, and the final pond is aerated by Solar Bee mixers. Effluent from the existing lagoon system is disinfected with a UV disinfection system prior to discharge to the New River, a water of the United States.
3. The discharger owns and operates the wastewater collection system, which provides conveyance of raw wastewater to the treatment facility. The collection system contains both combined and separate sanitary sewer lines.

B. Discharge Points and Receiving Waters

1. The final effluent is discharged to the New River. The New River conveys the effluent to the Salton Sea. The permitted average monthly flow limitation is equal to the design capacity of the wastewater treatment plant, 5.9 MGD.
2. The discharge consists of disinfected secondary treated domestic wastewater.

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

1. Effluent limitations/Discharge Specifications contained in the existing Order for discharges from the facility and representative monitoring data from the term of the previous Order are as follows:

Constituent (units)	Effluent Limitation			Monitoring Data (From July 2000 to January 2005)		
	Average Monthly	Average Weekly	Maximum Daily	Maximum Average Monthly Discharge	Maximum Average Weekly Discharge	Maximum Daily Discharge
Discharge Flow (MGD)	--	--	5.9	3.85	--	6.7
BOD @ 20°C (mg/L)	45	65	--	47.8	65	--
Total Suspended Solids (TSS) (mg/L)	95	--	--	48.0	69	--
pH (pH units)	--	--	6.0 – 9.0	7.1 – 8.6 ¹	--	6.6 – 8.8 ¹
Fecal Coliform ² (MPN)	200	--	400 ³	68	--	500
Percent Removal, BOD (%)	65	--	--	58.9 ⁴	--	--
Percent Removal, TSS (%)	65	--	--	52.7 ³	--	--

- 1 This represents the range of reported values of pH.
- 2 This represents the geometric mean of the monitoring data collected from October 2002 through January 2005
- 3 Ten (10) percent of the total samples collected during the average monthly period shall not exceed 400 MPN
- 4 This value represents the minimum reported value of percent removal of the pollutant.

2. The Report of Waste Discharge described the discharge as follows:

Annual Average Effluent Flow – 3.47 MGD
 Maximum Average Monthly Effluent Flow – 3.82 MGD

3. The Report of Waste Discharge described the effluent characteristics as follows:

Constituent (units)	Annual Average	Lowest Monthly Average	Highest Monthly Average
Flow (MGD)	3.47	3.10	3.82
pH (pH Units)	--	7.10	7.72
Temperature, Winter (°F)	64	57	71
Temperature, Summer °F	78	71	84
Fecal Coliform (MPN/100 ml)	--	--	128
BOD 5-day (mg/L)	26.8	14.6	48
Total Dissolved Solids (mg/L)	1289	1164	1590
Total Suspended Solids (mg/L)	20	12	34
Settleable Matter (ml/L)	< 0.1	< 0.1	< 0.1
Ammonia as Nitrogen (mg/L)	13.6	0.56	29.1
Nitrate as Nitrogen (mg/L)	12.2	2.8	36.4
Nitrite as Nitrogen (mg/L)	3.3	0.31	14.4
Total Phosphorus as Phosphorus (mg/L)	4.2	3.3	7.8

D. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger for the period from July 2000 through September 2004, the wastewater discharged from the wastewater treatment facility was in chronic violation of the effluent limitations for toxicity established in Order No. 00-087 for the aerated lagoon treatment system. The Discharger completed two Toxicity Identification Evaluations (TIEs) in 2001 and 2002 to evaluate the cause of the observed effluent acute and chronic toxicity. Ammonia was found to be the primary toxicant in the 2001 evaluation and was the source of all observed toxicity in the 2002 evaluation. The City of Brawley submitted a Toxicity Reduction Evaluation (TRE) evaluation on January 9, 2003, that addressed the cities plan to optimize the existing treatment system for ammonia reduction and to perform a comprehensive survey of the collection system as well as a plan to evaluate industrial and commercial businesses to determine the source of the high levels of observed ammonia. Through source evaluation, the city identified discharges to the cities collection system that were in noncompliance with the city's Pretreatment Ordinance, Ordinance No. 2001-08. Through plant optimization, the city provided an overall improvement in the quality of effluent discharged from the WWTP but on average, the effluent ammonia concentrations discharged from the WWTP remain high. The Water Board issued a Clean-up and Abatement Order (CAO), No. R7-2004-0079, on June 30, 2004. The CAO states that the Discharger has chronically failed the effluent acute bioassay tests over the last few years and corrective actions by the Discharger were necessary in order for the discharge from the WWTP to comply with the requirements of Order No. 00-087. The CAO requires the Discharger to design and construct upgrades to the WWTP by February 1, 2007 in order to comply with their NPDES permit. An overview of the planned changes to the WWTP are summarized below in section E – Planned Changes.

The Discharger also exceeded the following effluent limitations during the period of July 2000 through September 2004: exceeded the 30-day average BOD₅ limitation four (4) times, reported less than the 30-day average percent removal effluent limitation for BOD₅ two (2) times and reported less than the 30-day average percent removal effluent limitation for TSS two (2) times.

