

**Central Coast Regional Water Quality Control Board**

**ORDER NO. R3-2012-0027  
NPDES NO. CA0047856**

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

**Table 1. Discharger Information**

<b>Discharger</b>	California Department of Corrections and Rehabilitation
<b>Indirect Dischargers</b>	California Army National Guard, Camp San Luis Obispo Cuesta College San Luis Obispo County Education Center San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course San Luis Obispo County Operational Facility
<b>Name of Facility</b>	California Men’s Colony Wastewater Treatment Plant (WWTP)
<b>Facility Address</b>	Hwy 1, North of San Luis Obispo, behind Cuesta College San Luis Obispo, CA 93401 San Luis Obispo County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

Discharges by the California Department of Corrections and Rehabilitation from the discharge point identified below are subject to waste discharge requirements as set forth in this Order.

**Table 2. Discharge Location**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated domestic wastewater	35° 19' 30" N	120° 45' 9" W	Chorro Creek

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Board on:	<b>December 6, 2012</b>
This Order shall become effective on:	<b>January 25, 2013</b>
This Order shall expire on:	<b>January 25, 2018</b>
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	<b>July 28, 2017</b>

I, Kenneth A. Harris Jr., Interim Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region on December 6, 2012.

Kenneth A. Harris Jr., Interim Executive Officer

## Table of Contents

I.	Facility Information .....	3
II.	Findings.....	3
III.	Discharge Prohibitions.....	8
IV.	Effluent Limitations and Discharge Specifications.....	9
	A. Effluent Limitations for Conventional and Non-Conventional Pollutants .....	9
V.	Receiving Water Limitations .....	12
	A. Surface Water Limitations .....	12
	B. Groundwater Limitations .....	15
VI.	Provisions.....	16
	A. Standard Provisions.....	16
	B. Monitoring and Reporting Program, Notification, and General Reporting Requirements .....	16
	C. Special Provisions.....	16
	1. Reopener Provisions.....	16
	2. Special Studies, Technical Reports, and Additional Monitoring Requirements .....	16
	3. Best Management Practices and Pollution Minimization Program .....	18
	4. Construction, Operation and Maintenance Specifications.....	19
	5. Special Provisions for Municipal Facilities (POTWs Only) .....	19
	6. Other Special Provisions.....	20
	7. Compliance Schedules – Not Applicable.....	20
VII.	Compliance Determination .....	20

## Tables

Table 1.	Discharger Information.....	1
Table 2.	Discharge Location .....	1
Table 3.	Administrative Information.....	1
Table 4.	Facility Information.....	3
Table 5.	Basin Plan Beneficial Uses of Chorro Creek .....	5
Table 6.	Effluent Limitations.....	9
Table 7.	Organic Substances Water Quality Objectives .....	13
Table 8.	Salinity Water Quality Objectives .....	14
Table 9.	Groundwater Objectives.....	15
Table 10.	Toxicity Reduction Evaluation Schedule.....	17

## Attachments

Attachment A –	Definitions.....	A-1
Attachment B –	Facility Map .....	B-1
Attachment C –	Process Flow Diagram .....	C-1
Attachment D –	Federal and Regional Water Board Standard Provisions.....	D-1
Attachment E –	Monitoring and Reporting Program (MRP).....	E-1
Attachment F –	Fact Sheet .....	F-1

**I. FACILITY INFORMATION**

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

**Table 4. Facility Information**

<b>Discharger</b>	California Department of Corrections and Rehabilitation
<b>Indirect Dischargers</b>	California Army National Guard, Camp San Luis Obispo Cuesta College San Luis Obispo County Education Center San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course San Luis Obispo County Operational Facility
<b>Name of Facility</b>	California Men's Colony Wastewater Treatment Plant (WWTP)
<b>Facility Address</b>	Hwy 1, North of San Luis Obispo, behind Cuesta College San Luis Obispo, CA 93401 San Luis Obispo County
<b>Facility Contact, Title, and Phone</b>	Elvin Valenzuela, Acting Warden, (805) 547-7901
<b>Mailing Address</b>	P.O. Box 8101, San Luis Obispo, CA 93401
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Permitted Flow</b>	1.2 million gallons per day (MGD)
<b>Facility Design Flow</b>	1.2 MGD (dry weather monthly average) 5.2 MGD (peak hour wet weather)

**II. FINDINGS**

The California Regional Water Quality Control Board, Central Coast Water Board (hereinafter Regional Water Board), finds:

**A. Background.** The California Department of Corrections and Rehabilitation (the Discharger) is currently discharging under Order No. R3-2006-0032 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047856. The Discharger submitted a Report of Waste Discharge (ROWD), dated August 25, 2011, and applied to renew its NPDES permit to discharge up to 1.2 MGD of treated wastewater from the California Men's Colony Wastewater Treatment Plant (hereinafter Facility). The application was deemed complete on August 29, 2011.

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

**B. Facility Description.** The Discharger owns and operates a trunk sewer line and a domestic wastewater treatment plant (WWTP) located on the grounds of Camp San Luis Obispo, a National Guard training site. In addition to conveying and treating domestic wastewater from the East and West Facilities of the California Men's Colony, a correctional institution, the trunk sewer and WWTP provide wastewater conveyance and treatment for the California Army National Guard (Camp San Luis Obispo), Cuesta College, and several County facilities (including the Education Center, the El Chorro Regional Park and Dairy Creek Golf Course, and the Operational Facility). The California Army National Guard, Cuesta College, San Luis Obispo County Education Center, San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course, and San Luis Obispo County Operational Facility own and maintain discrete wastewater collection and transport systems that discharge to the Department of Corrections' trunk sewer system. It is incumbent upon these local

sewering entities to protect the environment to the greatest degree possible and ensure their local collection systems, as well as the receiving sewerage system, are protected and utilized properly. This responsibility includes preventing overflows and may include restricting or prohibiting the volume, type or concentration of wastes added to the system.

Wastewater treatment facilities include an influent pump station, aerated grit removal, two oxidation ditches, secondary clarification, tertiary filtration, and chlorination/dechlorination capability. The treatment facility has an average dry weather design flow of 1.2 MGD, with a peak dry weather flow of 2.4 MGD, and a peak wet weather flow of 5.2 MGD. Wastewater solids are dewatered by centrifuge and hauled from the site for disposal.

Treated wastewater is used by the County of San Luis Obispo to irrigate the Dairy Creek Golf Course and discharged to Chorro Creek at a minimum continuous flow rate of 0.75 cubic feet per second.

Attachment B provides a topographic map of the area around the Facility. Attachment C provides a flow diagram of the Facility.

- C. Legal Authorities.** This Order is issued pursuant to Clean Water Act (CWA) Section 402 and implements regulations adopted by the United States Environmental Protection Agency (USEPA) and California Water Code (CWC) Chapter 5.5, Division 7 (commencing with Section 13370). It shall serve as an NPDES permit for point source discharges from the Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to CWC Article 4, Chapter 4, Division 7 (commencing with Section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the NPDES renewal application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F) contains background information and rationale for this Order's requirements, and is hereby incorporated into this Order and constitutes part of this Order's Findings. Attachments A through E and F are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Pursuant to Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code Sections 21100-21177.
- F. Technology-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at Title 40 of the Code of Federal Regulations (40 CFR) Section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR 133. A detailed discussion of technology-based effluent limitation development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. 40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard (Reasonable Potential). Where Reasonable Potential has been established for a pollutant that has no numeric objective, water quality-based effluent limitations (WQBELs) must be established using (1) USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant

information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board has adopted the *Water Quality Control Plan for the Central Coastal Basin* (the Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Facility discharges treated wastewater to Chorro Creek. Beneficial uses established in the Basin Plan for Chorro Creek are presented in Table 5.

Table 5, below, lists the beneficial uses of Chorro Creek as identified in the Basin Plan.

**Table 5. Basin Plan Beneficial Uses of Chorro Creek**

Discharge Point	Receiving Water Name	Beneficial Uses
001	Chorro Creek	<p><u>Existing</u></p> <p>Municipal and Domestic Water Supply (MUN)</p> <p>Agricultural Supply (AGR)</p> <p>Groundwater Recharge (GWR)</p> <p>Water Contact Recreation (REC1)</p> <p>Non-Contact Water Recreation (REC2)</p> <p>Wildlife Habitat (WILD)</p> <p>Cold Fresh Water Habitat (COLD)</p> <p>Warm Fresh Water Habitat (WARM)</p> <p>Fish Migration (MIGR)</p> <p>Fish Spawning (SPWN)</p> <p>Preservation of Biological Habitats of Special Significance (BIOL)</p> <p>Preservation of Rare and Endangered Species (RARE)</p> <p>Fresh Water Replenishment (FRESH)</p> <p>Commercial and Sport Fishing (COMM)</p>

Groundwater throughout the Central Coast Region is suitable for agricultural water supply, municipal and domestic water supply, and industrial use. Requirements of this Order implement the Basin Plan.

**I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that applied in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

**J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (hereinafter State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated

through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

**K. Recycled Water Policy.** The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The State Water Board adopted the Recycled Water Policy via Resolution No. 2009-0011 on February 3, 2009<sup>1</sup>. The Recycled Water Policy is intended to support the Strategic Plan priority to Promote Sustainable Local Water Supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to encourage beneficial use, rather than solely disposal, of recycled water.

The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The State Water Board recognizes that, pursuant to the letter from statewide water and wastewater entities<sup>2</sup> dated December 19, 2008, and attached to Resolution No. 2009-0011 adopting the Policy, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Regional Water Board staff.

It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board finds that the appropriate way to address salt and nutrient issues is through the development of regional or sub regional salt and nutrient management plans rather than through imposing requirements solely on individual projects. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements may be necessary to protect beneficial uses.

One of the primary components of the required regional salt/nutrient management plans is the development and implementation of groundwater basin/sub-basin monitoring programs. As specified in the Recycled Water Policy, salt/nutrient contributing stakeholders will be responsible for conducting, compiling, and reporting the monitoring data once the regional groundwater monitoring programs are developed.

A large number of technical reports and data contained within Central Coast Water Board files document widespread and increasing salt and nutrient impacts within the groundwater basins throughout the Central Coast Region, including the Chorro Area sub basin of the Estero Bay groundwater basin.

**L. Compliance Schedules and Interim Requirements.** The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled *Policy for Compliance Schedules in National Pollutant*

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<sup>1</sup> [http://www.swrcb.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2009/rs2009\\_0011.pdf](http://www.swrcb.ca.gov/board_decisions/adopted_orders/resolutions/2009/rs2009_0011.pdf)

<sup>2</sup> [http://www.waterboards.ca.gov/board\\_info/agendas/2009/feb/020309\\_7\\_%20rw\\_policy\\_funding\\_letter.pdf](http://www.waterboards.ca.gov/board_info/agendas/2009/feb/020309_7_%20rw_policy_funding_letter.pdf)

*Discharge Elimination System Permits.* Under limited circumstances, this policy allows the Regional Water Board to grant a compliance schedule based on a discharger's request and demonstration that it is infeasible to comply immediately with certain effluent limits. This policy became effective on August 27, 2008, superseding the Basin Plan's compliance schedule policy. This Order does not contain a compliance schedule or any interim effluent limits.

- M. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [65 Fed. Reg. 24641 (April 27, 2000) (codified at 40 CFR 131.21)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- N. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on carbonaceous biochemical oxygen demand (5-day @ 20°C) (CBOD), total suspended solids (TSS), pH, total residual chlorine, and oil and grease. Derivation of these technology-based limitations is discussed in the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum federal technology-based requirements as necessary to meet water quality standards.

In this Order, WQBELs implement Water Quality Objectives (WQOs) that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under State law and submitted to USEPA prior to May 30, 2000. Any WQOs 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 the purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- O. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law and requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in the Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- P. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES 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. As discussed in the Fact Sheet, the permitted discharge is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- Q. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the

future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of applicable State and federal law pertaining to threatened and endangered species.

- R. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. Attachment E contains the MRP.
- S. Standard and Special Provisions.** Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 CFR 122.41 and additional conditions that apply to specified categories of permits in accordance with 40 CFR 122.42. The Discharger must comply with all standard provisions and with those additional conditions that apply under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions that apply to the Discharger. The Fact Sheet (Attachment F) provides rationale for the special provisions contained in this Order.
- T. Provisions and Requirements Implementing State Law.** No provisions or requirements in this Order are included to implement State law only. All provisions and requirements are required or authorized under the federal CWA; consequently, violations of these provisions and requirements are subject to the enforcement remedies that are available for NPDES violations.
- U. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit written comments and recommendations. The Fact Sheet provides notification details.
- V. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. The Fact Sheet provides public hearing details.

IT IS HEREBY ORDERED, that this Order rescinds and supersedes Order No. R3-2006-0032, except for enforcement purposes, and, pursuant to all applicable authorizes and in order to meet the provisions contained in Division 7 of the CWC (commencing with Section 13000) and regulations adopted thereunder, and the federal CWA provisions and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order and all attachments.

### III. DISCHARGE PROHIBITIONS

- A.** The discharge of any waste not specifically regulated by this Order, excluding storm water regulated by General Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities), is prohibited.
- B.** Discharge of treated wastewater at a location other than Discharge Point No. 001 or approved recycled water use as described by this Order is prohibited, unless the discharge is regulated by General Permit No. CAS000001 or another discharge permit.
- C.** The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited.

- D. Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the CWC, is prohibited.
- E. The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat.

**IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

**A. Effluent Limitations for Conventional and Non-Conventional Pollutants**

1. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No.001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (MRP) (Attachment E).

**Table 6. Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand (5-day @ 20°C) (BOD) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Total Suspended Solids (TSS) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Oil and Grease	mg/L	5.0	--	10
	lbs/day	50	--	100
Settleable Solids	mL/L	0.1	--	0.3
pH	s.u.	7.0 – 8.3 <sup>[2]</sup>		
Turbidity	NTU	10	--	20
Chlorine Residual	mg/L	--	--	ND <sup>[3]</sup>
Dissolved Oxygen	mg/L	> 2.0 mg/L at all times		
Chlorodibromomethane	µg/L	0.40	--	0.80
Copper, Total Recoverable	µg/L	7.5	--	17
Dichlorobromomethane	µg/L	0.56	--	0.88
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	--	3.6
Sulfate	mg/L	--	--	125
	lbs/day	--	--	1,251
Total Nitrogen (as N)	mg/L	--	--	10
	lbs/day	--	--	100
Nitrite (as N)	mg/L	--	--	1.0
Acute Toxicity	% survival	--	--	<sup>[4]</sup>

<sup>[1]</sup> The average monthly percent removal for BOD and TSS shall not be less than 85 percent.

<sup>[2]</sup> When the Discharger continuously monitors effluent pH, levels shall be maintained within specified ranges 99 percent of the time. To determine 99 percent compliance, the following conditions shall be met:

- The total time during which pH is outside the range of 7.0 – 8.3 shall not exceed 7 hours and 26 minutes in any calendar month;
- No single excursion from the range of 7.0 – 8.3 shall exceed 30 minutes;
- No single excursion shall fall outside the range of 6.0 – 9.0; and
- When continuous monitoring is not being performed, standard compliance guidelines shall be followed (i.e., between 7.0 – 8.3 at all times, measured daily).

<sup>[3]</sup> ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:

- The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar

- 
- month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed.
- <sup>[4]</sup> Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition), to the survival of control organisms, as defined in section V of Attachment E to this Order.

2. **Dry Weather Flow.** Effluent average dry weather flow shall not exceed a monthly average of 1.2 MGD.
3. **Floating Material.** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
4. **Bacteria**
  - a. **Total Coliform**
    - i. The total coliform concentrations shall not exceed a median of 2.2 MPN/100 mL as determined from the last 7 days of sampling results for which analyses have been completed;
    - ii. No more than one sample shall exceed 23 MPN/100 mL in any 30-day period;
    - iii. No sample shall exceed 240 MPN/100 mL.
5. **Chronic Toxicity.** There shall be no chronic toxicity in the effluent discharge.
6. **Orthophosphorus.** Median orthophosphorus concentrations of effluent from May through September shall not exceed current levels, as measured by a comparison to effluent concentrations from 2004 and 2005.

**B. Land Discharge Effluent Limitations and Specifications – Not Applicable**

**C. Reclamation Specifications**

1. Reclamation use of tertiary treated wastewater shall comply with applicable state and local requirements regarding the production and use of reclaimed wastewater, including requirements of California Water Code (CWC) sections 13500-13577 (Water Reclamation) and Department of Health Services (DHS) regulations at Title 22, sections 60301-60357 of the California Code of Regulations (Water Recycling Criteria).
2. Wastewater shall be disinfected by either:
  - a. A chlorine disinfection process that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on the peak dry-weather design flow, or



10. Spray irrigation of reclaimed water shall be accomplished at a time and in a manner to minimize ponding and contact with the public.
11. Delivery of reclaimed water shall be discontinued when these Reclamation Specifications cannot be met.
12. All reclamation reservoirs and other areas with public access shall be posted, in English and Spanish, to warn the public that reclaimed wastewater is being stored or used.
13. Reclaimed water systems shall be properly labeled and regularly inspected to ensure proper operation, absence of leaks, and absence of illegal connections.

## **V. RECEIVING WATER LIMITATIONS**

### **A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan, are consistent with the State Implementation Policy, and are a required part of this Order. The discharge shall not cause a violation of the following receiving water limitations in Chorro Creek. The Regional Water Board may require the Discharger to investigate the cause of exceedances in the receiving water before determining whether the Discharger caused any water condition that exceeds the following receiving water limitations.

1. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. Coloration attributable to materials of waste origin shall not be greater than 15 units or 10 percent above natural background color, whichever is greater.
2. Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
3. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
4. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
5. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
6. Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
7. 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.
8. The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

9. Concentrations of toxic metals and inorganic chemicals in waters shall not be increased in such a manner that may adversely affect beneficial uses.
10. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits.
  - a. 5 NTU, where natural turbidity is less than 25 NTU.
  - b. 20 percent, where natural turbidity is between 25 and 50 NTU.
  - c. 10 NTU, where natural turbidity is between 50 and 100 NTU.
  - d. 10 percent, where natural turbidity is greater than 100 NTU.
11. The pH value shall not be depressed below 7.0 nor raised above 8.3. The change in normal ambient pH levels shall not exceed 0.5 units.
12. Dissolved oxygen concentrations in receiving waters shall not be reduced below 7.0 mg/L at any time.
13. Effluent discharged shall not cause the receiving water temperature to be increased by more than 5°F, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
14. 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 aquatic life. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge.
15. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH<sub>3</sub>) to exceed 0.025 mg/L (as N) in the receiving water.
16. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect the beneficial uses of the receiving water. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. For waters where existing concentrations are presently nondetectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods as prescribed in *Standard Methods for the Examination of Water and Wastewater*, latest edition, or other equivalent methods approved by the Executive Officer.
17. Waters shall not contain organic substances in concentrations greater than the following:

**Table 7. Organic Substances Water Quality Objectives**

Parameter	Water Quality Objective
Methylene Blue Activated Substances	0.2 mg/L
Phenols	0.1 mg/L
PCBs <sup>[1]</sup>	0.3 µg/L
Phthalate Esters	0.002 µg/L

Parameter	Water Quality Objective
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<sup>[1]</sup> PCBs refer to sum of PCB 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

18. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstance shall receiving waters contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.
19. Receiving waters shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.
20. Receiving waters shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural beneficial use. Interpretation of adverse effects shall be derived from guidelines of the University of California Agricultural Extension Service guidelines presented in Section III, Table 3-3 of the Basin Plan.
21. Receiving waters shall not contain concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in Section III, Table 3-4 of the Basin Plan. Salt concentrations for irrigation waters shall be controlled through implementation of the anti-degradation policy to the effect that mineral constituents of currently or potentially usable waters shall not be increased.
22. Receiving waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the levels presented in Section III, Table 3-5 of the Basin Plan.
23. Cadmium shall not exceed 0.003 mg/L, when hardness in receiving waters is greater than 100 mg/L as CaCO<sub>3</sub>, nor shall cadmium exceed 0.0004 mg/L when hardness in receiving waters is equal to or less than 100 mg/L as CaCO<sub>3</sub>.
24. Fecal coliform concentration, based on a minimum of not fewer than five samples for any 30-day period, shall not exceed a log mean of 200 organisms/100 mL, nor shall more than 10 percent of samples collected during any 30-day period exceed 400 organisms/100 mL.
25. Discharges shall not cause receiving water to exceed the following water quality objectives specifically identified for the Chorro Creek sub-area (Estero Bay sub-basin) by Table 3-7 of the Basin Plan, shown below. Additionally, for TDS and sodium, effluent discharged shall not exceed the concentrations shown below, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.

**Table 8. Salinity Water Quality Objectives**

Parameter	Units	Annual <sup>[1]</sup>
TDS	mg/L	500
Chloride	mg/L	50
Sulfate	mg/L	50
Boron	mg/L	0.2
Sodium	mg/L	50

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<sup>[1]</sup> Objectives shown are annual mean values. Objectives based on preservation of existing quality or water quality enhancement believed attainable following control of point sources.

**B. Groundwater Limitations**

Activities at the Facility shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the Basin Plan. The Regional Water Board may require the Discharger to investigate the cause of exceedances in the groundwater before determining whether the Discharger caused any water condition that exceeds the following groundwater limitations.

1. Groundwater shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses.
2. The Discharger shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwaters as determined by comparison of samples collected from wells located up-gradient and down-gradient of the waters affected by the discharge.
3. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstances shall groundwater contain concentrations of radionuclides in excess of the MCLs for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.
4. The median concentration of coliform organisms in groundwater, over any seven-day period, shall be less than 2.2 organisms/100 mL.
5. Groundwater shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.
6. Groundwater shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-3 of the Basin Plan.
7. Groundwater used for irrigation and livestock watering shall not exceed concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in Section III, Table 3-4 of the Basin Plan.
8. Groundwater shall not contain constituents greater than the following concentrations established in Table 3-8 of the Basin Plan for groundwaters within the Chorro Creek sub-area (Estero Bay sub-basin).

**Table 9. Groundwater Objectives**

Parameter	Units	Annual Mean <sup>[1]</sup>
TDS	mg/L	1,000
Chloride	mg/L	250

Sulfate	mg/L	100
Boron	mg/L	0.2
Sodium	mg/L	50
Nitrogen	mg/L	5

<sup>[1]</sup> Objectives shown are median values based on data averages; objectives are based on preservation of existing water quality enhancement believed attainable following control of point sources.

## VI. PROVISIONS

### A. Standard Provisions

- 1. Federal Standard Provisions.** The Discharger shall comply with Federal Standard Provisions included in Attachment D of this Order.
- 2. Regional Water Board Standard Provisions.** The Discharger shall comply with all Regional Water Board Standard Provisions included in Attachment D of this Order.

### B. Monitoring and Reporting Program, Notification, and General Reporting Requirements

Pursuant to CWC sections 13267 and 13383, the Discharger shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this Order, and all notification and general reporting requirements throughout this Order and Attachment D. Where notification or general reporting requirements conflict with those stated in the MRP (e.g., annual report due date), the Discharger shall comply with the MRP requirements. All monitoring shall be conducted according to 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*.

The Discharger is required to provide these technical or monitoring reports because it is the owner and operator responsible for the waste discharge and compliance with this Order. The Central Coast Water Board needs the information to determine the Discharger's compliance with this Order, assess the need for further investigation and/or enforcement action, and to protect public health and safety and the environment.

### C. Special Provisions

#### 1. Reopener Provisions

This permit may be reopened and modified in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved, new, State WQO.

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

##### a. Toxicity Reduction Requirements

As indicated in section V.D of the MRP, when acute toxicity is detected in the effluent greater than the applicable effluent limitation established in Table 6, or chronic toxicity is detected greater than a chronic toxicity trigger of 1 TU<sub>c</sub>, and the discharge is continuing, the Discharger shall resample immediately, retest, and report the results to the Executive Officer, who will determine whether to initiate an enforcement action, require a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan, or implement other measures.

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

The Discharger shall maintain a TRE Workplan, which describes steps that the Discharger intends to follow in the event that a toxicity effluent limitation or toxicity trigger established by this Order is exceeded in the discharge. The workplan shall be prepared in accordance with current technical guidance and reference material, including EPA/600/2-88/062, and shall include, at a minimum:

- i. Actions that will be taken to investigate/identify the causes/sources of toxicity;
- ii. Actions that will be evaluated to mitigate the impact of the discharge, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken); and
- iii. A schedule under which these actions will be implemented.

When monitoring measures toxicity in the effluent above a limitation or toxicity trigger established by this Order, if the discharge is continuing, the Discharger shall resample immediately, and retest for acute or chronic toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer as soon as possible following receipt of monitoring results. The Executive Officer will determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures. When the Executive Officer requires the Discharger to conduct a TRE, the TRE shall be conducted giving due consideration to guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (USEPA document Nos. EPA 600/R-91/003, 600/R-92/080, and 600/R-92/081, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

**Table 10. Toxicity Reduction Evaluation Schedule**

Action Step	When Required
Take all reasonable measures necessary to immediately reduce toxicity, where the source is known.	Within 24 hours of identification of noncompliance.
Initiate the TRE in accordance to the Workplan.	Within 7 days of notification by the Executive Officer.
Conduct the TRE following the procedures in the Workplan.	Within the period specified in the Workplan (not to exceed one year, without an approved Workplan).
Submit the results of the TRE, including summary of findings, required corrective action, and all results and data.	Within 60 days of completion of the TRE.

Action Step	When Required
Implement corrective actions to meet Permit limits and conditions.	To be determined by the Executive Officer.

**3. Best Management Practices and Pollution Minimization Program**

**a. Salt and Nutrient Management**

- i. The Discharger shall continue to update and implement an ongoing Salt Management Program, with the intent of reducing mass loading of salts in treated effluent and attainment of applicable WQOs for salts in the Chorro Creek Sub-Basin of the Estero Bay Drainage Basin. Additionally, the Discharger shall develop and implement a Nutrient Management Program, with the intent of reducing mass loading of nutrients in treated effluent and attainment of applicable WQOs for nutrients in the same basin.
- ii. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial, and residential dischargers.
- iii. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may also include source control (non-human waste from commercial and industrial sources) as appropriate.
- iv. As part of the salt/nutrient management program, the Discharger shall submit an annual report of salt and nutrient reduction efforts. This salt/nutrient management report shall be included as part of the annual report described in the MRP (Attachment E). The report shall be submitted by January 30<sup>th</sup>, and shall include (at a minimum):

**1) Salt Component**

- a) Calculations of annual salt mass discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;
- b) Analysis of wastewater evaporation/salt concentration effects;
- c) Analysis of groundwater monitoring results for salts constituents and associated trends;
- d) Analysis of potential impacts of salt loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);
- e) A summary of existing salt reduction measures;
- f) Recommendations and time schedules for implementation of any additional salt reduction measures; and
- g) Status of the implementation of the Salt Management items detailed in Section 4.3 of the Discharger's May 2009 Salt Management Study.

**2) Nutrient Component**

- a) Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;
  - b) Analysis of wastewater treatment facility ability to facilitate nitrification and denitrification, or other means of nitrogen removal;
  - c) Analysis of groundwater monitoring results for nitrogen constituents and trends;
  - d) Analysis of potential impacts of nitrogen loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);
  - e) A summary of existing nitrogen loading reduction measures; and
  - f) Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.
- v. As an alternative to the Salt and Nutrient Management Program requirements described above, upon Executive Officer approval, the Discharger may submit documentation and summary of participation in a regional salt/nutrient management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy).

#### **4. Construction, Operation and Maintenance Specifications**

The Facility shall be operated as specified under Standard Provision D of Attachment D.

#### **5. Special Provisions for Municipal Facilities (POTWs Only)**

##### **a. Biosolids Management**

- i. The handling, treatment, use, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of CWA Section 405 and USEPA regulations at 40 CFR Parts 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.
- ii. Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Regional Water Board at least 180 days prior to beginning the alternative means of disposal.
- iii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- iv. All requirements of 40 CFR Part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.

- v. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- vi. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- vii. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- viii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.
- ix. The Discharger shall submit an annual report to the USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR Part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 1 of each year and report for the period of the previous calendar year.

## 6. Other Special Provisions

- a. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS0000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.
- b. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** This General Permit, adopted on May 2, 2006, is applicable to all "federal and State agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publically owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger has obtained coverage under the General Permit.

## 7. Compliance Schedules – Not Applicable

## VII. COMPLIANCE DETERMINATION

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

- A. **General.** Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the

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

- B. Multiple Sample Data.** When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- C. Chronic Whole Effluent Toxicity Effluent Limitation (Section IV.A.4).** Compliance with the accelerated monitoring and TRE/TIE provisions of Provision VI.C.2.a shall constitute compliance with the effluent limitation.

## ATTACHMENT A – DEFINITIONS

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

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

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

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

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

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

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

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

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

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

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

**Effluent Concentration Allowance (ECA)** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge

concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Sanitary Sewer Overflow** is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sanitary sewer overflows include: (1) overflows or releases of untreated or partially treated wastewater that reach waters of the United States; (2) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (3) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publically owned portion of a sanitary sewer system.

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

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

**Standard Deviation ( $\sigma$ )** is a measure of variability that is calculated as follows:

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

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

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

**ATTACHMENT B – FACILITY MAP**

**ATTACHMENT C – PROCESS FLOW DIAGRAM**

## **ATTACHMENT D –STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

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

#### **B. Need to Halt or Reduce Activity Not a Defense**

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

#### **C. Duty to Mitigate**

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

#### **D. Proper Operation and Maintenance**

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

#### **E. Property Rights**

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

#### **F. Inspection and Entry**

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

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

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against the Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

#### **H. Upset**

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

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

### B. Duty to Reapply

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

### C. Transfers

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

## III. STANDARD PROVISIONS – MONITORING

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

## IV. STANDARD PROVISIONS – RECORDS

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

6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

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

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267 and 13383.)

### **B. Signatory and Certification Requirements**

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

or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

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

### **C. Monitoring Reports**

Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)

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

### **D. Compliance Schedules**

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

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR § 122.41(l)(6)(i); Wat. Code § 13383.)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

#### **F. Planned Changes**

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

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

#### **G. Anticipated Noncompliance**

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

#### **H. Other Noncompliance**

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

#### **I. Other Information**

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

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

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

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Publicly Owned Treatment Works (POTWs)**

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

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

## **CENTRAL COAST REGIONAL WATER BOARD STANDARD PROVISIONS (JANUARY 1985)**

### **I. Central Coast General Permit Conditions**

#### **A. Central Coast Standard Provisions – Prohibitions**

1. Introduction of "incompatible wastes" to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under CWC § 307(a) is prohibited.
4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.
5. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:
  - a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,
  - b. Flow through the system to the receiving water untreated; and,
  - c. Cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited.

6. Introduction of "pollutant free" wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

**B. Central Coast Standard Provisions – Provisions**

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by CWC § 13050.
2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.
3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.
6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
  - a. violation of any term or condition contained in this order;
  - b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;
  - c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
  - d. a substantial change in character, location, or volume of the discharge.
7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.
8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
  - a. Promulgation of a new or revised effluent standard or limitation;
  - b. A material change in character, location, or volume of the discharge;
  - c. Access to new information that affects the terms of the permit, including applicable schedules;
  - d. Correction of technical mistakes or mistaken interpretations of law; and,
  - e. Other causes set forth under Sub-part D of 40 CFR Part 122.
9. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also

include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect of accidental discharges shall:

- a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
  - b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.
10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.
11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.
12. If the discharger's facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.
13. Production and use of reclaimed water is subject to the approval of the Central Coast Water Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Central Coast Water Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Central Coast Water Board.

### **C. Central Coast Standard Provisions – General Monitoring Requirements**

1. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling shall be increased to validate the test within the next monitoring period. The increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (Central Coast Standard Provisions –

Definitions I.G.13.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (Central Coast Standard Provisions – Definitions I.G.14.).

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:
  - a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
  - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
  - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.
3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.
4. 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.

#### **E. Central Coast Standard Provisions – General Reporting Requirements**

1. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.
2. The "Discharger" shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.
3. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:

- a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,
- b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

In addition to complying with Federal Standard Provision – Reporting V.B., the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

4. All “Dischargers” shall submit reports electronically to the:

Central Coast Water Board  
[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906

In addition, "Dischargers" with designated major discharges shall submit a copy of each document to:

Regional Administrator  
US Environmental Protection Agency, Region 9  
Attention: CWA Standards and Permits Office (WTR-5)  
75 Hawthorne Street  
San Francisco, California 94105

5. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing “Discharger” and proposed “Discharger” containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.
6. Except for data determined to be confidential under Section 308 of the Clean Water Act (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Federal Standard Provision – Records IV.C.
7. By January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:
  - a) Both tabular and graphical summaries of the monitoring data obtained during the previous year.
  - b) A discussion of the previous year's compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance.

- c) An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
- d) A discussion of operator certification and a list of current operating personnel and their grades of certification.
- e) The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Provision B.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.
- f) A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Section C, General Monitoring Requirements.
- g) If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.
- h) If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

#### **F. Central Coast Standard Provisions – General Pretreatment Provisions**

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:
  - a. By the date specified therein;
  - b. Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,
  - c. If a new indirect discharger, upon commencement of discharge.

#### **G. Central Coast Standard Provisions – Enforcement**

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed \$5,000 per day.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

#### **H. Central Coast Standard Provisions – Definitions**

##### **(Not otherwise included in Attachment A to this Order)**

1. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.

2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
  - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
  - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
  - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to CWA § 311.
7. "Incompatible wastes" are:
  - a. Wastes which create a fire or explosion hazard in the treatment works;
  - b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;
  - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
  - d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,
  - e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.
8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n},$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. "n" should be five or more.

10. "Mass emission rate" is a daily rate defined by the following equations:

$$\text{mass emission rate (lbs/day)} = 8.34 \times Q \times C; \text{ and,}$$

$$\text{mass emission rate (kg/day)} = 3.79 \times Q \times C,$$

where "C" (in mg/L) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in MGD) is the measured daily flow rate or the average of measured daily flow rates over the period of interest.

11. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.
12. "Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision G.10, above, using the "six-month Median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.
13. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.
14. "Monthly Average" (or "Weekly Average", as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

$$\text{Average} = (X_1 + X_2 + \dots + X_n) / n$$

in which "n" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or mass emission rate (kg/day or lbs/day) for each sampled day. "n" should be four or greater.

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, storm waters, and cooling waters and condensates which are essentially free of pollutants.

18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.

19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{\text{effluent}} / C_{\text{influent}})$$

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.

21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.

22. To "significantly contribute" to a permit violation means an "indirect discharger" must:

- a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
- b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
- c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
- d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.

23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.).

24. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Resources Control Board.

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM**

**Table of Contents**

I. General Monitoring Provisions.....	E-2
II. Monitoring Locations .....	E-3
III. Influent Monitoring Requirements .....	E-4
IV. Effluent Monitoring Requirements.....	E-4
A. Monitoring Location M-001.....	E-4
V. Whole Effluent Toxicity Testing Requirements.....	E-6
A. Whole Effluent Acute Toxicity – Monitoring Location M-001 .....	E-6
B. Whole Effluent Chronic Toxicity – Monitoring Location M-001 .....	E-7
C. Quality Assurance.....	E-8
D. Accelerated Monitoring Requirements .....	E-9
E. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE).....	E-9
VI. Land Discharge Monitoring Requirements – Not Applicable .....	E-10
VII. Reclamation Monitoring Requirements – RCL-001 .....	E-10
VIII. receiving Water Monitoring Requirements .....	E-10
A. Receiving Water Monitoring – R-001, R-002, R-003, R-004, and R-005 .....	E-10
B. Groundwater Monitoring – GW-001 and GW-002 .....	E-12
IX. Other Monitoring Requirements.....	E-13
A. Biosolids Monitoring, Reporting, and Notification – BIO-001 .....	E-13
B. Pretreatment Monitoring – Not Applicable.....	E-14
X. Reporting Requirements.....	E-14
A. General Monitoring and Reporting Requirements .....	E-14
B. Self-Monitoring Reports (SMRs) .....	E-14
C. Discharge Monitoring Reports.....	E-17
D. Other Reports .....	E-17
1. Sewage Spill Reporting and Notifications.....	E-18
2. Total Chlorine Residual Release Notification .....	E-19
3. Reporting of Non-Compliance.....	E-19
4. Report of Waste Discharge.....	E-20

**Tables**

Table E-1. Monitoring Station Locations .....	E-3
Table E-2. Influent Monitoring .....	E-4
Table E-3. Effluent Monitoring Location M-001 .....	E-4
Table E-4. Short-Term Methods for Estimating Chronic Toxicity – Fresh Water.....	E-7
Table E-5. Receiving Water Monitoring Requirements- R-001 and R-004.....	E-10
Table E-6. Receiving Water Monitoring Requirements- R-002 and R-003.....	E-11
Table E-7. Receiving Water Monitoring Requirements- R-005 .....	E-12
Table E-8. Grounwater Monitoring Requirements .....	E-13
Table E-9. Biosolids Monitoring Requirements .....	E-13
Table E-10. Monitoring Periods and Reporting Schedule.....	E-15

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Code of Federal Regulations Section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### I. GENERAL MONITORING PROVISIONS

- A. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH), in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B. 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 approval of the Regional Water Board.
- C. 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  $\pm 10$  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.)
- D. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued

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

- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxics listed by the California Toxics Rule (CTR) shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005) (SIP).