E. Planned Changes

The City of Brawley has contracted with Nolte Associates, Inc. (Nolte) for the research, design and construction for improvements to the existing wastewater treatment facility. Improvements to the existing WWTP will include the reconfiguration of the existing treatment facilities flow distribution system and the installation of flow return pumps. The new pumping and piping system will be configured to optimize nitrification and denitrification of the wastewater flowing through the treatment system

The City of Brawley has also contracted with the Citizen's Congressional Task Force (Task Force) on the New River and Nolte to design and construct a Free Water Surface (FWS) constructed wetland. The FWS constructed wetland will receive undisinfecting equivalent to secondary effluent from the City of Brawley's existing WWTP and will provide enhanced treatment of the effluent from the treatment facility prior to discharge to the New River. The FWS constructed wetland will provide physical, chemical and biological treatment that will polish the effluent to further decrease the BOD, TSS and ammonia levels in the treated wastewater. The preliminary design and layout of the proposed FWS constructed wetland system consists of three lined wetlands ponds that will be operated in series. The FWS constructed wetland will have a series of deep open water and shallow emergent vegetated sections. The shallow sections will be planted with native, emergent wetland plant species. Effluent from the wetland system will be redirected to the existing WWTP's UV disinfection system prior to the discharge to the New River.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a National Pollutant Discharge Elimination System (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.

B. California Environmental Quality Act (CEQA)

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

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional 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 Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the New River are as follows::

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	New River	<u>Existing:</u> Freshwater Replenishment (FRESH), Industrial Service Supply (IND) ¹ , Water Contact Recreation (REC I) ² , Non-Contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD), Preservation of Rare, Threatened or Endangered Species (RARE) ³ .

¹ Potential Use

² Although some fishing occurs in the downstream reaches, the presently contaminated water in the river makes it unfit for any recreational use. An advisory has been issued by the Imperial County Health Department warning against the consumption of any fish caught from the river and the river has been posted with advisories against any body contact with the water.

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

2. **Thermal Plan.** The Thermal Plan does not apply to the New River.
3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These Rules include water quality criteria for priority pollutants and are applicable to this discharge.
4. **State Implementation Policy.** On March 2, 2000, State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through National Toxics Rule (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 requires that dischargers submit data sufficient to determine which priority pollutants require water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so.
5. **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 water quality is maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16..
6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 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.
7. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires all NPDES permits to specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the boards to require technical and monitoring reports. The Monitoring and Reporting Program section establishes monitoring and reporting requirements to implement federal and State requirements.
8. **Stormwater Requirements.**
 - a. Federal regulations for storm water discharges require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.
 - b. The State Water Resources Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit. 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.

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

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate. USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003.

The final discharge from the facility is discharged through Discharge Point 001 to the New River. The New River has been classified as impaired on the 2002 303(d) lists and has been scheduled for TMDL development. According to the 2002 303(d) list, the New River is impaired for pathogens, silt/ sedimentation, pesticides, dissolved organic matter/ dissolved oxygen, trash, Volatile Organic Compounds (VOCs), and nutrients. To date, no TMDL has been completed for pesticides, dissolved oxygen organic matter/ dissolved oxygen, trash, VOCs or nutrients. The New River Pathogen TMDL was adopted by the Regional Board on October 10, 2001, and approved by the State Board on March 21, 2002; it was also approved by the Office of Administrative Law on March 23, 2002, and approved by U.S. EPA on August 14, 2002. The New River Sedimentation/ Siltation TMDL was adopted by the Regional Board on June 26, 2002 and approved by the State Board on November 19, 2002; the document was approved on January 13, 2003 by the Office of Administrative Law, and approved by U.S. EPA on March 31, 2003. The New River Pathogen and Sedimentation/ Siltation TMDL are available at:

http://www.waterboards.ca.gov/coloradoriver/tmdl/TMDL_Status.htm

The New River Pathogen TMDL establishes WLAs for point source dischargers. The 30-day geometric mean and maximum daily WLAs for point source dischargers are summarized as follows: for *E. coli*, 126 MPN/100 mL and 400 MPN/100 mL, respectively; for Enterococci, 33 MPN/100 mL and 100 MPN/100 mL, respectively; and for Fecal coliforms, the 30-day geometric mean WLA is 200 MPN/100 mL, where no more than 10% of the total samples during any 30-day period shall exceed 400 MPN/100 mL. Achieving the target is expected to result in the subject drains being: (a) unimpaired by pathogens and, (b) protective of the beneficial uses. This Order establishes a monthly geometric mean and average daily effluent limitation of 126 MPN/100 mL and 400 MPN/100 mL, respectively, for *E. coli*.

The New River Sedimentation/ Siltation TMDL does not prescribe numeric targets for NPDES facilities discharging to the New River. The New River sedimentation/ siltation TMDL specifies that NPDES facilities contribute an insignificant sediment amount and negligible suspended solids amount (as measured by TSS) into the New River. This Order includes concentration and mass-based effluent limitations for TSS of 95mg/L and 4700 lbs/day (monthly average).

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations. Section 122.44(a) of 40 CFR requires that permits include applicable technology-based limitations and standards. Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information; or an indicator parameter.

Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, U. S. Environmental Protection Agency guidance and regulations, and best practicable waste treatment technology. While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. EPA NPDES Application Forms 1, 2A and 2S dated January 14, 2005.
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 the City of Brawley WWTP NPDES permit CA0104523.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, U. S. Environmental Protection Agency guidance and regulations, and best practicable waste treatment technology.

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

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

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

- b. Equivalent Secondary Treatment Standards. Following publication of the secondary treatment regulations, legislative history indicates that Congress was concerned that USEPA had not "sanctioned" the use of certain biological treatment techniques that were effective in achieving significant reductions in 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 Pub. L. 97-147] that required USEPA to provide allowance for alternative biological treatment technologies such as trickling filters or waste stabilization ponds. In response to this requirement, definition of secondary treatment was modified on September 20, 1984 and June 3, 1985, and published in the revised secondary treatment regulations contained in 40 CFR §133.105. These regulations allow alternative limitations for facilities using trickling filters and waste stabilization ponds that meet the requirements for "equivalent to secondary treatment." These "equivalent to secondary treatment" limitations are *up to* 45 mg/L (monthly average) and *up to* 65 mg/L (weekly average) for BOD₅ and TSS.

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

Furthermore, in order to address the variations in facility performance due to geographic, climatic, or seasonal conditions in different States, the Alternative State Requirements (ASR) provision contained in 40 CFR §133.105(d) was written. ASR allows States the flexibility to set permit limitations above the maximum levels of 45 mg/L (monthly average) and 65 mg/L (weekly average) for TSS from lagoons. However, before ASR limitations for suspended solids

can be set, the effluent must meet the BOD limitations as prescribed by 40 CFR §133.102(a). Presently, the maximum TSS value set by the State of California for lagoon effluent is 95 mg/L. This value corresponds to a 30-day consecutive average or an average over duration of less than 30 days.

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

- The principal treatment process must be either a trickling filter or waste stabilization pond.
- The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of 30 mg/L BOD₅ and TSS.
- Water quality is not adversely affected by the discharge.

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

2. Applicable Technology-Based Effluent Limitations

- a. 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-1 for the aeration lagoons. These effluent limitations have been carried over from the previous Order. The proposed Order requires the 30-day average percent removal for BOD₅ and TSS from the aeration lagoon treatment system shall not be less than 65%. Further, mass-based effluent limitations for the aeration lagoon system are based on a design flow rate of 5.9 MGD.
- b. This existing permit for this facility established a 30-day average effluent limitation for TSS based on Alternative State Requirements (95 mg/L). Regulations promulgated in 40 CFR §133.105(f) require the permitting agency to establish more stringent limitations when adjusting permits if the permitting authority determines that the 30-day average and 7-day average BOD₅ and TSS effluent values that could be achievable through proper operation and maintenance of the facility, based on an analysis of the past performance, would enable the facility to achieve more stringent limitations. The term, effluent concentrations consistently achievable through proper operation and maintenance of the facility, is defined in 40 CFR §133.101(f). Facility performance data for the aeration lagoon treatment system for the period from July 2000 through January 2005 indicate the facility can achieve more stringent effluent limitations for TSS. The average reported 30-day TSS values are summarized as follows: 30-day average TSS value was 22.7 mg/L, minimum 30-day reported TSS value was 11.0 mg/L, the maximum 30-day reported TSS value was 48 mg/L, and the standard deviation was 8.8 mg/L. The proposed Order establishes a 30-day average effluent limitation of 45 mg/L and a 7-day average effluent limitation of 65 mg/L for discharges from the aeration lagoon system, based on USEPA's minimum level of effluent quality attainable by equivalent to secondary treatment in terms of TSS. Further, the proposed Order requires the 30-day average percent removal for TSS from the aeration lagoon treatment system shall not be less than 65%. Mass-based effluent limitations for TSS are based on a design flow rate of 5.9 MGD.

c. Basis for Limitations

Constituents	Basis for Limitations
Biochemical Oxygen Demand (BOD ₅)	Discharges to waters that support aquatic life, that is dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down. Nitrifying bacteria consume oxygen to convert nitrogen to nitrate.
Total Suspended Solids (TSS)	High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A range specified between 6 to 9 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Region.
Total Dissolved Solids (TDS)	High levels of TDS can adversely impact aquatic life. The TDS limit has been adopted in the Basin Plan of the Region.
Toxicity	Toxicity testing ensures that the effluent does not contain metals, chemicals, pesticides, or other constituents in concentration toxic to aquatic life.
Escherichia Coli (E. Coli)	These limits are required by the Basin Plan for waters designated for water contact recreation (REC1) and by the New River Pathogen TMDL.
Flow	The design capacity of the treatment plant is 5.9 MGD.