## II. MONITORING LOCATIONS

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

**Table E-1. Monitoring Station Locations**

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Influent	M-INF	Influent wastewater, prior to discharge to the oxidation ditches, and following all significant inputs to the collection system of untreated wastewater inflow and infiltration.
Effluent	M-001	Location representative of final effluent to the unnamed drainage way, prior to contact with receiving water flow.
Recycled Water	RCL-001	A location representative of disinfected recycled water prior to distribution.
Receiving Water	R-001	At the discharge from Chorro Reservoir, immediately below the dam <sup>[1]</sup> .
Receiving Water	R-002	Upstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of background conditions in Chorro Creek.
Receiving Water	R-003	Downstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of conditions within Chorro Creek after contact and mixing with the discharge.
Receiving Water	R-004	Approximately 0.6 miles downstream of the point of discharge, at the site of a washed out concrete diversion dam.
Receiving Water	R-005	Twin-Bridges at the bridge crossing with Chorro Creek and South Bay Boulevard.
Groundwater	GW-001	Upgradient of the WWTP, as approved by the Central Coast Water Board.
Groundwater	GW-002	Downgradient of the WWTP, as approved by the Central Coast Water Board.
Biosolids	BIO-001	A location where a representative sample of biosolids may be obtained, after handling, and prior to disposal.

<sup>[1]</sup> If conditions are determined to be unsafe for sample collection, the Discharger may monitor directly from Chorro Reservoir at a location that provides a representative sample of upstream water quality. The Discharger shall provide a description of unsafe conditions and alternative monitoring location.

**III. INFLUENT MONITORING REQUIREMENTS**

The Discharger shall monitor the influent to the individual treatment plants at M-INF as follows.

**Table E-2. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	continuous	Continuous <sup>[1]</sup>
Max Daily Flow	MGD	calculated	1/Month
Mean Daily Flow	MGD	calculated	1/Month
Biochemical Oxygen Demand (5-day @ 20°C) (BOD)	mg/L	C-24	2/Month
Total Suspended Solids (TSS)	mg/L	C-24	2/Month

**Footnotes to Table E-2:**

Units:

- MGD = million gallons per day
- mg/L = milligrams per liter
- µg/L = micrograms per liter
- C-24 = 24-hour Composite

<sup>[1]</sup> Continuous monitoring for flow and daily reporting.

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location M-001**

The Discharger shall monitor the discharge at Monitoring Location M-001 as follows:

**Table E-3. Effluent Monitoring Location M-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorine Used	lbs/day	Continuous	1/Day
pH <sup>[1]</sup>	s.u.	Grab	1/Day
Residual Chlorine <sup>[2]</sup>	mg/L	Continuous	1/Day
Settleable Solids	mL/L	Grab	1/Day
Turbidity	NTU	Grab	1/Day
Total Coliform Bacteria	MPN/100 mL	Grab	5/Week <sup>[3]</sup>
Dissolved Oxygen	mg/L	Grab	5/Week
	% removal	Calculated	1/Week
BOD	mg/L	C-24	1/Week
	% removal	Calculated	1/Week
Nitrate (as N)	mg/L	Grab	1/Week
Nitrite (as N)	mg/L	Grab	1/Week
Temperature <sup>[1]</sup>	°F	instantaneous	1/Week
Total Ammonia (as N)	mg/L	Grab	1/Week
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	1/Week
Total Nitrogen (as N)	mg/L	Calculated <sup>[4]</sup>	1/Week
TSS	mg/L	C-24	1/Week
	% removal	Calculated	1/Week

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chloride	mg/L	Grab	1/Month
Dissolved Orthophosphate (as P)	mg/L	Grab	1/Month
Hardness (as CaCO3)	mg/L	Grab	1/Month
Oil and Grease	mg/L	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Bis(2-ethylhexyl)phthalate	µg/L	Grab	1/Month <sup>[8]</sup>
Chlorodibromomethane	µg/L	Grab	1/Month
Copper, Total Recoverable	µg/L	Grab	1/Month
Dichlorobromomethane	µg/L	Grab	1/Month
Acute Toxicity <sup>[5]</sup>	% survival	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Chronic Toxicity <sup>[5]</sup>	TUc	Grab	1/Year
Cobalt	mg/L	Grab	1/Year
CTR Pollutants <sup>[6]</sup>	µg/L	Grab	1/Year
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Phthalate Esters	µg/L	Grab	1/Year
Title 22 Pollutants <sup>[6]</sup>	µg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year

**Footnotes to Table E-3:**

Units:

- MGD = million gallons per day
- mg/L = milligrams per liter
- s.u. = standard units
- MPN/100 mL = Most probable number/100 mL
- °F = degree Fahrenheit
- µg/L = micrograms per liter
- C-24 = 24-hour composite

- [1] Temperature and pH shall be measured simultaneously with the sample taken for measurement of total ammonia. Results shall be used to calculate un-ionized ammonia concentration.
- [2] Compliance determinations for total residual chlorine (TRC) shall be based on 99 percent compliance. To determine 99 percent compliance with the effluent limitation for TRC, the following conditions shall be met: (1) the total time during which TRC exceeds 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no excursion above 0.1 mg/L shall exceed 30 minutes; and (3) no excursion shall exceed 2.0 mg/L. Verification of excursion length shall be submitted with monthly monitoring report. After the Facility upgrades disinfection from sodium hypochlorite injection to ultraviolet disinfection, monitoring for total residual chlorine may be reduced to only days on which sodium hypochlorite or other chlorinating agents are used.

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- [3] Total coliform bacteria should be analyzed daily when wastewater is being reclaimed/recycled for irrigation.
- [4] Total nitrogen shall be equal to the sum of total kjehldahl nitrogen, nitrite and nitrate.
- [5] Acute and chronic toxicity monitoring shall be conducted according to methods described in Section V of this MRP, below.
- [6] The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibrated standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML. Monitoring for the CTR pollutants in effluent shall occur simultaneously with monitoring required for the CTR pollutants in receiving water.
- [7] The Title 22 pollutants are those for which primary Maximum Contaminant Levels (MCLs) have been established by the Department of Health Services and which are listed in Tables 64431-A and 64444-A of the California Code of Regulations, Title 22, Division 4, Chapter 15. Where these pollutants are included in other groups of pollutants (CTR Priority Pollutants), monitoring does not need to be duplicated. Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 and 64445.1. Monitoring for the Title 22 pollutants in effluent shall occur simultaneously with monitoring required for the Title 22 pollutants in receiving water.
- [8] If bis (2-ethylhexyl) phthalate is found to be non-detect for 6 consecutive months, monitoring may be reduced to quarterly. If bis (2-ethylhexyl) phthalate is found to be non-detect for 2 years, monitoring may be reduced to annually as part of the annual CTR monitoring. If bis (2-ethylhexyl) phthalate is detected at anytime, monthly monitoring shall be resumed for a minimum of 6 consecutive months.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Whole Effluent Acute Toxicity – Monitoring Location M-001

1. Compliance with the acute toxicity effluent limitations of this Order shall be evaluated by measuring survival of test organisms exposed to 96-hour continuous flow-through bioassays.
2. Test organisms shall be fathead minnow unless the Executive Officer specifies in writing otherwise.
3. All bioassays shall be performed using the most sensitive species based on the most recent screening test results and in accordance with the most up-to-date protocols in 40 CFR 136, currently in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5<sup>th</sup> Edition.
4. If the Discharger can demonstrate that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limitation may be determined after the test samples are adjusted to remove the influence of those substances. The Discharger must obtain written approval from the Executive Officer to authorize such an adjustment.
5. The sample shall be taken from treated effluent after disinfection. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported in the monthly SMRs or as specified by the Regional Water Board.

- 6. The presence of acute toxicity shall be determined as significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test. The Discharger shall include with the SMR the percent survival of the organisms for both the effluent and control, and the results of the t-test (“statistically different” or “not statistically different”).

If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

**B. Whole Effluent Chronic Toxicity – Monitoring Location M-001**

**1. Chronic Toxicity Monitoring Requirements**

- a. **Toxicity Trigger.** A toxicity trigger of 1 TUc is established for the discharge of effluent through Discharge Point No. 001.
- b. **Sampling.** The Discharger shall collect grab samples of the effluent at M-001, as specified in Table E-3 above, for critical life stage toxicity testing as indicated below.
- c. **Test Species.** The test species shall include a vertebrate, and invertebrate, and an aquatic plant. After a three month screening period, monitoring may be reduced to the most sensitive species. Screening phase chronic toxicity monitoring shall be conducted with the following three species with approved test protocols. The Executive Officer may change the test species if data suggest that another test species is more sensitive to the discharge.

**Table E-4. Short-Term Methods for Estimating Chronic Toxicity – Fresh Water**

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow	<i>Pimephales promelas</i>	Larval Survival and Growth	7
Water Flea	<i>Ceriodaphnia dubia</i>	Survival; number of young	6 to 8 days
Green Alga	<i>Selenastrum capricornutum</i>	Growth Rate	4 days

- d. **Methodology.** Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1 and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently third edition (EPA-821-R-02-014) and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, currently fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).
- e. **Dilution Series.** The Discharger shall conduct tests at 100%, 85%, 70%, 50%, and 25%. The “%” represents percent effluent as discharged. The Discharger may use the biological buffer MOPS (3-(N-Morpholino)propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test.

## 2. Chronic Toxicity Reporting Requirements

- a. *Routine Reporting.* Toxicity test results for the current reporting period shall include, at a minimum, for each test:
  - i. Sample dates
  - ii. Test initiation date
  - iii. Test species
  - iv. End point values for each dilution (e.g. number of young, growth rate, percent survival)
  - v. NOEC values in percent effluent
  - vi. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub>, and IC<sub>50</sub> values (or EC<sub>15</sub>, EC<sub>25</sub> ... etc.) in percent effluent
  - vii. TUC values (100/NOEC, 100/IC<sub>25</sub>, or 100/EC<sub>25</sub>)
  - viii. Mean percent mortality ( $\pm$ s.d.) after 96 hours in 100% effluent (if applicable)
  - ix. NOEC and LOEC values for reference toxicant tests
  - x. IC<sub>50</sub> or EC<sub>50</sub> values for reference toxicant tests
  - xi. Available water quality measurements for each test (pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia)
- b. *Compliance Summary.* The results of the chronic toxicity testing shall be provided in the next Self-Monitoring Report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under 2.a., item numbers i, iii, v, vi (IC<sub>25</sub> or EC<sub>25</sub>), vii, and viii.

## C. Quality Assurance

1. 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).
2. 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.).
3. 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 resample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger collects the first sample required to complete the retest.
4. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD)

for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

#### **D. Accelerated Monitoring Requirements**

1. When acute toxicity is detected in the effluent above the effluent limitation established by this Order or when the chronic toxicity trigger of 1 TUC is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results.
3. If implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the effluent limitation or toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the effluent limitation or toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
4. If none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

#### **E. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE)**

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 toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, section V.C.
  - b. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
  - c. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:
  - a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);
  - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);
  - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a); and
  - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b).

3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. 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 includes the following:
  - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002; and
  - 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.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**

**VII. RECLAMATION MONITORING REQUIREMENTS – RCL-001**

The Discharger shall comply with applicable State and local monitoring requirements regarding the production and use of reclaimed wastewater, including requirements established by the California Department of Public Health at Title 22, Sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria.

The Discharger shall maintain records of the volumes of water delivered to each reclamation site. For each location of reclamation/reuse, the following information shall be maintained and reported:

- Total volume and maximum daily volume of water reclaimed during the reporting period.
- Percent of total wastewater influent flow that is reclaimed.
- Uses of reclaimed water.

Reclaimed water shall be monitored for turbidity, total coliform bacteria, and total residual chlorine at the appropriate frequency to demonstrate compliance with section IV.C of the Order.

**VIII. RECEIVING WATER MONITORING REQUIREMENTS**

**A. Receiving Water Monitoring – R-001, R-002, R-003, R-004, and R-005**

1. The Discharger shall monitor the receiving water at Monitoring Station R-001 and R-004 as follows. Receiving water at Monitoring Station R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge (between Chorro Reservoir and the point of discharge).

**Table E-5. Receiving Water Monitoring Requirements- R-001 and R-004**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>(1)</sup>
Ammonia (as N)	mg/L	Grab	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
pH <sup>[2]</sup>	s.u.	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[2]</sup>	°F	Instantaneous	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Calculated <sup>[3]</sup>	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Unionized Ammonia (as N)	mg/L	Calculated <sup>[4]</sup>	1/Month

<sup>[1]</sup> Monitoring Station R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge. When there is no surface flow below the dam, upstream data shall be calculated from an average of the last three samples.

<sup>[2]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate unionized ammonia concentration.

<sup>[3]</sup> Total nitrogen shall be equal to the sum of total kjeldahl nitrogen, nitrite and nitrate.

<sup>[4]</sup> Unionized Ammonia shall be calculated based on the following formula, or as otherwise approved by the Regional Water Board:

$$NH_3 = \frac{1}{1 + 10^{(pK - pH)}}$$

Where:

$$pK = 0.09018 + 2729.92/T$$

T = Temperature in degrees Kelvin

- The Discharger shall monitor the receiving water at Monitoring Station R-002 and R-003 as follows. Receiving water at Monitoring Station R-002 shall be monitored only when continuous surface flow exists between Chorro Reservoir and the point of discharge.

**Table E-6. Receiving Water Monitoring Requirements- R-002 and R-003**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Ammonia (as N)	mg/L	Grab	1/Month
Unionized Ammonia (as N)	mg/L	Calculated <sup>[2]</sup>	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
pH <sup>[2]</sup>	s.u.	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[3]</sup>	°F	Instantaneous	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Boron	mg/L	Grab	1/Year
Cobalt	mg/L	Grab	1/Year

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
CTR Pollutants <sup>[4]</sup>	µg/L	Grab	1/Year
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances (MBAS)	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Phthalate Esters	µg/L	Grab	1/Year
Sulfate	mg/L	Grab	1/Year
Title 22 Pollutants <sup>[5]</sup>	µg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year

<sup>[1]</sup> Monitoring Station R-002 shall be monitored only when surface flow exists between Chorro Reservoir and the point of discharge.

<sup>[2]</sup> Unionized Ammonia shall be calculated based on the following formula, or as otherwise approved by the Regional Water Board:

$$NH_3 = \frac{1}{1 + 10^{(pK - pH)}}$$

Where:

$$pK = 0.09018 + 2729.92/T$$

T = Temperature in degrees Kelvin

<sup>[3]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate unionized ammonia concentration.

<sup>[4]</sup> The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Monitoring of receiving water for the CTR pollutants shall occur simultaneously with effluent monitoring for the CTR pollutants.

<sup>[5]</sup> The Title 22 pollutants are those for which primary MCLs have been established by the Department of Health Services and which are listed in sections 64431-A and 64444-A of the California Code of Regulations, Title 22, Division 4, Chapter 15. Where these pollutants are also identified as CTR Priority Pollutants, monitoring does not need to be duplicated. Monitoring of receiving water for the Title 22 Pollutants shall occur simultaneously with effluent monitoring for Title 22 pollutants.

3. The Discharger shall monitor receiving water at Monitoring Station R-005 as follows:

**Table E-7. Receiving Water Monitoring Requirements- R-005**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	Percent	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month

<sup>[1]</sup> Sampling shall take place once per month between May and September.

**B. Groundwater Monitoring – GW-001 and GW-002**

The Discharger shall monitor groundwater at GW-001 and GW-002 as follows. After depth to groundwater has been measured, wells shall be purged before samples are collected for analysis.

**Table E-8. Groundwater Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	Feet	Measured	1/Quarter
Nitrate, Total (as N)	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Specific Conductance	µhoms/cm	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Chemical Oxygen Demand	mg/L	Grab	1/Quarter

**IX. OTHER MONITORING REQUIREMENTS**

**A. Biosolids Monitoring, Reporting, and Notification – BIO-001**

The Discharger shall collect a representative sample of residual solids (biosolids) from the last point in the handling process and perform the following analyses:

**Table E-9. Biosolids Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Quantity Removed	tons or yds <sup>3</sup>	Measured	During Removal
Location of Reuse/Disposal	General Public or Specific Site	Grab	1/Year
Moisture Content	Percent	Grab	1/Year
Ammonia (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Antimony	mg/kg <sup>[1]</sup>	Grab	1/Year
Arsenic	mg/kg <sup>[1]</sup>	Grab	1/Year
Barium	mg/kg <sup>[1]</sup>	Grab	1/Year
Beryllium	mg/kg <sup>[1]</sup>	Grab	1/Year
Boron	mg/kg <sup>[1]</sup>	Grab	1/Year
Cadmium	mg/kg <sup>[1]</sup>	Grab	1/Year
Chromium (IV)	mg/kg <sup>[1]</sup>	Grab	1/Year
Cobalt	mg/kg <sup>[1]</sup>	Grab	1/Year
Copper	mg/kg <sup>[1]</sup>	Grab	1/Year
Fluoride	mg/kg <sup>[1]</sup>	Grab	1/Year
Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
Mercury	mg/kg <sup>[1]</sup>	Grab	1/Year
Nickel	mg/kg <sup>[1]</sup>	Grab	1/Year
Nitrate (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Oil and Grease	mg/kg <sup>[1]</sup>	Grab	1/Year
Organic Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
PCBs	mg/kg <sup>[1]</sup>	Grab	1/Year
Pesticides	mg/kg <sup>[1]</sup>	Grab	1/Year
pH	s.u.	Grab	1/Year
Selenium	mg/kg <sup>[1]</sup>	Grab	1/Year
Silver	mg/kg <sup>[1]</sup>	Grab	1/Year
Thallium	mg/kg <sup>[1]</sup>	Grab	1/Year

Parameter	Units	Sample Type	Minimum Sampling Frequency
Tin	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Chromium	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Nitrogen (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Phosphorus (as P)	mg/kg <sup>[1]</sup>	Grab	1/Year
Trichloroethylene	mg/kg <sup>[1]</sup>	Grab	1/Year
Vanadium	mg/kg <sup>[1]</sup>	Grab	1/Year
Vinyl Chloride	mg/kg <sup>[1]</sup>	Grab	1/Year
Zinc	mg/kg <sup>[1]</sup>	Grab	1/Year

<sup>[1]</sup> Results shall be reported on a dry weight basis.

The following information shall be submitted with the Annual Report required by the Regional Water Board. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR 503.

1. Annual biosolids production in dry tons.
2. Percent solids content of biosolids which leave the site.
3. A schematic drawing showing handling facilities, including temporary and final storage areas. Include a narrative description of solids treatment and performance.
4. A description of disposal methods, including the following information as applicable related to the disposal methods used at the Facility.
  - a. For landfill disposal include: tons placed in the landfill; the Regional Water Board WDR numbers that regulate the landfills used; the present classification of the landfill; and the names and locations of the landfills which receive biosolids.
  - b. For land application include: tons applied to the land; the location of the land applications sites; the Regional Water Board's WDR numbers that regulate the land application sites; the application rates in lbs/acre/year (specify the weight basis, e.g., dry weight or percent solids); and the subsequent uses of the land.