Table F-1.
Summary of Technology-based Effluent Limitations for Aeration Lagoon Treatment System
Equivalent to Secondary Treatment Standards
Discharge Point 001 at Monitoring Location M-001A

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	5.9	--	--	--	--
BOD ₅	mg/L	45	65	--	--	--
	lbs/day	2,200	3,200	--	--	--
Total Suspended Solids	mg/L	45	65	--	--	--
	lbs/day	2,200	3,200	--	--	--
pH	standard units	--	--	--	6.0	9.0
Removal Efficiency for BOD and TSS	%	65	--	--	--	--

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

- a. Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Water Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States.
- b. The U.S. Environmental Protection Agency published the adopted California Toxics Rule (CTR) (40 CFR §131.38). The CTR promulgates new criteria for both human health protection and protection of aquatic life. New numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants are listed. In addition, the CTR contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Table F-3 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

**Table F-3
Applicable Beneficial Uses and Water Quality Criteria and Objectives**

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria				
			Freshwater		Saltwater		Human Health for Consumption of:
			Acute	Chronic	Acute	Chronic	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
2	Arsenic	36	340	150	69	36	
5a	Chromium (III)	644	5,400	644			
6	Copper	3.73	51.9	30.5	5.78	3.73	
7	Lead	8.52	477	18.6	221	8.52	
9	Nickel	8.28	1520	16.9	74.7	8.28	4,600
10	Selenium	5.00		5.00	291	71.1	
13	Zinc	85.6	388	388	95.1	85.6	
14	Free Cyanide	5.2	22.0	5.2			220,000
68	Bis(2-Ethylhexyl)Phthalate	5.9					5.9

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 and receiving water data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identified the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent, based on data provided by the Discharger.

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

- 1) Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.
- 2) Trigger 2 – If $MEC < C$ and background water quality (B) $> C$, a limit is needed.
- 3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient 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-4. Based on the RPA copper, lead, selenium, zinc and free cyanide demonstrated reasonable potential to cause or contribute to an excursion above a water quality standard.

**Table F-4
Summary Reasonable Potential Analysis**

CTR No.	Priority Pollutant	Applicable Water Quality Criteria (C)	Maximum Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result – Limit Required?	Reason
		µg/L	µg/L	µg/L		
2	Arsenic	36	ND	11	No	$B < C$
5a	Chromium (III)	644	28	21	No	$MEC \text{ and } B < C$
6	Copper	3.74	120	22	Yes	$MEC \text{ and } B > C$
7	Lead	8.52	680	11	Yes	$MEC \text{ and } B > C$
9	Nickel	8.28	ND	8	No	$MEC \text{ and } B < C$
10	Selenium	5.00	5	19	Yes	$MEC = C \text{ \& } B > C$
13	Zinc	85.6	2,550	109	Yes	$MEC \text{ and } B > C$
14	Free Cyanide	5.2	70	50	Yes	$MEC \text{ and } B > C$
68	Bis(2-Ethylhexyl)Phthalate	5.9	4.9	ND	No	$MEC < C$

4. WQBEL Calculations

- a. Water quality based effluent limits (final) are based on monitoring results and following the calculation process outlined in Section 1.4 of the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California. Table F-5 summarizes the development and calculation of all water quality-based effluent limitations for this Order using the process described below. A table providing the calculation for all applicable water quality-based effluent limitations for this Order is provided in Attachment G of this Order.
- b. WQBELS Calculation Example

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

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

$$\begin{aligned} \text{ECA} &= C + D(C-B) && \text{when } C > B, \text{ and} \\ \text{ECA} &= C && \text{When } C \leq B, \end{aligned}$$

Where

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 400 mg/L (as CaCO₃) was used for development of hardness-dependant criteria, and a pH of 7.19 was used for pH-dependant criteria.
- D = The dilution credit, and
- B = The ambient background concentration

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

$$\text{ECA} = C$$

For free cyanide, the applicable water quality criteria are (reference Table F-2):

$$\begin{aligned} \text{ECA}_{\text{acute}} &= 22 \mu\text{g/L} \\ \text{ECA}_{\text{chronic}} &= 5.2 \mu\text{g/L} \\ \text{ECA}_{\text{human health}} &= 220,000 \mu\text{g/L} \end{aligned}$$

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.

$$\text{LTA}_{\text{acute}} = \text{ECA}_{\text{acute}} \times \text{Multiplier}_{\text{acute}}$$

$$\text{LTA}_{\text{chronic}} = \text{ECA}_{\text{chronic}} \times \text{Multiplier}_{\text{chronic}}$$

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

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

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{acute}</u>	<u>Multiplier_{chronic}</u>
14	0.6	0.321	0.527

$$LTA_{acute} = 22 \mu\text{g/L} \times 0.321 = 7.06 \mu\text{g/L}$$

$$LTA_{chronic} = 5.2 \mu\text{g/L} \times 0.527 = 2.74 \mu\text{g/L}$$

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

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

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

$$LTA = 2.74 \mu\text{g/L}$$

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

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

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

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 free 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>
14	0.6	3.11	1.55

$$AMEL_{aquatic\ life} = 2.74 \times 1.55 = 4.26 \mu\text{g/L}$$

$$MDEL_{aquatic\ life} = 2.74 \times 3.11 = 8.54 \mu\text{g/L}$$

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

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

For free cyanide:

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

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.

$$\text{MDEL}_{\text{human health}} = \text{AMEL}_{\text{human health}} \times (\text{Multiplier}_{\text{MDEL}} / \text{Multiplier}_{\text{AMEL}})$$

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

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{MDEL}</u>	<u>Multiplier_{AMEL}</u>	<u>Ratio</u>
14	0.60	3.11	1.55	2.01

$$\text{MDEL}_{\text{human health}} = 220,000 \mu\text{g/L} \times 2.01 = 442,200 \mu\text{g/L}$$

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 free cyanide:

<u>AMEL_{aquatic life}</u> 4.3 $\mu\text{g/L}$	<u>MDEL_{aquatic life}</u> 8.5 $\mu\text{g/L}$	<u>AMEL_{human health}</u> 220,000 $\mu\text{g/L}$	<u>MDEL_{human health}</u> 442,200 $\mu\text{g/L}$
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The lowest (most restrictive) effluent limits are based on aquatic toxicity and were incorporated into this Order. These limits will be protective of aquatic life.

5. WQBEL based on Basin Plan Objectives

- a. **Total Dissolved Solids (TDS).** The Basin Plan states that any discharge to the New River shall not cause concentration of TDS in the surface water to exceed a maximum of 4,500 mg/L and an annual average of 4,000 mg/L. Therefore, effluent limitations for TDS are included in the Order and are based on the maximum effluent limitation provided in the Basin Plan
- b. **Escherichia coli (E. Coli).** The Basin Plan states that any discharge to a waterbody with a REC1 designated use shall not have an Escherichia coli (E. coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five samples for any 30-day period) nor shall any sample exceed 400 MPN per 100 milliliters. Effluent limitations for E.coli are incorporated in this Order. In addition, the Basin Plan contains receiving water limitations for enterococci and fecal coliform. E.coli is an indicator parameter for enterococci and fecal coliform. Therefore, effluent limitations for enterococci and fecal coliform are not included in the Order.
- c. **Toxicity.** The Basin Plan requires all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, 96-hour bioassay or bioassays of appropriate duration or other appropriate methods as specified by the Regional Board. This Order establishes narrative toxicity limitations to comply with this requirement.
 - i. **Ammonia.** As reported above in section II.D – Compliance Summary, the effluent discharged from the WWTP has been in chronic violation of the effluent limitations for toxicity. The Discharger has determined that high concentrations of ammonia in the effluent discharged from the WWTP has significantly contributed to the observed effluent toxicity. A WQBEL has been calculated for ammonia. The WQBEL for ammonia was calculated based on the USEPA's "1999 Update of Ambient Water Quality Criteria for Ammonia", EPA-822-R-99-014, December 1999. The 1999 guidance document specifies that freshwater aquatic life shall be protected if both of the following conditions are satisfied for the temperature and pH of the waterbody:

1. The criteria maximum concentration (CMC) for total ammonia nitrogen (in mg/L) for receiving water bodies where salmonid fish are not present shall be calculated as follows:

$$\text{CMC} = 0.411 / (1 + 10^{7.204 - \text{pH}}) + 58.4 / (1 + 10^{\text{pH} - 7.204})$$

2. The criteria continuous concentration (CCC) for total ammonia nitrogen (in mg/L) for receiving water bodies where early life stages of fish are present shall be calculated as follows:

$$\text{CCC} = [0.0577 / (1 + 10^{7.6888 - \text{pH}}) + 2.487 / (1 + 10^{\text{pH} - 7.6888})] * \text{MIN}(2.85, 1.45 * 10^{0.028 * (25 - T)})$$

The total ammonia nitrogen effluent limitations were calculated based on the maximum observed receiving water pH and temperature from receiving water monitoring data submitted by the Discharger for the period from the 2000 3rd Quarter monitoring period to the 2004 4th Quarter monitoring period. The applicable receiving water temperature and pH values are 31.7 °C (89 °F) and 7.8, respectively.

6. Final WQBELs

Summaries of the water quality effluent limitations required by this Order are described in Table F-5 below. Mass-based effluent limitations are based on a design capacity of 5.9 MGD.

**Table F-5
Summary of Water Quality-based Effluent Limitations
Monitoring Location M-001A**

Constituent	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Total Dissolved Solids (TDS)	mg/L	--	4,500
	lbs/day	--	220,000
Total Ammonia as N	mg/L	1.1	12
	lbs/day	54	590
Copper	µg/L	2.9	5.8
	lbs/day	0.14	0.29
Lead	µg/L	7.0	14
	lbs/day	0.34	0.69
Selenium	µg/L	4.1	8.2
	lbs/day	0.20	0.40
Zinc	µg/L	47	95
	lbs/day	2.3	4.7
Free Cyanide	µg/L	4.3	8.5
	lbs/day	0.21	0.42

7. Whole Effluent Toxicity (WET)

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

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 includes acute toxicity limitations consistent with these requirements.