**B. Pretreatment Monitoring – Not Applicable**

**X. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

The Discharger shall comply with all Federal Standard Provisions (Attachment D) and Regional Standard Provisions related to monitoring, reporting, and recordkeeping.

**B. Self-Monitoring Reports (SMRs)**

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, semi-annual, and annual SMRs including the results of all required monitoring using USEPA approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-10. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Day after permit effective date	All	First day of the second calendar month following month of sampling.
1/Day	Day after permit effective date	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling	
1/Week	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	
1/Month	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	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
2/Year	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 1 February 1
1/Year	Permit effective date if that date is January 1 through June 30.  January 1 after permit effective date if that date is July 1 through December 31 <sup>[1]</sup> .	January 1 through December 31	February 1

<sup>[1]</sup> For permit renewals with an effective date from July 1 through December 31, for that calendar year only the Discharger shall comply with its old permit's annual reporting requirements (including electronic submittal to CIWQS under the previous permit number), and then begin its annual monitoring and reporting according to the new permit on January 1. For example, if a new permit takes effect on October 15, 2012, then the Discharger would comply with the annual reporting requirements from its old permit for the reporting period of January 1, 2012, through December 31, 2012, and then begin complying with the new permit's annual reporting requirements beginning January 1, 2013

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

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

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

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

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

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
6. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
7. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format

within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. In the event that the CIWQS website is unavailable due to service interruption or other technical difficulties, the Discharger shall electronically submit SMRs to the Regional Water Board at [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov), signed and certified as required by the Standard Provisions (Attachment D. In the event that electronic mail is not available, the Discharger shall submit the SMR hard copy by mail, signed and certified as required by the Standard Provisions (Attachment D) to the address listed below:

California Regional Water Quality Board  
 Central Coast Region  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, California 93401

**C. Discharge Monitoring Reports**

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

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

- 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 will not be accepted unless they follow the exact same format of EPA Form 3320-1.

**D. Other Reports**

The Discharger shall report the results of any special studies, monitoring, and reporting required by section VI.C (Special Studies, Technical Reports, and Additional Monitoring) of the Order with the first monthly SMR following the respective due date.

In addition, the Discharger shall comply with the reporting requirements below.

### 1. Sewage Spill Reporting and Notifications

- a. Sanitary sewer overflows associated with the Discharger's collection system are subject to the online reporting and notification requirements set forth in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ. The Discharger has enrolled under the statewide waste discharge requirements for sanitary sewer systems. Therefore, all prohibitions, provisions, and monitoring and reporting requirements apply to the Discharger. For any unauthorized discharges of sewage to a drainage channel or surface water, the Discharger is required to notify the State Office of Emergency Services, the local health officer or director of environmental health with jurisdiction over affected water bodies, and the Central Coast Water Board, within two hours after becoming aware of the discharge. Additionally, within 24 hours the Discharger shall submit to the Central Coast Water Board certification that the appropriate agencies (i.e., Office of Emergency Services and local Environmental Health Department) have been notified of the sewage discharge to surface water bodies.
- b. In accordance with the requirements of Health and Safety Code Section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any spills that cause, or probably will cause, a discharge to any waters of the state.

In accordance with the requirements of Water Code Section 13271, the Discharger shall provide notification to the State Office of Emergency Services of reportable amounts of hazardous substance spills or sewage spills that cause, or probably will cause, a discharge to any waters of the state. The California Code of Regulations, Title 23, Section 2250, defines a reportable amount of a sewage spill as being 1,000 gallons. The phone number for reporting these releases to the **State Office of Emergency Services is (800) 852-7550**.

The Discharger shall notify the Central Coast Water Board of any spill from its wastewater treatment plant that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than **two hours** after becoming aware of the release. This notification does not need to be made if the Discharger has notified the State Office of Emergency Services first. The phone number for reporting these sewage spills to the Central Coast Water Board is **(805) 549-3147**. At a minimum, the following information shall be provided:

- i. The location, date, and times of the spill.
- ii. The water body that received or will receive the spill.
- iii. An estimate of the amount of sewage or other waste spilled and the amount that reached a surface water at the time of notification.
- iv. If ongoing, the estimated flow rate of the spill at the time of the notification.
- v. The name of the organization, phone number, and email address of the reporting representative.

- c. As soon as possible, but not later than 24 hours after becoming aware of a spill from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Central Coast Water Board by email at [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov). If the spill is 1,000 gallons or more, this statement shall certify that the State Office of Emergency Services has been notified of the spill in accordance with California Water Code Section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the spill in accordance with Health and Safety Code Section 5411.5. The statement shall also include at a minimum the following information:
  - i. Agency, NPDES No., Order No., and MRP No., if applicable.
  - ii. The location, date, and time of the spill.
  - iii. The water body that received the spill.
  - iv. A description of the level of treatment of the sewage spill or other waste spilled.
  - v. An initial estimate of the amount of sewage spilled or other waste spilled and the amount that reached a surface water.
  - vi. The State Office of Emergency Services control number and the date and time that notification of the incident was provided to the State Office of Emergency Services.
  - vii. The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

**2. Total Chlorine Residual Release Notification**

- a. The Discharger shall notify the following agencies **within two hours** if an individual total chlorine residual release to surface water is detected at 0.1 mg/L for more than 30 minutes and/or individual total chlorine residual exceeds 2.0 mg/L, which violate the effluent limitations as defined in section IV.A.1 of this Order:

Central Coast Water Board	805-542-4638
Office of Emergency Services	800-852-7550
Department of Fish and Game Dispatch <sup>[1]</sup>	831-649-2801
San Luis Obispo County Environmental Health Agency	805-781-5544

<sup>[1]</sup> Prompt dispatch to notify marine protected area warden, enforcement warden, and biologist.

- b. Within 24 hours of the release, the Discharger shall certify to the Central Coast Water Board that notifications have been made to appropriate agencies (above). Certification of such notifications shall be conducted through email notifications or by facsimile at 805-543-0397.

**3. Reporting of Non-Compliance**

The Discharger shall comply with section V.E. of Standard Provisions (Attachment D), following procedures described in a February 17, 1981, tri-agency memo from the Department of Health Services and any amendments thereto, and shall notify the following:

Department of Health Services Jill Baltan	510-412-4633
Office of Emergency Services	800-852-7550
Department of Fish and Game Dispatch	831-649-2819
County Board of Supervisors	805-781-5450
County Ag Commission	805-781-5910
Tomales Bay Shellfish Farms Inc Drew Aldeen	415-250-9905
Morro Bay Oyster Company Neal Maloney	805-234-7102
Grassy Bar Oyster Company George Trevelyan	805-471-9683
Morro Bay National Estuary Program	805-772-3834
Y. Hayashi & Sons	805-489-2595

**4. Report of Waste Discharge**

**No later than July 28, 2017**, and pursuant to California Water Code section 13376, the Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements.

**ATTACHMENT F - FACT SHEET**

**Table of Contents**

I.	Permit Information .....	F-3
II.	Facility Description .....	F-4
	A. Description of Wastewater and Biosolids Treatment and Controls .....	F-4
	B. Discharge Points and Receiving Waters .....	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report Data.....	F-5
	D. Compliance Summary.....	F-7
	E. Planned Changes .....	F-9
III.	Applicable Plans, Policies, and Regulations .....	F-9
	A. Legal Authorities .....	F-9
	B. California Environmental Quality Act (CEQA).....	F-9
	C. State and Federal Regulations, Policies, and Plans .....	F-10
	D. Impaired Water Bodies on CWA 303(d) List.....	F-11
	E. Other Plans, Policies and Regulations .....	F-14
IV.	Rationale For Effluent Limitations and Discharge Specifications.....	F-14
	A. Discharge Prohibitions .....	F-15
	B. Technology-Based Effluent Limitations .....	F-16
	1. Scope and Authority .....	F-16
	1. Applicable Technology-Based Effluent Limitations .....	F-16
	C. Water Quality-Based Effluent Limitations (WQBELs) .....	F-17
	1. Scope and Authority .....	F-17
	2. Applicable Beneficial Uses and Water Quality Objectives .....	F-18
	3. Determining the Need for WQBELs.....	F-18
	4. WQBEL Calculations.....	F-23
	5. Whole Effluent Toxicity (WET).....	F-28
	6. Basin Plan.....	F-29
	D. Final Effluent Limitations .....	F-35
V.	Rationale for Surface Receiving Water Limitations .....	F-38
VI.	Rationale for Monitoring and Reporting Requirements .....	F-38
	A. Influent Monitoring .....	F-38
	B. Effluent Monitoring .....	F-38
	C. Whole Effluent Toxicity Testing Requirements .....	F-39
	D. Receiving Water Monitoring .....	F-39
	1. Surface Water .....	F-39
	2. Groundwater .....	F-39
	E. Other Monitoring Requirements .....	F-39
	1. Biosolids/Sludge Monitoring .....	F-39
	2. Pretreatment Monitoring – Not Applicable .....	F-39
	3. Salt and Nutrient Management Plan Reporting .....	F-39
VII.	Rationale for Provisions.....	F-39
	A. Standard Provisions.....	F-39
	B. Special Provisions.....	F-40
	1. Reopener Provisions.....	F-40
	2. Special Studies and Additional Monitoring Requirements.....	F-40
	3. Best Management Practices and Pollution Prevention .....	F-40
	4. Construction, Operation, and Maintenance Specifications – Not Applicable .....	F-41
	5. Special Provisions for Municipal Facilities (POTWs Only) .....	F-41
Attachment F– Fact Sheet		F-1

6. Other Special Provisions .....	F-41
7. Compliance Schedules – Not Applicable .....	F-42
VIII. Public Participation .....	F-42
A. Notification of Interested Parties .....	F-42
B. Written Comments .....	F-42
C. Public Hearing .....	F-42
D. Waste Discharge Requirements Petitions .....	F-43
E. Information and Copying .....	F-43
F. Register of Interested Persons.....	F-43
G. Additional Information .....	F-43

**List of Tables**

Table F-1. Facility Information.....	F-3
Table F-2. Design Flows .....	F-5
Table F-3. Outfall Locations .....	F-5
Table F-4. Previous Effluent Limitations and Monitoring Data for Conventional and Non- Conventional Pollutants from Discharge Point No. 001 .....	F-6
Table F-5. Compliance Summary .....	F-7
Table F-6. Basin Plan Beneficial Uses of Chorro Creek .....	F-10
Table F-7. Phosphate and Orthophosphate Effluent Data Summary .....	F-13
Table F-8. Secondary Treatment Requirements .....	F-16
Table F-9. Technology-Based Effluent Limitations .....	F-17
Table F-10. Summary of RPA Results .....	F-19
Table F-11. WQBEL Calculations .....	F-26
Table F-12. Receiving Water .....	F-32
Table F-13. Groundwater.....	F-32
Table F-14. Municipal Supply Water .....	F-33
Table F-15. Collection System Data for Salts.....	F-33
Table F-16. Influent Data for Salts .....	F-33
Table F-17. Final Effluent Limitations.....	F-36

**ATTACHMENT F – FACT SHEET**

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

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

**I. PERMIT INFORMATION**

The following table summarizes administrative information related to the Facility.

**Table F-1. Facility Information**

<b>WDID</b>	3400108001
<b>Discharger</b>	California Department of Corrections and Rehabilitation
<b>Indirect Dischargers</b>	California Army National Guard, Camp San Luis Obispo Cuesta College San Luis Obispo County Education Center San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course San Luis Obispo County Operational Facility
<b>Name of Facility</b>	California Men's Colony Wastewater Treatment Plant (WWTP)
<b>Facility Address</b>	Hwy 1, North of San Luis Obispo, behind Cuesta College San Luis Obispo, CA 93401 San Luis Obispo County
<b>Facility Contact, Title, Phone</b>	Elvin Valenzuela, Acting Warden, (805) 547-7901
<b>Authorized Person to Sign and Submit Reports</b>	Elvin Valenzuela, Acting Warden, (805) 547-7901
<b>Mailing Address</b>	P.O. Box 8101, San Luis Obispo, CA 93401
<b>Billing Address</b>	Same
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Major or Minor Facility</b>	Major
<b>Threat to Water Quality</b>	1
<b>Complexity</b>	A
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	Yes, Department of Health Services regulations at Title 22 of the California Code of Regulations Chapter 3 (Water Recycling Criteria).
<b>Facility Permitted Flow</b>	1.2 million gallons per day (MGD) (dry weather monthly average)
<b>Watershed</b>	Estero Bay Hydrologic Unit
<b>Receiving Water</b>	Chorro Creek
<b>Receiving Water Type</b>	Inland, freshwater

- A.** The California Department of Corrections and Rehabilitation (hereinafter the Discharger) owns and operates a trunk sewer line and wastewater treatment facility located on the grounds of Camp San Luis Obispo, a National Guard training site. In addition to conveying and treating domestic wastewater from the East and West Facilities of the California Men's Colony, a correctional institution, the trunk sewer and treatment plant provide wastewater conveyance and treatment for the California National Guard's Camp San Luis Obispo, Cuesta College, and several County facilities, including a jail, an education center, and an operations facility.

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

- B.** The wastewater treatment facility discharges treated effluent to Chorro Creek, a water of the United States, and is currently regulated by Order No. R3-2006-0032, which was adopted on July 7, 2006.
- C.** The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on August 25, 2011.

## **II. FACILITY DESCRIPTION**

### **A. Description of Wastewater and Biosolids Treatment and Controls**

The California Men's Colony wastewater treatment plant was originally constructed in 1940 by the Army Corps of Engineers, which operated the facility until the early 1960s, when the Department of Corrections assumed responsibility for its operations. Treatment modifications and upgrades occurred in 1979 and 1985, and in the fall of 2006, major modifications and upgrades were completed.

In addition to treating domestic wastewater from the East and West Facilities of the California Men's Colony, the facility provides wastewater treatment for the California National Guard's Camp San Luis Obispo, Cuesta College, and several County facilities, including the County Jail, Education Center, and operations facility. The California National Guard, San Luis Obispo County, and Cuesta College own and maintain discrete wastewater collection and transport systems that discharge to the Department of Corrections' trunk sewer system. The entire service area includes approximately 13,000 acres with an estimated population of 16,000. Approximately 11,700 acres of the service area are public lands.

Design flows for the recently upgraded (2006) wastewater treatment facility are summarized below.

**Table F-2. Design Flows**

Average Dry Weather Flow	1.2 MGD
Average Annual Flow	1.3 MGD
Average Day Maximum Monthly Flow	1.8 MGD
Peak Hour Dry Weather Flow	2.4 MGD
Peak Hour Wet Weather Flow	5.2 MGD

The headworks of the new facility include a Parshall flume with a capacity of 5.73 MGD, barscreens, and an aerated chamber. Additional treatment is provided by two oxidation ditches and two secondary clarifiers. Tertiary treatment is accomplished by sand filtration, using eight filter cells with surface areas of 50 square feet each. The facility disinfects treated effluent with sodium hypochlorite and dechlorinates using sodium bisulfite before discharging to Chorro Creek. Two centrifuges are used to dewater sludge, generating up to 2.2 dry tons of solids per day. Wastewater solids are hauled from the site for disposal. Treated wastewater is used by the County to irrigate the Dairy Creek Golf Course and discharged to Chorro Creek at a minimum continuous flow rate of 0.75 cubic feet per second (cfs).

**B. Discharge Points and Receiving Waters**

Effluent from the California Men's Colony Wastewater treatment plant is discharged to Chorro Creek, within the Chorro Creek Subarea of the Estero Bay Hydrologic Unit. Chorro Creek is a drinking water source for the City of Morro Bay, as well as a fresh water source for the Morro Bay Estuary.

**Table F-3. Outfall Locations**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated domestic wastewater	35° 19' 30" N	120° 45' 9" W	Chorro Creek

**C. Summary of Existing Requirements and Self-Monitoring Report Data**

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 and representative monitoring data for Monitoring Location M-001, for the term of the previous Order, are presented in the following tables.

**Table F-4. Previous Effluent Limitations and Monitoring Data for Conventional and Non-Conventional Pollutants from Discharge Point No. 001**

Parameter	Units	Effluent Limitations			Monitoring Data (From July 2009-March 2011)		
		Monthly Average	Weekly Average	Daily Maximum	Highest Monthly Average	Highest Weekly Average	Highest Daily Discharge
Acute Toxicity	% survival	--	--	1	--	--	95
BOD, 5-day <sup>2</sup>	mg/L	10	30	50	4.9	7.1	7.1
	lbs/day	100	300	500	42	52	52
	kg/day	45	136	227	NA	NA	NA
Chlorine Residual	mg/L	--	--	ND <sup>3</sup>	--	--	0.12
Chlorodibromomethane <sup>4</sup>	µg/L	0.4	--	0.81	19	--	19
Chronic Toxicity	TUc	--	--	1	--	--	
Copper, Total Recoverable <sup>5</sup>	µg/L	8.5	--	17	11	--	11
Dichlorobromomethane <sup>4</sup>	µg/L	0.56	--	1.1	20	--	20
Dissolved Oxygen	mg/L	> 2.0 mg/L at all times					0.57 <sup>6</sup>
Flow Rate	MGD	1.2 <sup>7</sup>	--	--	1.4	--	--
Oil and Grease	mg/L	5	--	10	ND	--	ND
	lbs/day	50	--	100	ND	--	ND
	kg/day	23	--	45	ND	--	ND
pH	s.u.	6.5-8.3 at all times					6.8-8.0
Settleable Solids	mL/L	0.1	--	0.3	ND	--	0.2
Sulfate	mg/L	--	--	125	--	--	189
	lbs/day	--	--	1,251	--	--	NA
	kg/day	--	--	568	--	--	NA
Total Suspended Solids (TSS)	mg/L	10	30	50	7.7	20	38
	lbs/day	100	300	500	37	98	182
	kg/day	45	136	227	NA	NA	NA
Total Nitrogen (as N)	mg/L	--	--	10	--	--	9
	lbs/day	--	--	100	--	--	NA
	kg/day	--	--	45	--	--	NA
Turbidity	NTU	10	--	20	4.1	--	20

**Footnotes to Table F-4:**

mg/L = milligrams per liter  
 s.u. = Standard Units  
 ND = Non-detect  
 NA = Not Available

- (1) Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test, to the survival of control organisms
- (2) 5-day biochemical oxygen demand at 20°C
- (3) ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation specified above for total chlorine residual, the following conditions shall be satisfied: (1) the total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no individual excursion from 0.1 mg/L shall exceed 30 minutes; and (3) no individual excursion shall exceed 2 mg/L.
- (4) Final effluent limitations for the trihalomethanes became effective on May 19, 2010, pending results of the Trihalomethane Study required by Section VI.C.6 of the previous Order.
- (5) Final effluent limitations for copper will become effective on May 19, 2010, in accordance with the compliance schedule established by Section VI.C.6 of the previous Order

**Footnotes to Table F-4 continued:**

- (6) Represents the lowest reported value.
- (7) Average monthly dry weather flow

**D. Compliance Summary**

The Discharger violated numeric effluent limitations multiple times during the term of the previous Order. A majority of the violations are related to trihalomethane constituents, a by-product of chlorinated disinfection. The following table summarizes the violations of effluent limitations based on data collected from July 2009 through March 2011.