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. Any chronic toxicity test that exceeds 2 chronic toxicity units (TU_c) or a three-sample median (consecutive samples) that exceeds 1 TU_c may trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity may trigger an accelerated monitoring frequency. Accelerated monitoring frequency shall consist of performing three toxicity tests in a 6-week period following the first exceedence of the chronic or acute toxicity triggers.

D. Final Effluent Limitations

Summaries of the water quality effluent limitations required by this Order are described in Table F-6 and the text below.

Table F-6, summarizes the proposed effluent limitations for the discharge from the aeration lagoon treatment system, M-001A. Proposed effluent limitations are based on equivalent to secondary treatment standards, California Toxics Rule, and Colorado River Basin Plan Water Quality Standards.

**Table F-6
Summary of Final Effluent Limitations – Aeration Lagoon Treatment System
Discharge Point 001 at Monitoring Location M-001A**

Constituent	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	5.9	--	--	--	--
BOD 5-day 20°C	mg/L	45	65	--	--	--
	lbs/day	2,200	3,200	--	--	--
Total Suspended Solids (TSS)	mg/L	45	65	--	--	--
	lbs/day	2,200	3,200	--	--	--
Removal Efficiency for BOD and TSS	%	65	--	--	--	--
Total Dissolved Solids (TDS)	mg/L	--	--	4,500	--	--
	lbs/day	--	--	220,000	--	--
pH	pH Units	--	--	--	6.0	9.0
Escherichia coli (E. Coli)	MPN	126 ¹	--	--	--	400
Total Ammonia as Nitrogen	mg/L	1.1	--	12	--	--
	lbs/day	54	--	590	--	--
Copper ²	µg/L	2.9	--	5.8	--	--
	lbs/day	0.14	--	0.29	--	--
Lead ²	µg/L	7.0	--	14	--	--
	lbs/day	0.34	--	0.69	--	--
Selenium ²	µg/L	4.1	--	8.2	--	--
	lbs/day	0.20	--	0.40	--	--
Zinc ²	µg/L	47	--	95	--	--
	lbs/day	2.3	--	4.7	--	--
Free Cyanide ²	µg/L	4.3	--	8.5	--	--
	lbs/day	0.21	--	0.42	--	--

¹ Log mean based on a minimum of not less than five samples for any 30-day period.

² Limitations are applicable after May 18, 2010. The interim limitations described in Section VIII below are applicable from June 29, 2005 through May 18, 2010.

1. 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.

E. Interim Effluent Limitations

The discharger may not be able to consistently comply with the new effluent limitations for copper, lead, selenium, zinc and free cyanide. Therefore, interim limits have been set as follows:

1. The governing Water Quality Criteria (WQC) for copper is 3.73 $\mu\text{g/L}$, the freshwater aquatic life criteria contained in the CTR. Copper has reasonable potential to exceed water quality objectives, and final Water Quality Based Effluent Limitations (WQBELs) are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 2.9 $\mu\text{g/L}$ monthly average and 5.8 $\mu\text{g/L}$ daily maximum. The Discharger indicated in its April 8, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for copper is required. The previous permit did not contain an effluent limit for copper. The interim effluent limit is based on the 99th percentile of the reported daily maximum effluent data. The Discharger collected 19 samples with an observed mean of 17.3 $\mu\text{g/L}$ and a standard deviation of 26.7 $\mu\text{g/L}$. The calculated interim average monthly effluent limit is 79 $\mu\text{g/L}$. This interim effluent limit is based on the best professional judgment of Regional Water Board staff.
2. The governing WQC for lead is 8.52 $\mu\text{g/L}$, the saltwater aquatic life criteria contained in the CTR. Lead has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 7.0 $\mu\text{g/L}$ monthly average and 14 $\mu\text{g/L}$ daily maximum. The Discharger indicated in its April 8, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for lead is required. The previous permit did not contain an effluent limit for lead. The interim effluent limit is based on the 99th percentile of the reported daily maximum effluent data. The Discharger collected 19 samples with an observed mean of 49.8 $\mu\text{g/L}$ and a standard deviation of 56.0 $\mu\text{g/L}$. The calculated interim average monthly effluent limit is 180 $\mu\text{g/L}$. This interim effluent limit is based on the best professional judgment of Regional Water Board staff.
3. The governing WQC for selenium is 5.00 $\mu\text{g/L}$, the freshwater aquatic life criteria contained in the CTR. Selenium has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 4.1 $\mu\text{g/L}$ monthly average and 8.2 $\mu\text{g/L}$ daily maximum. The Discharger indicated in its April 8, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for selenium is required. The previous permit did not contain an effluent limit for selenium. The Discharger collected 6 of samples and it is not possible to statistically determine current plant performance based on 6 of data points. Therefore, the interim average monthly effluent limit is the MEC, 5.0 $\mu\text{g/L}$. The observed MEC was less than the proposed final maximum daily effluent limit (MDEL) pursuant to the SIP therefore, the maximum daily effluent limit is 8.2 $\mu\text{g/L}$. This interim effluent limit is based on the best professional judgment of Regional Water Board staff.
4. The governing WQC for zinc is 85.6 $\mu\text{g/L}$, the saltwater aquatic life criteria contained in the CTR. zinc has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 47 $\mu\text{g/L}$ monthly average and 95 $\mu\text{g/L}$ daily maximum. The Discharger indicated in its April 8, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for zinc is required. The previous permit did not contain an effluent limit for zinc. The interim effluent limit is based on the 99th percentile of the reported daily maximum effluent data. The Discharger collected 19 samples with an observed mean of 34.1 $\mu\text{g/L}$ and a standard deviation of 12.2 $\mu\text{g/L}$. The calculated interim average monthly effluent limit is 62 $\mu\text{g/L}$. The observed proposed average monthly effluent limit is less than the proposed final maximum daily effluent limit (MDEL) pursuant to the SIP therefore the maximum daily effluent limit is 95 $\mu\text{g/L}$. This interim effluent limit is based on the best professional judgment of Regional Water Board staff.