**Table F-5. Compliance Summary**

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
11/25/2010	4th Quarter	Maximum Daily	Chlorine Residual	0.12	<0.1	mg/L
November 2010	4th Quarter	Average Monthly	Copper, Total Recoverable	11	8.5	µg/L
July 2009	3rd Quarter	Interim Average Monthly	Chlorodibromomethane	4.4	3.5	µg/L
August 2009	3rd Quarter	Interim Average Monthly	Chlorodibromomethane	4.4	3.5	µg/L
October 2009	4th Quarter	Interim Average Monthly	Chlorodibromomethane	11	3.5	µg/L
January 2010	1st Quarter	Interim Average Monthly	Chlorodibromomethane	9.3	3.5	µg/L
April 2010	2nd Quarter	Interim Average Monthly	Chlorodibromomethane	4.3	3.5	µg/L
June 2010	2nd Quarter	Final Average Monthly	Chlorodibromomethane	4	0.4	µg/L
6/18/2010	2nd Quarter	Final Maximum Daily	Chlorodibromomethane	4	0.81	µg/L
July 2010	3rd Quarter	Final Average Monthly	Chlorodibromomethane	19	0.4	µg/L
7/23/2010	3rd Quarter	Final Maximum Daily	Chlorodibromomethane	19	0.81	µg/L
January 2011	1st Quarter	Final Average Monthly	Chlorodibromomethane	4	0.4	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
1/13/2011	1st Quarter	Final Maximum Daily	Chlorodibromomethane	4	0.81	µg/L
July 2009	3rd Quarter	Interim Average Monthly	Dichlorobromomethane	20	13	µg/L
October 2009	4th Quarter	Interim Average Monthly	Dichlorobromomethane	17	13	µg/L
January 2010	1st Quarter	Interim Average Monthly	Dichlorobromomethane	19	13	µg/L
April 2010	2nd Quarter	Interim Average Monthly	Dichlorobromomethane	17	13	µg/L
June 2010	2nd Quarter	Final Average Monthly	Dichlorobromomethane	17	0.56	µg/L
6/18/2010	2nd Quarter	Final Maximum Daily	Dichlorobromomethane	17	1.1	µg/L
July 2010	3rd Quarter	Final Average Monthly	Dichlorobromomethane	4.3	0.56	µg/L
7/23/2010	3rd Quarter	Final Maximum Daily	Dichlorobromomethane	4.3	1.1	µg/L
November 2010	4th Quarter	Final Average Monthly	Dichlorobromomethane	2.1	0.56	µg/L
11/20/2010	4th Quarter	Final Maximum Daily	Dichlorobromomethane	2.1	1.1	µg/L
January 2011	1st Quarter	Final Average Monthly	Dichlorobromomethane	14	0.56	µg/L
1/13/2011	1st Quarter	Final Maximum Daily	Dichlorobromomethane	14	1.1	µg/L
5/1/2010	2nd Quarter	Maximum Daily	Dissolved Oxygen	0.57	>2.0	mg/L
January 2010	1st Quarter	Average Monthly	Flow Rate	1.3	1.2	MGD
December 2010	4th Quarter	Average Monthly	Flow Rate	1.4	1.2	MGD
4/15/2010	2nd Quarter	Maximum Daily	Sulfate	130	125	mg/L
11/20/2010	4th Quarter	Maximum Daily	Sulfate	189	125	mg/L

The Regional Water Board issued administrative civil liability orders (ACLs) for a wastewater spill to Chorro Creek and effluent limitation violations during the previous permit term. In January 2008, a power failure caused 20,000 gallons of untreated wastewater to be discharged to Chorro Creek, and the Discharger was assessed a related ACL of \$40,000. Two additional ACLs for effluent limitation violations were issued in February 2009 for a total of \$201,500. In November 2009, the Discharger paid a penalty of \$18,000 for effluent limitation violations subject to mandatory minimum penalties.

#### **E. Planned Changes**

Currently all flow at the Facility is disinfected by sodium hypochlorite and then dechlorinated by sodium bisulfite. The Discharger is planning a disinfection upgrade project to address ongoing trihalomethane and salt effluent violations. With the completion of the disinfection upgrade project, ultraviolet (UV) light will become the primary means of effluent disinfection. The sodium hypochlorite system will continue to be used to provide a chlorine residual to the water that will be used for water recycling activities at the Dairy Creek Golf Course, and for the Facility's plant water used for wash down and maintenance. With the conversion to UV disinfection, the dechlorination system will no longer be used for the treatment process of effluent discharged to Chorro Creek and sodium bisulfite will no longer be on the site.

The Facility is expected to construct the new UV system beginning in fall 2012 and should be completed within the following 14 to 16 months. Once the system is online, effluent will be disinfected through one channel of UV lights. A second channel of UV lights will be in service during peak flow events. A composite sampler will be installed in each channel that will be flow paced using the channel flow measurement from a Parshall flume.

### **III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in this 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 United States Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC, commencing with Section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

#### **B. California Environmental Quality Act (CEQA)**

Pursuant to Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 through 21177.

**C. State and Federal Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The California Water Resources Control Board, Central Coast Region (Regional Water Board) has adopted the *Water Quality Control Plan for the Central Coastal Basin* (the Basin Plan) that designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses established by the Basin Plan for Chorro Creek are presented below.

**Table F-6. Basin Plan Beneficial Uses of Chorro Creek**

Discharge Point	Receiving Water Name	Beneficial Uses
001	Chorro Creek	Municipal and Domestic Water Supply (MUN) Agricultural Supply (AGR) Groundwater Recharge (GWR) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Wildlife Habitat (WILD) Cold Fresh Water Habitat (COLD) Warm Fresh Water Habitat (WARM) Fish Migration (MIGR) Fish Spawning (SPWN) Preservation of Biological Habitats of Special Significance (BIOL) Preservation of Rare and Endangered Species (RARE) Fresh Water Replenishment (FRESH) Commercial and Sport Fishing (COMM)

Groundwater throughout the Central Coast Region is suitable for agricultural water supply, municipal and domestic water supply, and industrial use. Requirements of this Order implement the Basin Plan.

- 2. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
- 3. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that apply in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants that are applicable to the receiving water for discharges from the Facility.

4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (hereinafter State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control that are applicable to discharges to Chorro Creek.

Requirements of this Order implement the SIP.

5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [40 CFR 131.21, 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
6. **Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in section IV.D.2 of this Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
7. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 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 limitations and requirements of this Order are consistent with anti-backsliding requirements of the CWA and NPDES Regulations.

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

CWA section 303(d) 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 Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The 2010 303(d) list identifies Chorro Creek as being impaired for E. coli, fecal coliform, nutrients, and sediment/siltation.

TMDLs establish WLAs for point source and LAs for non-point sources and are intended to achieve the water quality standards for the impaired waterbodies.

## 1. Nutrients and Dissolved Oxygen in Chorro Creek

The Regional Water Board adopted, and the USEPA approved, a TMDL for nutrients and dissolved oxygen in Chorro Creek on July 7, 2006, and July 19, 2007, respectively. The TMDL establishes WLAs for the Discharger to achieve water quality objectives for dissolved oxygen and biostimulatory substances. WLAs applicable to the Discharger as specified by the Nutrients and Dissolved Oxygen TMDL are summarized below.

- a. Effluent discharged shall not cause sodium concentration to exceed 50 mg/L in receiving waters, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- b. Effluent discharged shall not cause total dissolved solids to exceed 500 mg/L in receiving waters, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- c. Effluent discharged shall not cause receiving water temperature to be increased by more than 5 °F, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- d. The monthly nitrate concentration of effluent shall not exceed 10 mg/L-N.
- e. Median orthophosphorus concentrations of effluent from May through September shall not exceed current levels, as measured by a comparison to effluent concentrations from 2004 and 2005.

Section 7.1.1, Implementation to Achieve TMDLs for Nitrate-N, Sodium, Total Dissolved Solids, and Temperature states that the Regional Water Board will incorporate effluent and receiving water limitations consistent with the allocations assigned to the Discharger. Order No. R3-2012-0027 implements the Nutrients and Dissolved Oxygen TMDL through receiving water limitations and effluent limitations. Receiving water limitations equal to the applicable WLAs are established for ammonia (unionized, as N), dissolved oxygen, sodium, total dissolved solids, and temperature. An effluent limitation of 10 mg/L is established for total nitrogen, which is more conservative than the 10 mg/L for nitrate-N established in the TMDL.

Section 7.1.2, Implementation to Achieve the Orthophosphorus-P TMDL, states, *"To date, CMC's orthophosphorus-P levels have not caused receiving water increases above the acceptable range of orthophosphorus-P necessary to control nuisance levels of algae in the impaired lower reaches. Therefore, Central Coast Water Board expects these levels to be maintained with the upgraded treatment operations. To insure that the levels don't cause increases in the acceptable range of orthophosphorus-P, Central Coast Water Board staff will review monitoring data for orthophosphorus-P in monitoring reports submitted by CMC."*

The TMDL does not require the implementation of an effluent limitation for orthophosphorus, but does require the Regional Water Board to monitor and compare the effluent to 2004 and 2005 levels. Within the TMDL, because orthophosphorus data is not available, phosphorus data was used to determine the May through September median for 2004 and 2005. It is assumed that the orthophosphorus concentrations will be less than phosphorus. The

resulting median for phosphorus in 2004 and 2005 within the effluent is 2.4 mg/L. Relevant data for phosphorus compounds in the effluent collected over the current permit term are limited to phosphate and orthophosphate. The annual median effluent concentration based on available data for phosphate and orthophosphate are summarized below.

**Table F-7. Phosphate and Orthophosphate Effluent Data Summary**

Year (May through September)	Annual Median (mg/L)	
	Phosphate	Orthophosphate
2007	1.8	1.7
2009	2.0	1.6
2010	2.2	1.9

The available data does not indicate that phosphate concentrations have increased in the Discharger's effluent. Consistent with the requirements of the TMDL, continued monitoring for phosphate and orthophosphate have been carried over to this Order and will continue to be evaluated by the Regional Water Board.

**2. Sediment Loading to Morro Bay, Los Osos Creek, and Chorro Creek**

The Regional Water Board, State Water Board, California Office of Administrative Law, and USEPA approved Resolution No. R3-2002-0051 on May 16, 2003, September 16, 2003, December 3, 2003, and January 20, 2004, respectively. In Morro Bay, erosion and sedimentation have been accelerated due to anthropogenic watershed disturbances, resulting in impairment of beneficial uses for biological resources and recreational uses. Resolution No. R3-2002-0051 implements the TMDL through the Morro Bay National Estuary Program, Coastal San Luis Resources Conservation District, and other public and private groups, through self-determined activities and trackable implementation actions focusing on non-point sources. Trackable implementation actions or WLAs are not specified for the Discharger and consistent with the previous Order, have not been established in this Order.

**3. Pathogens for Morro Bay and Chorro and Los Osos Creeks**

The Regional Water Board, State Water Board, California Office of Administrative Law, and USEPA approved Resolution No. R3-2002-0117 on May 16, 2003, September 16, 2003, November 19, 2003, and January 20, 2004, respectively. Elevated levels of fecal coliform in Morro Bay and Chorro and Los Osos Creeks indicate that pathogens are impairing water contact recreation and shellfish harvesting in these water bodies. High levels of pathogens may cause disease in humans and may also adversely affect marine animals. Resolution No. R3-2002-0117 establishes WLAs and LAs for point sources and non-point sources that are equal to the numeric targets. For Chorro Creek, the geometric mean shall not exceed 200 MPN/100 mL over a 30-day period nor shall 10 percent of the samples exceed 400 MPN/100 mL over any 30-day period for fecal coliform.

However, the Regional Water Board established the following effluent limitations for total coliform in Order No. R3-2006-0032.

*“The median concentration to total coliform bacteria measured in treatment effluent at Discharge Point [No.] 001 shall not exceed a most probably number (MPN) of 2.2 organisms*

*per 100 milliliters (mL), as determined from the last seven days for which analyses have been completed. The number of total coliform bacteria shall not exceed a MPN of 23 per 100 mL in more than one sample in any 30-day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.”*

The effluent limitations for total coliform bacteria have been carried over to the current Order and are considered more protective of water quality than the WLAs established for fecal coliform. The implementation of total coliform limitations meets the requirements of the TMDL.

#### **E. Other Plans, Polices and Regulations**

- 1. Storm Water Management.** For the control of storm water discharged from the site of the wastewater treatment facilities, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resource Control Board's Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, if applicable.
- 2. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The General Permit, adopted on May 2, 2006, is applicable to all “federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger has obtained coverage under the General Permit.
- 3. Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. Pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution No. 2009-0011, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff. The policy was added to establish participation in development of a regional groundwater basin/sub-basin salt/nutrient management plan.

#### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44(a) permits are required to include applicable technology-based limitations and standards; and at 40 CFR 122.44(d) permits are required to 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. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 CFR 122.44(d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using USEPA criteria guidance published under CWA Section 304(a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

Several specific factors affecting the development of limitations and requirements in this Order are discussed below.

#### **A. Discharge Prohibitions**

- 1. Discharge Prohibition III.A** (Discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited): This prohibition is similar to the previous Orders and is based on 40 CFR 122.21(a), duty to apply, and CWC Section 13260, which requires filing a ROWD before discharges can occur. Discharges not described in the ROWD, and subsequently in this Order, are prohibited.
- 2. Discharge Prohibition III.B** (No discharge at a location or in a manner except as described by this Order). The Order authorizes a single, specific point of discharge to surface waters, and the limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Regional Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA Section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition has been retained from the previous Order.
- 3. Discharge Prohibition III.C** (The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited). The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR 122.41(m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order. This prohibition has been retained from the previous Order.
- 4. Discharge Prohibition III.D** (Creation of pollution, contamination, or nuisance, as defined by CWC Section 13050, is prohibited). This prohibition has been retained from the previous Order.
- 5. Discharge Prohibition III.E** (The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat). This prohibition has been retained from the previous Order.

**B. Technology-Based Effluent Limitations**

**1. Scope and Authority**

CWA Section 301(b) requires USEPA to develop secondary treatment standards for publicly-owned treatment works at a level of effluent quality attainable through applying secondary or equivalent treatment. USEPA promulgated such technology-based effluent guidelines at 40 CFR 133. These secondary treatment regulations include the following minimum requirements. In addition, the 30-day average percent removal for BOD and TSS, by concentration, is not to be less than 85 percent.

At 40 CFR 133, in the Secondary Treatment Regulations, USEPA has established the following minimum required level of effluent quality attainable by secondary treatment.

**Table F-8. Secondary Treatment Requirements**

Parameter	Units	30-Day Average	7-Day Average
BOD <sup>(1)</sup>	mg/L	30	45
TSS <sup>(1)</sup>	mg/L	30	45
pH	s.u.	6.0 – 9.0	

<sup>(1)</sup> The 30-day average percent removal for BOD and TSS shall not be less than 85 percent.

**1. Applicable Technology-Based Effluent Limitations**

Title 40 CFR 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration and mass limitations are not necessary to protect the beneficial uses of the receiving waters.

**a. BOD and TSS.** Federal Regulations, 40 CFR 133, establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD and TSS. However, effluent limitations contained within Order No. R3-2006-0032 for BOD and TSS are based on a tertiary level of treatment provided by the Facility. The application of tertiary treatment processes results in the ability to achieve lower levels for BOD and TSS than the secondary standards currently prescribed. Effluent limitations for BOD and TSS have been carried over from Order No. R3-2006-0032, and represent the degree of treatment capable of the Facility.

In addition to the average weekly and average monthly effluent limitations, a daily maximum effluent limitation for BOD and TSS is included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. These effluent limitations for BOD and TSS have been adopted for similar facilities in the Central Coast Region that have effluent limitations for this level of treatment.

Additionally, 40 CFR 133.012, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. If 85 percent removal of BOD and TSS must be achieved by a secondary treatment, it must also be achieved by a tertiary (i.e., treatment beyond secondary level) treatment plant. This Order contains a limitation requiring an average of 85 percent removal of BOD and TSS over each calendar month.

- b. pH.** Federal Regulations, 40 CFR 133, establishes technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. This technology-based effluent limitation is not as stringent as the WQBELs for pH as discussed in section IV.C of this Fact sheet; therefore, this Order establishes the more stringent WQBELs for pH.
- c. Flow.** The monthly average dry season flow limitation of 1.2 MGD is based on design figures of the wastewater treatment facility and is intended to ensure that wastewater flows do not exceed the treatment facility's dry weather design capacity.

The following table summarizes technology-based effluent limitations established by the Order.

**Table F-9. Technology-Based Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD <sup>[1]</sup>	mg/L	10	30	50
	lbs/day <sup>[2]</sup>	100	300	500
TSS <sup>[1]</sup>	mg/L	10	30	50
	lbs/day <sup>[2]</sup>	100	300	500
Flow	MGD	1.2	--	--

<sup>[1]</sup> The average monthly percent removal for BOD and TSS shall not be less than 85 percent.

<sup>[2]</sup> Mass-based effluent limitations were calculated using the following formula:  
 lbs/day = pollution concentration (mg/L) \* Design flow (1.2 MGD) \* conversion factor (8.34)

**C. Water Quality-Based Effluent Limitations (WQBELs)**

**1. Scope and Authority**

NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

The process for determining "reasonable potential" and calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin Plan and achieve applicable WQOs and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the CTR and NTR.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the

requirements of 40 CFR 122.44(d)(1)(vi), using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information.

## **2. Applicable Beneficial Uses and Water Quality Objectives**

Beneficial uses described by the Basin Plan for Chorro Creek and are presented in section II.H, Table 5 of the Order. Water quality criteria applicable to this receiving water are established by the CTR, the NTR, and by the Basin Plan. Reasonable potential for pollutants with applicable water quality criteria was evaluated for Discharge Point No. 001.

## **3. Determining the Need for WQBELs**

NPDES regulations at 40 CFR 122.44(d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

The SIP, statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants which show reasonable potential.

The SIP Section 1.3 requires the Regional Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. Here, the Discharger has collected and analyzed samples for the CTR pollutants and the toxic pollutants with WQOs established in the Basin Plan from July 2006 through March 2011.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. Regional Water Board staff used the most conservative upstream hardness of 150 mg/L (as CaCO<sub>3</sub>) to conduct the RPA.

To conduct the reasonable potential analysis, the Regional Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each priority, toxic pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

- Trigger 1 – If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.
- Trigger 2 – If B is greater than C, and the pollutant is detected in effluent (MEC > ND), there is reasonable potential, and an effluent limitation is required.

- Trigger 3 – After reviewing other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

The following table summarizes the RPA for each priority, toxic pollutant or Title 22 pollutant that was measured in effluent during monitoring events from July 2006 through March 2011.

**Table F-10. Summary of RPA Results**

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
1	Antimony	4.0	6.0	ND	No
2	Arsenic	1.4	10	ND	No
3	Beryllium	<0.10	4.0	<0.10	No
4	Cadmium	<0.10	3.4	ND	No
5a	Chromium (III)	0.62	50	2.4	No
5b	Chromium (VI)	<0.00025	11	.002	No
<b>6</b>	<b>Copper</b>	<b>28</b>	<b>13</b>	<b>.72</b>	<b>Yes</b>
7	Lead	0.31	5.3	<0.20	No
8	Mercury (303d listed)	<0.0001	0.050	<0.0001	No
9	Nickel	3.6	74	6.3	No
10	Selenium	0.42	10	2.5	No
11	Silver	<0.10	8.2	<0.10	No
12	Thallium	<0.20	1.7	<0.20	No
13	Zinc	27	169	<2.5	No
14	Cyanide	ND	5.2	ND	No
15	Asbestos	ND	No Criteria	.4	Ud
16	2,3,7,8-TCDD (303d listed)	<1.4	1.3E10 <sup>-8</sup>	<2.2	No
17	Acrolein	ND	320	ND	No
18	Acrylonitrile	ND	0.059	ND	No
19	Benzene	ND	1.0	ND	No
20	Bromoform	ND	4.3	ND	No
21	Carbon Tetrachloride	ND	0.25	ND	No
22	Chlorobenzene	ND	70	ND	No
<b>23</b>	<b>Chlorodibromomethane</b>	<b>19</b>	<b>0.40</b>	<b>ND</b>	<b>Yes</b>
24	Chloroethane	ND	No Criteria	ND	Ud
25	2-Chloroethylvinyl ether	ND	No Criteria	ND	Ud
26	Chloroform	49	No Criteria	ND	Ud
<b>27</b>	<b>Dichlorobromomethane</b>	<b>25</b>	<b>0.56</b>	<b>ND</b>	<b>Yes</b>
28	1,1-Dichloroethane	ND	5.0	ND	No
29	1,2-Dichloroethane	ND	0.38	ND	No
30	1,1-Dichloroethylene	ND	0.057	ND	No
31	1,2-Dichloropropane	ND	0.52	ND	No
32	1,3-Dichloropropylene	ND	0.50	ND	No
33	Ethylbenzene	ND	300	ND	No
34	Methyl Bromide	ND	48	ND	No
35	Methyl Chloride	ND	No Criteria	ND	Ud

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
36	Methylene Chloride	ND	4.7	ND	No
37	1,1,2,2-Tetrachloroethane	ND	0.17	ND	No
38	Tetrachloroethylene	ND	0.80	ND	No
39	Toluene	ND	150	ND	No
40	1,2-Trans-Dichloroethylene	ND	10	ND	No
41	1,1,1-Trichloroethane	ND	200	ND	No
42	1,1,2-Trichloroethane	ND	0.60	ND	No
43	Trichloroethylene	ND	2.7	ND	No
44	Vinyl Chloride	ND	0.50	ND	No
45	2-Chlorophenol	ND	120	ND	No
46	2,4-Dichlorophenol	ND	93	ND	No
47	2,4-Dimethylphenol	ND	540	ND	No
48	2-Methyl- 4,6-Dinitrophenol	ND	13	ND	No
49	2,4-Dinitrophenol	ND	70	ND	No
50	2-Nitrophenol	ND	No Criteria	ND	Ud
51	4-Nitrophenol	ND	No Criteria	ND	Ud
52	3-Methyl 4-Chlorophenol	ND	No Criteria	ND	Ud
53	Pentachlorophenol	ND	0.28	ND	No
54	Phenol	ND	21000	ND	No
55	2,4,6-Trichlorophenol	ND	2.1	ND	No
56	Acenaphthene	ND	1200	ND	No
57	Acenaphthylene	ND	No Criteria	0.095	Ud
58	Anthracene	ND	9600	ND	No
59	Benzdine	ND	0.00012	ND	No
60	Benzo(a)Anthracene	ND	0.0044	ND	No
61	Benzo(a)Pyrene	ND	0.0044	ND	No
62	Benzo(b)Fluoranthene	ND	0.0044	ND	No
63	Benzo(ghi)Perylene	ND	No Criteria	ND	Ud
64	Benzo(k)Fluoranthene	ND	0.0044	ND	No
65	Bis(2-Chloroethoxy)Methane	ND	No Criteria	ND	Ud
66	Bis(2-Chloroethyl)Ether	ND	0.03	ND	No
67	Bis(2-Chloroisopropyl)Ether	ND	1,400	ND	No
<b>68</b>	<b>Bis(2-Ethylhexyl)Phthalate</b>	<b>3.8</b>	<b>1.8</b>	<b>2.2</b>	<b>Yes</b>
69	4-Bromophenyl Phenyl Ether	ND	No Criteria	ND	Ud
70	Butylbenzyl Phthalate	1.2	3,000	0.99	No
71	2-Chloronaphthalene	ND	1,700	ND	No
72	4-Chlorophenyl Phenyl Ether	ND	No Criteria	ND	Ud
73	Chrysene	ND	0.0044	ND	No
74	Dibenzo(a,h)Anthracene	ND	0.0044	ND	No
75	1,2-Dichlorobenzene	ND	600	ND	No
76	1,3-Dichlorobenzene	ND	400	ND	No
77	1,4-Dichlorobenzene	ND	5.0	ND	No
78	3,3 Dichlorobenzidine	ND	0.040	ND	No
79	Diethyl Phthalate	ND	23,000	ND	No
80	Dimethyl Phthalate	ND	313,000	ND	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
81	Di-n-Butyl Phthalate	ND	2,700	ND	No
82	2,4-Dinitrotoluene	ND	0.11	ND	No
83	2,6-Dinitrotoluene	Not Available	No Criteria	ND	Ud
84	Di-n-Octyl Phthalate	ND	No Criteria	ND	Ud
85	1,2-Diphenylhydrazine	ND	0.04	ND	No
86	Fluoranthene	ND	300	ND	No
87	Fluorene	ND	1,300	ND	No
88	Hexachlorobenzene	ND	0.00075	ND	No
89	Hexachlorobutadiene	ND	0.44	ND	No
90	Hexachlorocyclopentadiene	ND	50	ND	No
91	Hexachloroethane	ND	1.9	ND	No
92	Indeno(1,2,3-cd)Pyrene	ND	0.0044	ND	No
93	Isophorone	ND	8.4	ND	No
94	Naphthalene	ND	No Criteria	ND	Ud
95	Nitrobenzene	ND	17	ND	No
96	N-Nitrosodimethylamine	ND	0.00069	ND	No
97	N-Nitrosodi-n-Propylamine	ND	0.005	ND	No
98	N-Nitrosodiphenylamine	ND	5.0	ND	No
99	Phenanthrene	ND	No Criteria	ND	Ud
100	Pyrene	ND	960	ND	No
101	1,2,4-Trichlorobenzene	ND	5.0	ND	No
102	Aldrin	ND	0.00013	ND	No
103	Alpha-BHC	ND	0.0039	ND	No
104	beta-BHC	ND	0.014	ND	No
105	gamma-BHC	ND	0.019	ND	No
106	delta-BHC	ND	No Criteria	ND	Ud
107	Chlordane (303d listed)	ND	0.00057	ND	No
108	4,4'-DDT (303d listed)	ND	0.00059	ND	No
109	4,4'-DDE (linked to DDT)	ND	0.00059	ND	No
110	4,4'-DDD	ND	0.00083	ND	No
111	Dieldrin (303d listed)	ND	0.00014	ND	No
112	Alpha-Endosulfan	ND	0.06	ND	No
113	beta-Endosulfan	ND	0.06	ND	No
114	Endosulfan Sulfate	ND	110	ND	No
115	Endrin	ND	0.036	ND	No
116	Endrin Aldehyde	ND	0.76	ND	No
117	Heptachlor	ND	0.00021	ND	No
118	Heptachlor Epoxide	ND	0.0001	ND	No
119-125	PCBs sum (303d listed)	ND	0.00017	ND	No
126	Toxaphene	ND	0.0002	ND	No
<b>Drinking Water Quality Objectives</b>					
	Aluminum	340	1,000	26	No
	Barium	18	1,000	110	No
	Fluoride	0.37	1,000	0.29	No
	cis-1,2-Dichloroethylene	ND	6.0	ND	No
	Methyl-tert-butyl ether	ND	13	ND	No
	Styrene	ND	100	ND	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
	Trichlorofluoromethane	ND	150	ND	No
	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1,200	ND	No
	Xylenes	ND	1,750	ND	No
	Alachlor	ND	2.0	ND	No
	Atrazine	0.11	1.0	0.10	No
	Bentazon	0.51	18	ND	No
	Carbofuran	ND	18	ND	No
	2,4-D	ND	70	ND	No
	Dalapon	1.8	200	ND	No
	Dibromochloropropane (1,2-Dibromo-3-chloropropane)	ND	0.20	ND	No
	Di(2-ethylhexyl)adipate	1.1	400	1.1	No
	Dinoseb	ND	0.01	ND	No
	Diquat	ND	20	ND	No
	Endothall	ND	100	ND	No
	Ethylene Dibromide	ND	0.02	ND	No
	Glyphosate	ND	700	ND	No
	Methoxychlor	ND	30	ND	No
	Molinate	ND	20	ND	No
	Oxamyl	ND	50	ND	No
	Picloram	ND	500	ND	No
	Simazine	ND	4.0	0.09	No
	Thiobencarb	ND	70	ND	No
	2,4,5-TP (Silvex)	ND	10	ND	No
	<b>Nitrate (as NO3) (mg/L)</b>	<b>61.1<sup>(4)</sup></b>	<b>45</b>	<b>ND</b>	<b>Yes</b>
	<b>Nitrate+Nitrite (sum as nitrogen) (mg/L)</b>	<b>15.02</b>	<b>10</b>	<b>1.6</b>	<b>Yes</b>
	<b>Nitrite (as nitrogen) (mg/L)</b>	<b>1.22</b>	<b>1</b>	<b>&lt;0.00009</b>	<b>Yes</b>
	Perchlorate	Not Available	6.0	Not Available	Cannot Determine
<b>R3 Basin Plan WQO</b>					
	Cobalt	0.50	50	0.11	No
	Iron	<15	5,000	78	No
	Lithium	<30	2,500	<30	No
	Manganese	3.9	200	3.4	No
	Molybdenum	3.0	10	2.6	No
	Vanadium	4.4	100	5.7	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
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**Footnotes to Table F-10:**

- <sup>(1)</sup> The MEC or maximum background concentration is the actual detected concentration. Where detection values were available and the pollutant was not detected, the detection value was provided with a "<" before it. Where the pollutant was non-detect and a detection value was not available, "ND" was entered.
- <sup>(2)</sup> The MEC or maximum background concentration is "Not Available" when there are no monitoring data for the constituent.
- <sup>(3)</sup> RPA Results =
  - = Yes, if MEC => WQO/WQC, or B > WQO/WQC and MEC is detected;
  - = No, if MEC and B are < WQO/WQC or all effluent data are undetected;
  - = Undetermined (Ud), if no criteria have been promulgated;
  - = Cannot Determine, if there are insufficient data.
- <sup>(4)</sup> Converted from nitrate (as N).

Reasonable potential has been determined for copper, chlorodibromomethane, dichlorobromomethane, bis(2-ethylhexyl)phthalate, nitrite, nitrate, and nitrate+nitrite. WQBELs have been established for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate based on the procedures identified within Section 1.4 of the SIP, as discussed in section IV.C.4 below. WQBELs for nitrite, nitrate, and nitrate+nitrite have been established based on the Basin Plan and a TMDL, as discussed in section III.D.1 and IV.C.6.d.

**4. WQBEL Calculations**

- a.** If reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
  - i.** If applicable and available, use of the wasteload allocation (WLA) established as part of a TMDL.
  - ii.** Use of a steady-state model to derive MDELs and AMELs.
  - iii.** Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b.** Water quality based effluent limitations for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- c.** Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed.
- d.** WQBELs Calculation Example

Using copper as an example, the following demonstrates how WQBELs were established for this Order.

Concentration-Based Effluent Limitations

Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

*Calculation of aquatic life AMEL and MDEL:*

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

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

- Where
- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators.
  - D = The dilution credit, and
  - B = The ambient background concentration

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

$$ECA = C$$

For copper, the applicable ECAs are:

$$ECA_{\text{acute}} = 20 \mu\text{g/L}$$

$$ECA_{\text{chronic}} = 13 \mu\text{g/L}$$

$$ECA_{\text{human health}} = 200 \mu\text{g/L}$$

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

$$LTA_{\text{acute}} = ECA_{\text{acute}} \times \text{Multiplier}_{\text{acute } 99}$$

$$LTA_{\text{chronic}} = ECA_{\text{chronic}} \times \text{Multiplier}_{\text{chronic } 99}$$

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 copper, the calculated CV of 1.27 was used.

For copper, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier <sub>acute</sub>	ECA Multiplier <sub>chronic</sub>
15	1.27	0.17	0.31

$$LTA_{acute} = 20 \mu\text{g/L} \times 0.17 = 3.4 \mu\text{g/L}$$

$$LTA_{chronic} = 13 \mu\text{g/L} \times 0.31 = 4.0 \mu\text{g/L}$$

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

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

For copper, the most limiting LTA was the  $LTA_{acute}$ .

$$LTA_{copper} = LTA_{acute} = 3.4 \mu\text{g/L}$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and 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 CV of the data set, the number of samples (for AMEL) and whether it is a 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.

$$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$$

$$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$$

AMEL multipliers are based on a 95<sup>th</sup> percentile occurrence probability, and the MDEL multipliers are based on the 99<sup>th</sup> 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 copper, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4	1.27	6.03	2.20

Copper

$$AMEL = 3.4 \mu\text{g/L} \times 6.03 = 20.5 \mu\text{g/L}$$

$$MDEL = 3.4 \mu\text{g/L} \times 2.20 = 7.47 \mu\text{g/L}$$

*Calculation of human health AMEL and MDEL:*

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

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

For copper:

$$AMEL_{\text{human health}} = 200 \mu\text{g/L}$$

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

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

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

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$	Ratio
4	1.27	6.03	2.20	2.75

$$MDEL_{\text{human health}} = 200 \mu\text{g/L} \times 2.75 = 549 \mu\text{g/L}$$

**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 copper, the aquatic life criteria-based effluent limitations of 7.5  $\mu\text{g/L}$  (AMEL) and 20.5  $\mu\text{g/L}$  (MDEL) are established in this Order.

A summary of the calculations for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate is provided below.

**Table F-11. WQBEL Calculations**

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromomethane	Dichlorobromomethane	Bis(2-Ethylhexyl) Phthalate
Units	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$
Basis and Criteria type	CTR Aquatic Life	CTR Human Health	CTR Human Health	CTR Human Health
Criteria -Acute	20	-----	-----	-----
Criteria -Chronic	13	-----	-----	-----

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromo- methane	Dichlorobromo- methane	Bis(2- Ethylhexyl) Phthalate
Units	µg/L	µg/L	µg/L	µg/L
HH criteria	200	0.401	0.56	1.8
Background (Maximum Conc. for Aquatic Life calc)	0.72	-----	-----	-----
Background (Average Conc. for Human Health calc)	0.72	ND	ND	2.0
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	N	N
ECA acute	20	-----	-----	-----
ECA chronic	13	-----	-----	-----
ECA HH	200	0.401	0.56	1.8
No. of data points <10 or at least 80 percent of data reported non detect? (Y/N)	N	N	N	N
Avg of effluent data points	6.4	7.1	15.8	3.8
Std Dev of effluent data points	8.2	4.2	5.4	NA
CV calculated	1.27	0.59	0.34	0.6
CV (Selected) - Final	1.27	0.59	0.34	0.6
ECA acute mult99	0.17	-----	-----	-----
ECA chronic mult99	0.31	-----	-----	-----
LTA acute	3.4	-----	-----	-----
LTA chronic	4.04	-----	-----	-----
minimum of LTAs	3.4	-----	-----	-----
AMEL mult95	2.2	1.54	1.30	1.55
MDEL mult99	6.03	3.06	2.05	3.11
AMEL (aq life)	7.5	-----	-----	-----
MDEL(aq life)	20.5	-----	-----	-----
MDEL/AMEL Multiplier	2.75	1.99	1.57	2.0
AMEL (human hlth)	200	0.4	0.56	1.8
MDEL (human hlth)	549	0.8	0.88	3.6
minimum of AMEL for Aq. life vs HH	7.5	0.40	0.57	1.8
minimum of MDEL for Aq. Life vs HH	20.5	0.80	0.88	3.6
Current limit in permit (30- day average)	8.5	0.40	0.56	-----

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromomethane	Dichlorobromomethane	Bis(2-Ethylhexyl) Phthalate
Units	µg/L	µg/L	µg/L	µg/L
Current limit in permit (daily)	17	0.81	1.1	-----
Final limit - AMEL	7.5	0.40	0.56	1.8
Final limit - MDEL	17	0.80	0.88	3.6
Max Effl Conc (MEC)	28	19	25	3.8

**5. Whole Effluent Toxicity (WET)**

WET limitations protect receiving water quality from the aggregated toxic effect of a mixture of pollutants in 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 requires that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic organisms in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge or for another control water.

The previous Order included effluent limitations for chronic and acute toxicity to ensure compliance with the Basin Plan narrative objective. The acute toxicity effluent limitation has been retained from the previous Order.

Numeric chronic WET effluent limitations have not been included in this Order. The SIP contains implementation gaps regarding the appropriate form and implementation of chronic toxicity limits. This has resulted in the petitioning of a NPDES permit in the Los Angeles Region<sup>1</sup> that contained numeric chronic toxicity effluent limitations. To address the petition, the State Water Board adopted WQO 2003-012 directing its staff to revise the toxicity control provisions in the SIP. The State Water Board states the following in WQO 2003-012, *“In reviewing this petition and receiving comments from numerous interested persons on the propriety of including numeric effluent limitations for chronic toxicity in NPDES permits for publicly-owned treatment works that discharge to inland waters, we have determined that this issue should be considered in a regulatory setting, in order to allow for full public*

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<sup>1</sup> In the Matter of the Review of Own Motion of Waste Discharge Requirements Order Nos. R4-2002-0121 [NPDES No. CA0054011] and R4-2002-0123 [NPDES NO. CA0055119] and Time Schedule Order Nos. R4-2002-0122 and R4-2002-0124 for Los Coyotes and Long Beach Wastewater Reclamation Plants Issued by the California Regional Water Quality Control Board, Los Angeles Region SWRCB/OCC FILES A-1496 and 1496(a).