5. The governing WQC for free cyanide is 5.2 µg/L, the freshwater aquatic life criteria contained in the CTR. Free cyanide has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to SIP procedures are 4.3 µg/L monthly average and 8.5 µg/L daily maximum. The Discharger indicated in its April 8, 2005 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for free cyanide is required. The previous permit did not contain an effluent limit for free cyanide. The interim effluent limit is based on the 99th percentile of the reported daily maximum effluent data. The Discharger collected 14 samples with an observed mean of 21.3 µg/L and a standard deviation of 23.4 µg/L. The calculated interim average monthly effluent limit is 76 µg/L. This interim effluent limit is based on the best professional judgment of Regional Water Board staff.

Constituents	Unit	Date Effluent Limit Becomes Effective	Average Monthly Effluent Limit	Maximum Daily Effluent Limit
Copper (interim)	µg/L	June 29, 2005	79	79
Copper (final)	µg/L	May 18, 2010	2.9	5.8
Lead (interim)	µg/L	June 29, 2005	180	180
Lead (final)	µg/L	May 18, 2010	7.0	14
Selenium (interim)	µg/L	June 29, 2005	5.0	8.2
Selenium (final)	µg/L	May 18, 2010	4.1	8.2
Zinc (interim)	µg/L	June 29, 2005	62	95
Zinc (final)	µg/L	May 18, 2010	47	95
Free Cyanide (interim)	µg/L	June 29, 2005	76	76
Free Cyanide (final)	µg/L	May 18, 2010	4.3	8.5

F. Land Discharge Specifications (NOT APPLICABLE)

G. Reclamation Specifications (NOT APPLICABLE)

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater

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

VI. MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring

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

B. Effluent Monitoring

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

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

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

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

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

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan.

2. Groundwater

Sediment monitoring is required to characterize the effluent water quality and to determine compliance with the effluent limitations..

E. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger is required to obtain or acquire quarterly 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.f of the Order.

2. Biosolids/Sludge Monitoring.

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

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

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

2. Regional Water Board Standard Provisions

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

B. Special Provisions

1. Re-Opener Provisions

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

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- c. **Total Dissolved Solids (TDS) Study.** The Discharger is required to conduct a study to determine the concentrations of TDS in the source water of its service area, and to conduct a study on the feasibility of the discharger to achieve TDS concentrations in its discharge that are 400 mg/L or less above the flow weighted average TDS concentrations of the intake water supply. The requirement to conduct a study is based on the Basin Plan and the Policy for Implementation of Colorado River Salinity Standards Through the NPDES Permit Program (Policy). This policy was developed in 1977 to provide guidance for the regulation of municipal and industrial point source discharges of saline water to ensure compliance with the Water Quality Standards for Salinity for the Colorado River System. The salinity standards include numeric criteria and a plan of implementation. One of the components of the plan of implementation consists of placing effluent limitations in NPDES permits issued to industrial and municipal discharges. The Policy provides guidance for the regulation of municipal and industrial point source discharges of saline water.

For municipal dischargers the policy indicates that a reasonable increase in salinity shall be established for municipal discharges to any portion of the Colorado River stream system that has an impact on the lower main stem. The 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 intake water supply. The policy allows the permitting authority to authorize a discharge in excess of the 400 mg/l incremental increase upon satisfactory demonstration by the permittee that it is not practicable to attain the 400 mg/L limit. The policy outlines the minimum information the permittee must provide to justify discharging in excess of the 400 mg/L incremental increase.

The Discharger is required to compile and summarize its TDS monitoring data and its feasibility analysis to achieve the 400 mg/L incremental increase in a technical report and is to be submitted to the Regional Board at the time the Discharger submits a Report of Waste Discharge to renew this Order. At a minimum, the information provided by the Discharger in its technical report must meet the requirements set forth in the policy.