*discussion and deliberation. We intend to modify the SIP to specifically address the issue. We anticipate that review will occur within the next year. We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits.”* The process to revise the SIP is currently underway. Proposed changes include clarifying the appropriate form of effluent toxicity limits in NPDES permits and general expansion and standardization of toxicity control implementation related to the NPDES permitting process. Since the toxicity control provisions in the SIP are currently under revision, it is inappropriate to carry over numeric effluent limitations for chronic toxicity. Therefore, this Order establishes a narrative chronic toxicity effluent limitation and a numeric chronic toxicity trigger consistent with the previous chronic toxicity effluent limitation which will require that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 CFR 122.44(k).

To ensure compliance with the Basin Plan's narrative toxicity objective, the Discharger is required to conduct acute and chronic WET testing, as specified in the Monitoring and Reporting Program (Attachment E, section V). Furthermore, the Special Provision contained at VI.C.2.a of this Order requires the Discharger to investigate the causes of, and identify and implement corrective actions to reduce or eliminate effluent toxicity. If the discharge demonstrates toxicity exceeding the acute toxicity effluent limitation or numeric chronic toxicity monitoring trigger, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) in accordance with an approved TRE workplan. The numeric chronic toxicity monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to perform accelerated chronic toxicity monitoring, as well as, the threshold to initiate a TRE if effluent toxicity has been demonstrated.

## **6. Basin Plan**

### **a. Bacteria.**

As previously discussed in section III.D of this Fact Sheet, a TMDL for pathogens is applicable to Chorro Creek. The TMDL for pathogens establishes the following WLAs for fecal coliform:

- i. The geometric mean shall not exceed 200 MPN/100mL over a 30-day period; and
- ii. Less than 10 percent of the samples shall not exceed 400 MPN/100 mL over any 30-day period.

These WLAs are consistent with the bacteria objectives for the REC1 beneficial use, which is applicable to the receiving water. However, Order No. R3-2006-0032 established effluent limitations for total coliform which are protective of water quality and meet the requirements of the WLAs:

- i. The median concentration shall not exceed 2.2 MPN/100mL from the last 7 days for which analyses have been completed;
- ii. No more than one sample in any 30-day period shall exceed 23 MPN/100mL; and
- iii. No sample shall exceed 240 MPN/100mL.

These effluent limitations for total coliform have been carried over to this Order.

- b. Total Residual Chlorine.** Order No. R3-2006-0032 established an effluent limitation of non-detect for total residual chlorine. Because the Facility currently disinfects using sodium hypochlorite, the Facility maintains reasonable potential for total residual chlorine to be present in the effluent. The total residual chlorine maximum daily effluent limitation of non-detect is protective of the Basin Plan's narrative toxicity objective and has been carried over from Order No. R3-2006-0032.
- c. Dissolved Oxygen.** As discussed in section III.D.1 of this Fact Sheet, a TMDL has been established for dissolved oxygen in Chorro Creek. The TMDL does not specify a WLA for dissolved oxygen, however Order No. R3-2006-0032 established an effluent limitation for dissolved oxygen of >2.0 mg/L at all times, and a receiving water limitation of 7.0 mg/L. The Regional Water Board determined that these limitations, when combined with an effluent limitation for total nitrogen, and receiving water limitations for unionized ammonia, sodium, total dissolved solids, and temperature, satisfy the requirements of the Chorro Creek Nutrient and Dissolved Oxygen TMDL. As such, this Order carries over the effluent limitation for dissolved oxygen of 2.0 mg/L. Further, the receiving water limitation of 7.0 mg/L for dissolved oxygen has been carried over.
- d. Nitrogen and Nitrite.** As discussed in section III.D.1 of this Fact Sheet, a TMDL has been established for nitrate in Chorro Creek. Further, as summarized in Table F-10 of this Fact Sheet, effluent data indicates the Discharger's effluent exceeds the applicable criteria (CCR Title 22, Table 64431-A, primary MCL) of 10 mg/L (as N) for nitrate + nitrite. Order No. R3-2006-0032 determined that total nitrogen is the most appropriate method of limiting all forms of nitrogen and established a maximum daily effluent limitation of 10 mg/L (as N) for total nitrogen. This Order carries over the maximum daily effluent limitation of 10 mg/L (as N) for total nitrogen and a mass-based effluent limitation based on a design flow of 1.2 MGD.

As summarized in Table F-10 of this Fact Sheet, effluent data indicates the Discharger's effluent exceeds the applicable criteria (CCR Title 22, Table 64431-A, primary MCL) of 1 mg/L (as N) for nitrite. This Order establishes a maximum daily effluent limitation of 1 mg/L (as N) for nitrite, consistent with the requirements of the Basin Plan's requirements for MUN designated waters.

- e. Oil and Grease.** The Basin Plan establishes a narrative effluent limitation for oil and grease, which states, "*Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.*"

The previous Order contained an AMEL and MDEL of 5.0 mg/L and 10 mg/L, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from the previous Order.

- f. pH.** The Basin Plan establishes a WQO for pH of between 6.5 to 8.3 standard units for the protection of receiving waters with the beneficial use of Municipal and Domestic

Supply (MUN), Agricultural Supply (AGR), and Water Recreation (REC1 and REC2). The Basin Plan establishes a WQO for pH between 7.0 to 8.5 standard units for the beneficial use of Freshwater Habitat (COLD and WARM) and Fish Spawning (SPWN). The previous Order established an effluent limitation of 6.5 to 8.3. However, since Chorro Creek has MUN, AGR, REC1, REC2, COLD, WARM, and SPWN beneficial uses, this Order establishes a pH effluent limitation of 7.0 to 8.3 in order to protect all beneficial uses. This effluent limitation is more stringent than effluent limitations for pH contained in the previous Order.

- g. Salinity (TDS, Sulfate, Chloride, Boron, and Sodium).** The previous Order established an effluent limitation for sulfate of 125 mg/L. This Order carries over the effluent limitation for maximum daily effluent limitation for sulfate of 125 mg/L and the mass-based effluent limitation of 1,251 lbs/day.

As described in the following discussion, the current discharge is not causing Chorro Creek to exceed WQOs since background concentrations of the pollutants naturally exceed WQOs in Basin Plan 3-7. Implementation of the maximum daily effluent limitation for sulfate, along with the implementation of a Salt Management Plan and discontinued use of sodium bisulfite for dechlorination, as described in section VII.B.3.a of this Fact Sheet, will prevent further degradation and protect beneficial uses of Chorro Creek.

#### Basin Plan Water Quality Objectives

The Basin Plan contains specific numeric surface WQOs within Table 3-7, presented as median values for the Chorro Creek Sub-Area of the Estero Bay Sub-Basin. According to the Basin Plan, "these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin." Chapter 3, Section II.A.3 of the Basin Plan also states:

*"It must be recognized that the median values indicated in Table 3-7 are values representing gross areas of a water body. Specific water quality objectives for a particular area may not be directly related to the objectives indicated. Therefore, application of these objectives must be based upon consideration of the surface and groundwater quality naturally present..."*

The language preceding Table 3-7 also indicates, "the issuance of requirements must be tempered by consideration of beneficial uses within the immediate influence of the discharge."

#### Site-Specific Water Quality

The Discharger monitors both the upstream receiving water to the discharge point to Chorro Creek at RSW-002, and the upgradient groundwater to the Facility at GW-001. Based on available data for TDS, sodium, and chloride, upstream receiving water data exceeds the surface WQOs, indicating background levels for salts are elevated prior to contributions from Facility effluent. Additionally, groundwater recharge is a specified beneficial use for the receiving water; thus surface water discharge may impact groundwater quality. Average running 12-month mean RSW-002 and GW-001

concentrations for TDS, chloride, and sodium are shown in Table F-12 and Table F-13, respectively.

**Table F-12. Receiving Water**

Site	TDS (mg/L) <sup>[1]</sup>	Chloride (mg/L) <sup>[1]</sup>	Sulfate (mg/L) <sup>[1]</sup>	Boron (mg/L) <sup>[1]</sup>	Sodium (mg/L) <sup>[1]</sup>
RSW-002 (up stream)	579	64	62	0.09	39
RSW-003 (down stream)	556	99	65	0.16	74
Basin Plan Table 3-7 WQO	500	50	50	0.2	50

<sup>[1]</sup> Average 12-month running mean.

**Table F-13. Groundwater**

Site	TDS (mg/L) <sup>[1]</sup>	Chloride (mg/L) <sup>[1]</sup>	Sulfate (mg/L) <sup>[1]</sup>	Boron (mg/L) <sup>[1]</sup>	Sodium (mg/L) <sup>[1]</sup>
GW-001	962	48	318	0.83	82
Basin Plan Table 3-8 WQO	1,000	250	100	0.2	50

<sup>[1]</sup> Median values based on data averages.

The data in Table F-12 demonstrates that the long-term background salinity concentrations exceed WQOs for surface waters listed in Table 3-7 of the Basin Plan for TDS chloride, and sulfate. Further, between July 2007 and March 2001, daily maximum concentrations up stream of the Facility's discharge indicate that levels of sodium (up to 55 mg/L), chloride (up to 84 mg/L), sulfate (up to 86 mg/L) and TDS (up to 790 mg/L) have exceeded the WQOs contained in Table 3-7 of the Basin Plan.

The data in Table F-13 demonstrates that the long-term background salinity concentrations for boron and sodium in the groundwater are greater than WQOs listed in Table 3-8 of the Basin Plan. Daily maximum concentrations of TDS (up to 1,200 mg/L), sulfate (up to 1,800 mg/L), boron (up to 1.2 mg/L) and sodium (up to 100 mg/L) in the upgradient groundwater have been detected.

Sources

Salts originate from both natural and unnatural sources. The Discharger does not control all of the source water. More than half of the overall drinking water for the service area comes from Central Coast Water Authority (CCWA). In 2007 and 2008, 64 percent of the drinking water came from CCWA. The CCWA utilizes State Water Project water as its primary water source. The remaining drinking water is from the Discharger's water treatment plant, which utilizes surface water from Chorro Reservoir in San Luis Obispo and Whale Rock Reservoir in Cayucos. Source water data (annual averages) for 2007 are summarized below.

**Table F-14. Municipal Supply Water**

Source	Boron (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)
State Water Project	0.142 <sup>[1]</sup>	87	48	35	266
CCWA Water	0.098 <sup>[1]</sup>	90	45	39	273
CMC Water	0.089 <sup>[1]</sup>	45	27	39	338

<sup>[1]</sup> Data for Boron is from 2005.

The data summarized in Table F-14 indicate that supply water exceeds the water quality objective for chloride (50 mg/L).

Based on the Discharger's May 2009 Salt Management Study, flow contributions to the Facility, and available collection system salinity data, are summarized below.

**Table F-15. Collection System Data for Salts**

Source	Percent Contribution	Chloride (mg/L)	Sodium (mg/L)	TDS (mg/L)
Cuesta College (Manhole 21B)	9	650	69	60
Cuesta College (Manhole 1A)		1,000	120	120
National Guard Camp (Manhole 31A)	8	750	93	74
National Guard Camp (Manhole 52A)		640	62	60
County Facilities	18	730	130	83
East Catch CMC	65	520	100	110
West Catch CMC		650	67	75
Flow Weighted Influent	100	89	92	642
Facility Influent <sup>[1]</sup>	100	99	95	610

<sup>[1]</sup> Based on a single influent sample taken concurrent with the collection system data.

Average influent data to the Facility for salts from December 2007 through April 2009, provided in the Discharger's May 2009 Salt Management Study, are summarized below.

**Table F-16. Influent Data for Salts**

Boron (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)
0.23	107	96	73	650

Data summarized in Table F-15 and Table F-16 indicate salinity within the influent to the Facility exceeds applicable WQOs for surface water for boron, chloride, sodium, sulfate, and TDS.

Control of Salts

The Discharger has made significant efforts to minimize the salt loading at the prison and related facilities. Reduced water softening is now possible with the conversion to State Water Project water. Water softeners for the central steam plant now discharge to brine ponds and the Facility no longer discharges any water from the brine ponds into the wastewater system.

The Discharger has multiple Prison Industry Authority programs that occur on-site, including a laundry program and a textile program. The laundry facility currently utilizes water softening to minimize the amount of detergents required. The Discharger is considering the use of a recycled water system to reduce the need for softening of raw water. The textile program no longer washes and bleaches textiles prior to use and has switched to purchasing pre-bleached materials, which have reduced loading of salts from the bleaching process. In addition, the Discharger has replaced kitchen equipment that utilizes water softeners that do not use salts to soften the water.

At the Facility, other than evaporation, the only known salts increase is due to chemical addition for chlorine disinfection and dechlorination (sodium hypochlorite and sodium bisulfate). The Discharger is currently assessing alternatives methods such as ultraviolet disinfection, which would reduce these salt loads to the Facility.

There are no water softeners used at the State Military Department facility and Cuesta College has one residential water softener, which is considered to have an insignificant impact on salt loading to the Facility. The Discharger has no control over the operation of these facilities.

#### Proposed Salt Limits

Typically, waste discharge requirements incorporate the Basin Plan's specific, numeric WQOs as effluent limitations. Although convention generally sets effluent limitations at the Basin Plan's WQOs, the previous Order does not use Table 3-7 Basin Plan numeric WQOs as effluent limitations. Instead, the existing effluent limitation (for sulfate) is greater than WQOs in Basin Plan Table 3-7 to account for high background salt concentrations and uncontrollable salt loading from the water supply in Facility influent. Consistent with the previous Order, this Order shall establish a limitation for sulfate that is characteristic of the natural receiving water. Effluent limitations for the Facility should be related to water quality naturally present in the vicinity of the discharge while also protecting beneficial uses within the immediate influence of the discharge. Effluent limitations for sulfate from the previous Order were more closely related to the backgroundwater quality and were protective of beneficial uses.

#### Conclusion

Consistent with the Basin Plan, the proposed effluent limitations for salinity are based on a regional assessment of water quality conditions, are within reasonable control of the Discharger to meet, and are protective of downstream beneficial uses.

Because of elevated levels of salinity in the source water and naturally present in the receiving water, this Order requires the Discharger to continue to implement and update the Salt Management Study and Plan as described in section VI.B.3.a of this Fact Sheet. This Special Provision is retained from the previous Order.

- h. Settleable Solids.** The Basin Plan establishes a narrative effluent limitation for settleable solids, which states, "*Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.*"

The previous Order contained an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) of 0.1 mL/L and 0.3 mL/L, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. Therefore, this Order retains the effluent limitations for settleable solids from the previous Order.

- i. **Turbidity.** The Basin Plan establishes a narrative effluent limitation for turbidity which states, *“Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.”*

The Basin Plan further establishes allowable numeric increases to the receiving water.

The previous Order contained an AMEL and MDEL of 10 NTU and 20 NTU, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from the previous Order.

#### **D. Final Effluent Limitations**

Final technology-based and water quality-based effluent limitations established by the Order are discussed in the preceding sections of the Fact Sheet.

##### **1. Satisfaction of Anti-Backsliding Requirements.**

The Order retains effluent limitations equal to, or more stringent than those established by the previous Order for flow, BOD, TSS, pH, oil and grease, settleable solids, dissolved oxygen, sulfate, total nitrogen, acute toxicity, turbidity, chlorine residual, and total coliform. A more stringent effluent limitation has been established for the maximum daily effluent limitation for chlorodibromomethane, and more stringent average monthly effluent limitations have been established for and dichlorobromomethane and copper. Further, additional effluent limitations for bis(2-ethylhexyl)phthalate, and nitrite have been established in this Order as described in section IV.C.4, and section IV.C.6.a, respectively, of this Fact Sheet.

As discussed in section IV.C.5 of this Fact Sheet, the numeric effluent limitation for chronic toxicity has not been carried over due to the State Water Board's finding that the SIP does not provide sufficient guidance on establishing chronic toxicity effluent limitations in NPDES permits. However, a narrative chronic toxicity effluent limitation and a numeric chronic toxicity trigger, consistent with the previous chronic toxicity effluent limitation, has been established. The numeric chronic toxicity trigger will ensure appropriate best management practices and toxicity reduction measures are implemented by the Discharger. Further, a receiving water limitation for toxicity is established in the Order. The narrative chronic toxicity effluent limitation, combined with the chronic toxicity trigger, TRE requirements, and receiving water limitations shall ensure the Discharger operates the Facility in a manner to comply with toxicity water quality objectives and does not represent less stringent requirements. In addition, the Regional Water Board retains the right to reopen this Order once guidance for establishing numeric chronic toxicity effluent limitations is provided by the State Water Board.

**2. Satisfaction of Antidegradation Policy**

Provisions of the Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. This Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise assure maintenance of the existing quality of receiving waters.

**3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on flow, BOD, and TSS. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

**4. Summary of Final Effluent Limitations – Discharge Point No. 001**

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (MRP) (Attachment E).

**Table F-17. Final Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand (5-day @ 20°C) (BOD) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Total Suspended Solids (TSS) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Oil and Grease	mg/L	5.0	--	10
	lbs/day	50	--	100
Settleable Solids	mL/L	0.1	--	0.3
pH	s.u.	7.0 – 8.3 <sup>[2]</sup>		
Turbidity	NTU	10	--	20
Chlorine Residual	mg/L	--	--	ND <sup>[3]</sup>
Dissolved Oxygen	mg/L	> 2.0 mg/L at all times		
Chlorodibromomethane	µg/L	0.40	--	0.80
Copper, Total Recoverable	µg/L	7.5	--	17
Dichlorobromomethane	µg/L	0.56	--	0.88
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	--	3.6
Sulfate	mg/L	--	--	125
	lbs/day	--	--	1,251
Total Nitrogen (as N)	mg/L	--	--	10
	lbs/day	--	--	100

Parameter	Units	Effluent Limitations		
Nitrite (as N)	mg/L	--	--	1.0
Acute Toxicity	% survival	--	--	<sup>[4]</sup>

- <sup>[1]</sup> The average monthly percent removal for BOD and TSS shall not be less than 85 percent.
- <sup>[2]</sup> When the Discharger continuously monitors effluent pH, levels shall be maintained within specified ranges 99 percent of the time. To determine 99 percent compliance, the following conditions shall be met:
- The total time during which pH is outside the range of 7.0 – 8.3 shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from the range of 7.0 – 8.3 shall exceed 30 minutes;
  - No single excursion shall fall outside the range of 6.0 – 9.0; and
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed (i.e., between 7.0 – 8.3 at all times, measured daily).
- <sup>[3]</sup> ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:
- The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed.
- <sup>[4]</sup> Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition) to the survival of control organisms, as defined in section V of Attachment E to this Order.

**b. Dry Weather Flow.** Effluent average dry weather flow shall not exceed a monthly average of 1.2 MGD.

**c. Floating Material.** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

**d. Bacteria – Discharge Point No. 001**

**i. Total Coliform**

- 1) The total coliform concentrations shall not exceed a median of 2.2 MPN/100 mL as determined from the last 7 days of sampling results for which analyses have been completed;
- 2) No more than one sample shall exceed 23 MPN/100 mL in any 30-day period; and
- 3) No sample shall exceed 240 MPN/100 mL.