3. **Best Management Practices and Pollution Prevention**

4. **Compliance Schedules**

- a. This Order establishes final effluent limitations for copper, lead, selenium, zinc and free cyanide that are new limits for the facility. This Order also contains interim effluent limitations and a compliance schedule that provides the Discharge time to bring their facility into compliance with the newly established final limits. In accordance with Section 2.1 of the SIP, interim limits and compliance schedules can only be provided by the Board after the Discharger has submitted a report that demonstrates and justifies that it is infeasible for the Discharger to achieve immediate compliance with newly established final effluent limitations. Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors

The provision for compliance schedule is based on Section 2.1 (Compliance Schedules) of the SIP. The proposed permit allows the Discharger up to 5 years from the date of issue of the proposed permit to be in compliance with the final effluent limitations for copper, lead, selenium, zinc and free cyanide. Based on Regional Board's BPJ, 5 years is sufficient for the Discharger to achieve the final effluent limitations for the pollutants. The Discharger is required to develop a compliance plan to ensure that the Discharger achieves compliance with the final limitations. Annual reporting is required to inform the Regional Board about the progress made by the Discharger to achieve compliance with the final limitations within the specified time. During the interim period, the Discharger is required to meet the interim limitations derived from facility performance data.

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

This provision is based on the requirements of 40 CFR 122.41(e) and the previous Order.

6. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Sludge Disposal Requirements.** Requirements are based on the previous Order and 40 CFR Part 503.
- b. **Pretreatment Program Requirements.** Requirements are based on the previous Order and 40 CFR Part 403.

7. Other Special Provisions

Provisions contained in Sections VI.C.7.a through VI.C.7.e are based on the previous Order.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the City of Brawley WWTP. 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 permittee and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following newspapers, The Imperial Valley Press and the Riverside Press Enterprise.

B. Written Comments

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

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on May 31, 2005.

C. Public Hearing

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

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

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

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

D. Waste Discharge Requirements Petitions

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

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

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to 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				Saltwater / Freshwater										AMEL	MDEL
	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		
ug/L		ug/L	ug/L		ug/L	ug/L		ug/L	ug/L		ug/L		ug/L	ug/L	ug/L	
Copper	N/A	N/A	N/A	5.78	0.321	1.86	3.74	0.527	1.97	1.86	1.55	2.88	3.11	5.78	2.9	5.8
Lead	N/A	N/A	N/A	220	0.321	70.9	8.52	0.527	4.49	4.49	1.55	6.97	3.11	14.0	7.0	14
Selenium	N/A	N/A	N/A	291	0.321	93.3	5.00	0.527	2.64	2.64	1.55	4.09	3.11	8.21	4.1	8.2
Zinc	N/A	N/A	N/A	95.1	0.321	30.5	85.6	0.527	45.2	30.5	1.55	47.4	3.11	95.1	47	95
Free Cyanide	220,000	2.01	441,000	22	0.321	7.06	5.2	0.527	2.74	2.74	1.55	4.26	3.11	8.54	4.3	8.5

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
41	1,1,1-Trichloroethane	71556	EPA 8260B
42	1,12-Trichloroethane	79005	EPA 8260B
43	Trichloroethylene	79016	EPA 8260B
44	Vinyl Chloride	75014	EPA 8260B
45	2-Chlorophenol	95578	EPA 8270C
46	2,4-Dichlorophenol	120832	EPA 8270C
47	2,4-Dimethylphenol	105679	EPA 8270C
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C
49	2,4-Dinitrophenol	51285	EPA 8270C
50	2-Nitrophenol	88755	EPA 8270C
51	4-Nitrophenol	100027	EPA 8270C
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C
53	Pentachlorophenol	87865	EPA 8270C
54	Phenol	108952	EPA 8270C
55	2,4,6-Trichlorophenol	88062	EPA 8270C
56	Acenaphthene	83329	EPA 8270C
57	Acenaphthylene	208968	EPA 8270C
58	Anthracene	120127	EPA 8270C
59	Benzidine	92875	EPA 8270C
60	Benzo(a)Anthracene	56553	EPA 8270C
61	Benzo(a)Pyrene	50328	EPA 8270C
62	Benzo(b)Fluoranthene	205992	EPA 8270C
63	Benzo(ghi)Perylene	191242	EPA 8270C
64	Benzo(k)Fluoranthene	207089	EPA 8270C
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C
70	Butylbenzyl Phthalate	85687	EPA 8270C
71	2-Chloronaphthalene	91587	EPA 8270C
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C
73	Chrysene	218019	EPA 8270C
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C
75	1,2-Dichlorobenzene	95501	EPA 8260B
76	1,3-Dichlorobenzene	541731	EPA 8260B
77	1,4-Dichlorobenzene	106467	EPA 8260B
78	3,3'-Dichlorobenzidine	91941	EPA 8270C
79	Diethyl Phthalate	84662	EPA 8270C
80	Dimethyl Phthalate	131113	EPA 8270C
81	Di-n-Butyl Phthalate	84742	EPA 8270C
82	2,4-Dinitrotoluene	121142	EPA 8270C
83	2,6-Dinitrotoluene	606202	EPA 8270C
84	Di-n-Octyl Phthalate	117840	EPA 8270C

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
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
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