**E. Interim Effluent Limitations – Not Applicable**

**F. Land Discharge Effluent Limitations and Specifications – Not Applicable**

**G. Reclamation Specifications**

The Order requires compliance with applicable State and local requirements regarding production and use of reclaimed wastewater, including those requirements established by the Department of Health Services for reclaimed water at Title 22, Sections 60301-60357 of the California Code of Regulations, Water Recycling Criteria.

Reclamation requirements have been carried over from Order No. R3-2006-0032.

## **V. RATIONALE FOR SURFACE RECEIVING WATER LIMITATIONS**

### **A. Surface Water**

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Specific WQOs established by the Basin Plan to meet this goal for all inland surface waters are included as Receiving Water Limitations in section V.A of the Order. All receiving water limitations are retained from the previous Order.

### **B. Groundwater**

Groundwater limitations included in section V.B of the Order include general objectives as established in Chapter 3, Section II.A.4 of the Basin Plan and specific numeric WQOs for groundwater within the Chorro Creek sub area of the Estero Bay groundwater unit as established in Table 3-8 of the Basin Plan. All groundwater limitations in this Order are retained from the previous Order.

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

### **A. Influent Monitoring**

In addition to influent flow monitoring, monitoring for BOD and TSS is required to determine compliance with the Order's 85 percent removal requirement for those pollutants. Influent monitoring requirements have been retained from the previous Order.

### **B. Effluent Monitoring**

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements from the previous Order for Discharge Point No. 001 are retained in this Order with the following exceptions:

1. Effluent monitoring for bis(2-ethylhexyl)phthalate has been established to determine compliance with the newly established effluent limitations. Because bis (2-ethylhexyl) phthalate is a common contaminate in sampling, and often not representative of the effluent concentrations, reduced monitoring requirements have been established for this parameter

over time if the data indicates that this parameter is non-detect within the effluent. If the pollutant is determined to be present in the effluent, monthly monitoring is required.

2. Because reasonable potential was determined for chlorodibromomethane, copper, and dichlorobromomethane, the monitoring frequency for these parameters has been increased to monthly.

### **C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and or growth. This Order retains limitations for acute toxicity, establishes a chronic toxicity trigger of 1 TUc, and established monitoring requirements for acute and chronic toxicity for Discharge Point No. 001.

### **D. Receiving Water Monitoring**

#### **1. Surface Water**

Surface water receiving water monitoring requirements are retained from the previous Order as necessary to determine compliance with surface water limitations and for the protection of public health.

#### **2. Groundwater**

Groundwater monitoring requirements are retained from the previous Order as necessary to determine compliance with groundwater limitations.

### **E. Other Monitoring Requirements**

#### **1. Biosolids/Sludge Monitoring**

Biosolids monitoring shall be reported in the annual report in accordance with 40 CFR 503. Biosolids monitoring requirements have been retained from the previous Order.

#### **2. Pretreatment Monitoring – Not Applicable**

#### **3. Salt and Nutrient Management Plan Reporting**

Salt and Nutrient Management Plan reporting requirements are retained in this Order to help identify and reduce salt and nutrient loading in effluent. This salt/nutrient management report shall be included as part of the annual report.

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D to the Order.

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

## **B. Special Provisions**

### **1. Reopener Provisions**

The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

### **2. Special Studies and Additional Monitoring Requirements**

#### **a. Toxicity Reduction Requirements**

The Order retains the requirement to perform a TRE, if the acute toxicity limitation is exceeded or if chronic toxicity is detected in the effluent above 1 TUc. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitations established by the Order, the Discharger is required to resample and retest. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement TRE requirements, or whether other measures are warranted.

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

#### **a. Salt and Nutrient Management Program**

Section VI.C.8 of the previous Order required the Discharger to conduct a Salt Management Study to control levels of TDS, chloride, sodium, sulfate, and boron (collectively referred to as salts) in discharges from the Facility and attain applicable WQOs for salts in the Chorro Creek Sub-Basin of the Estero Bay Drainage Basin.

The Discharger completed a Salt Management Study and Plan (Study) in May 2009. The purpose of the Study was to summarize effluent and receiving water data, characterize source water supply and wastewater quality, and evaluate and identify feasible source control strategies. The Study indicated that receiving water quality upstream and downstream of the Facility discharge point exceeds surface WQOs, indicating the background levels for salts are elevated prior to contributions from the Facility effluent. Further, the Study examined the relative contributions of the primary sources to Facility. In addition, the Discharger identified several source control options.

Data from the term of the previous Order indicated the Facility has reasonable potential to cause or contribute to downstream impairment for salts loading. Therefore, in addition to effluent limitations for TDS, sodium, and chloride, this Order requires the Discharger to continue to update and implement the Salt Management Program. Additionally, the Discharger shall develop and implement a Nutrient Management Program as part of the Salt and Nutrient Management Program, as discussed in section VI.C.3.a of this Order, based on the Recycled Water Policy discussed in section III.E.3 of this Fact Sheet.

**4. Construction, Operation, and Maintenance Specifications – Not Applicable**

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

**a. Biosolids Management**

The use and disposal of biosolids is regulated under federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503. The Discharger is required to comply with the standards and time schedules contained in 40 CFR 503.

Title 27, CCR, Division 2, Subdivision 1, Section 20005 establishes approved methods for the disposal of collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes. Requirements to ensure the Discharger disposes of solids in compliance with State and federal regulations have been included in this Order. These requirements have been retained from the previous Order.

**b. Pretreatment Requirements – Not Applicable**

**6. Other Special Provisions**

**a. Discharges of Storm Water.** Discharges of storm water from POTWs with a design capacity greater than 1.0 MGD are eligible for coverage under General State Water Board Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Dischargers of Storm Water Associated with Industrial Activities Excluding Construction Activities. The design capacity of the Facility is greater than 1.0 MGD. Therefore, the Discharger shall seek coverage under General Permit No. CAS000001 for all storm water discharges. This is retained from the previous Order.

**b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The Order requires coverage by and compliance with applicable provisions of General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ). This General Permit, adopted on May 2, 2006, is applicable to all “federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. This provision is retained from the previous Order.

## 7. Compliance Schedules – Not Applicable

## VIII. PUBLIC PARTICIPATION

The Central Coast Regional Water Quality Control Board is considering the issuance of WDRs that will serve as an NPDES permit for the California Department of Corrections and Rehabilitation, California Men's Colony Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through written publication in the Tribune newspaper and posting on the Central Coast Water Board website.

### B. Written Comments

Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order or via electronic mail to [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

To receive a full response from the Regional Water Board staff and to be considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on **October 5, 2012**. No public comments were received.

### 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: **December 6, 2012**  
Time: **8:30 a.m.**  
Location: **Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401**

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/centralcoast/> 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 (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (805) 549-3147.

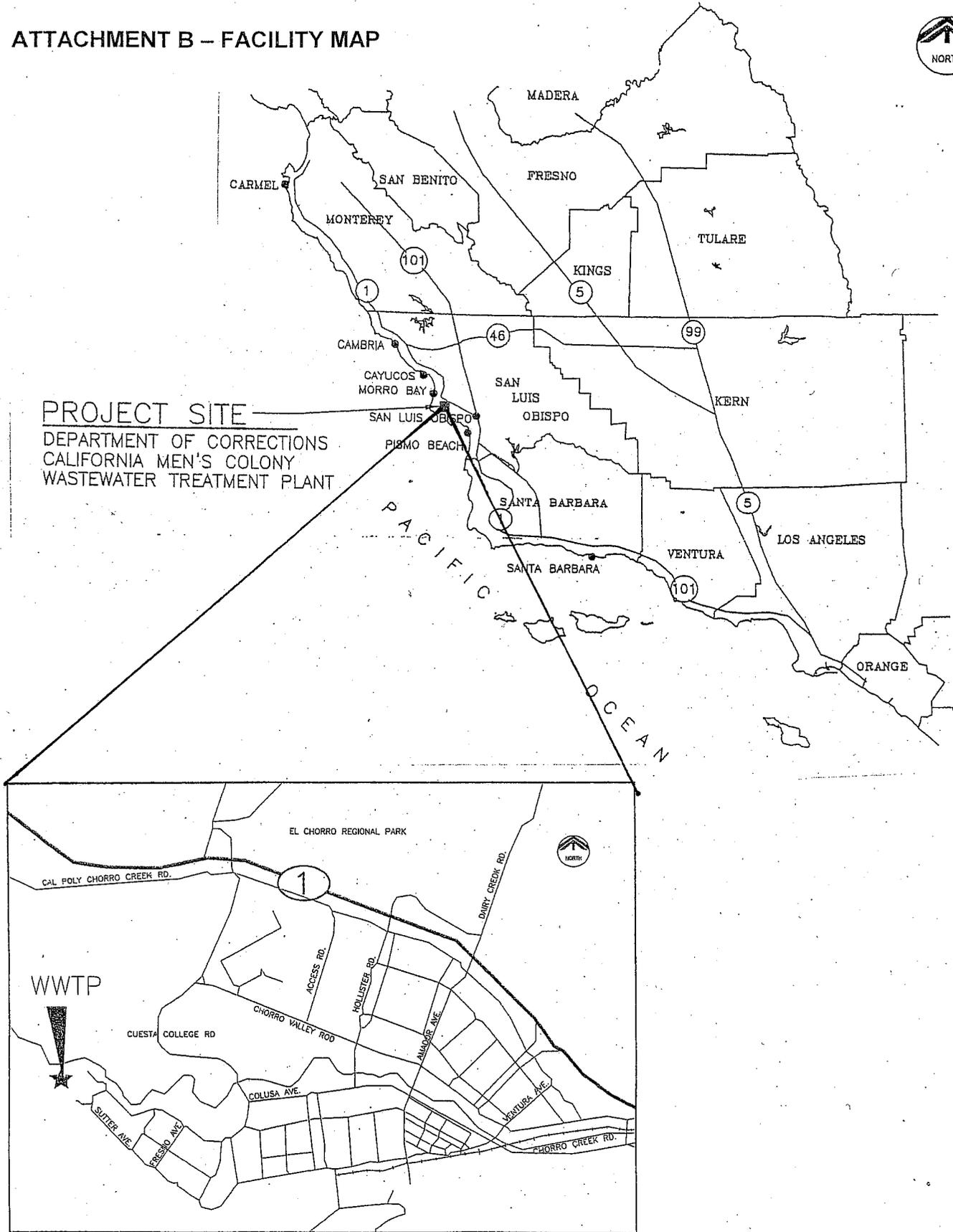
#### **F. Register of Interested Persons**

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 Katie DiSimone at (805) 542-4638 or [kdisimone@waterboards.ca.gov](mailto:kdisimone@waterboards.ca.gov) or Sheila Soderberg at (905) 549-3592 or [ssoderberg@waterboards.ca.gov](mailto:ssoderberg@waterboards.ca.gov).

**ATTACHMENT B – FACILITY MAP**





## **ATTACHMENT D –STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

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

#### **B. Need to Halt or Reduce Activity Not a Defense**

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

#### **C. Duty to Mitigate**

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

#### **D. Proper Operation and Maintenance**

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

#### **E. Property Rights**

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

#### **F. Inspection and Entry**

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

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

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against the Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

#### **H. Upset**

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

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

### B. Duty to Reapply

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

### C. Transfers

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

## III. STANDARD PROVISIONS – MONITORING

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

## IV. STANDARD PROVISIONS – RECORDS

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

6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

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

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267 and 13383.)

### **B. Signatory and Certification Requirements**

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

or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

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

### **C. Monitoring Reports**

Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)

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

### **D. Compliance Schedules**

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

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR § 122.41(l)(6)(i); Wat. Code § 13383.)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

#### **F. Planned Changes**

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

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

#### **G. Anticipated Noncompliance**

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

#### **H. Other Noncompliance**

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

#### **I. Other Information**

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

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

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

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Publicly Owned Treatment Works (POTWs)**

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

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

## **CENTRAL COAST REGIONAL WATER BOARD STANDARD PROVISIONS (JANUARY 1985)**

### **I. Central Coast General Permit Conditions**

#### **A. Central Coast Standard Provisions – Prohibitions**

1. Introduction of "incompatible wastes" to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under CWC § 307(a) is prohibited.
4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.
5. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:
  - a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,
  - b. Flow through the system to the receiving water untreated; and,
  - c. Cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited.

6. Introduction of "pollutant free" wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

**B. Central Coast Standard Provisions – Provisions**

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by CWC § 13050.
2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.
3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.
6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
  - a. violation of any term or condition contained in this order;
  - b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;
  - c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
  - d. a substantial change in character, location, or volume of the discharge.
7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.
8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
  - a. Promulgation of a new or revised effluent standard or limitation;
  - b. A material change in character, location, or volume of the discharge;
  - c. Access to new information that affects the terms of the permit, including applicable schedules;
  - d. Correction of technical mistakes or mistaken interpretations of law; and,
  - e. Other causes set forth under Sub-part D of 40 CFR Part 122.
9. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also

include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect of accidental discharges shall:

- a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
  - b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.
10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.
11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.
12. If the discharger's facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.
13. Production and use of reclaimed water is subject to the approval of the Central Coast Water Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Central Coast Water Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Central Coast Water Board.

### **C. Central Coast Standard Provisions – General Monitoring Requirements**

1. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling shall be increased to validate the test within the next monitoring period. The increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (Central Coast Standard Provisions –

Definitions I.G.13.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (Central Coast Standard Provisions – Definitions I.G.14.).

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:
  - a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
  - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
  - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.
3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.
4. 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.

#### **E. Central Coast Standard Provisions – General Reporting Requirements**

1. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.
2. The "Discharger" shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.
3. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:

- a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,
- b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

In addition to complying with Federal Standard Provision – Reporting V.B., the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

4. All “Dischargers” shall submit reports electronically to the:

Central Coast Water Board  
[centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906

In addition, "Dischargers" with designated major discharges shall submit a copy of each document to:

Regional Administrator  
US Environmental Protection Agency, Region 9  
Attention: CWA Standards and Permits Office (WTR-5)  
75 Hawthorne Street  
San Francisco, California 94105

5. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing “Discharger” and proposed “Discharger” containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.
6. Except for data determined to be confidential under Section 308 of the Clean Water Act (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Federal Standard Provision – Records IV.C.
7. By January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:
  - a) Both tabular and graphical summaries of the monitoring data obtained during the previous year.
  - b) A discussion of the previous year's compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance.

- c) An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
- d) A discussion of operator certification and a list of current operating personnel and their grades of certification.
- e) The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Provision B.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.
- f) A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Section C, General Monitoring Requirements.
- g) If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.
- h) If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

#### **F. Central Coast Standard Provisions – General Pretreatment Provisions**

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:
  - a. By the date specified therein;
  - b. Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,
  - c. If a new indirect discharger, upon commencement of discharge.

#### **G. Central Coast Standard Provisions – Enforcement**

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed \$5,000 per day.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

#### **H. Central Coast Standard Provisions – Definitions**

##### **(Not otherwise included in Attachment A to this Order)**

1. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.

2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
  - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
  - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
  - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to CWA § 311.
7. "Incompatible wastes" are:
  - a. Wastes which create a fire or explosion hazard in the treatment works;
  - b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;
  - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
  - d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,
  - e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.
8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n},$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. "n" should be five or more.

10. "Mass emission rate" is a daily rate defined by the following equations:

$$\text{mass emission rate (lbs/day)} = 8.34 \times Q \times C; \text{ and,}$$

$$\text{mass emission rate (kg/day)} = 3.79 \times Q \times C,$$

where "C" (in mg/L) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in MGD) is the measured daily flow rate or the average of measured daily flow rates over the period of interest.

11. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.
12. "Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision G.10, above, using the "six-month Median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.
13. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.
14. "Monthly Average" (or "Weekly Average", as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

$$\text{Average} = (X_1 + X_2 + \dots + X_n) / n$$

in which "n" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or mass emission rate (kg/day or lbs/day) for each sampled day. "n" should be four or greater.

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, storm waters, and cooling waters and condensates which are essentially free of pollutants.

18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{\text{effluent}} / C_{\text{influent}})$$

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.
22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
- Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
  - Discharge wastewater which substantially differs in nature or constituents from its average discharge;
  - Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
  - Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.).
24. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Resources Control Board.

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM**

**Table of Contents**

I.	General Monitoring Provisions.....	E-2
II.	Monitoring Locations .....	E-3
III.	Influent Monitoring Requirements .....	E-4
IV.	Effluent Monitoring Requirements.....	E-4
	A. Monitoring Location M-001.....	E-4
V.	Whole Effluent Toxicity Testing Requirements.....	E-6
	A. Whole Effluent Acute Toxicity – Monitoring Location M-001 .....	E-6
	B. Whole Effluent Chronic Toxicity – Monitoring Location M-001 .....	E-7
	C. Quality Assurance.....	E-8
	D. Accelerated Monitoring Requirements .....	E-9
	E. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE).....	E-9
VI.	Land Discharge Monitoring Requirements – Not Applicable .....	E-10
VII.	Reclamation Monitoring Requirements – RCL-001 .....	E-10
VIII.	receiving Water Monitoring Requirements .....	E-10
	A. Receiving Water Monitoring – R-001, R-002, R-003, R-004, and R-005 .....	E-10
	B. Groundwater Monitoring – GW-001 and GW-002 .....	E-12
IX.	Other Monitoring Requirements.....	E-13
	A. Biosolids Monitoring, Reporting, and Notification – BIO-001 .....	E-13
	B. Pretreatment Monitoring – Not Applicable.....	E-14
X.	Reporting Requirements.....	E-14
	A. General Monitoring and Reporting Requirements .....	E-14
	B. Self-Monitoring Reports (SMRs) .....	E-14
	C. Discharge Monitoring Reports.....	E-17
	D. Other Reports .....	E-17
	1. Sewage Spill Reporting and Notifications.....	E-18
	2. Total Chlorine Residual Release Notification .....	E-19
	3. Reporting of Non-Compliance.....	E-19
	4. Report of Waste Discharge.....	E-20

**Tables**

Table E-1.	Monitoring Station Locations .....	E-3
Table E-2.	Influent Monitoring .....	E-4
Table E-3.	Effluent Monitoring Location M-001 .....	E-4
Table E-4.	Short-Term Methods for Estimating Chronic Toxicity – Fresh Water.....	E-7
Table E-5.	Receiving Water Monitoring Requirements- R-001 and R-004.....	E-10
Table E-6.	Receiving Water Monitoring Requirements- R-002 and R-003.....	E-11
Table E-7.	Receiving Water Monitoring Requirements- R-005 .....	E-12
Table E-8.	Grounwater Monitoring Requirements .....	E-13
Table E-9.	Biosolids Monitoring Requirements .....	E-13
Table E-10.	Monitoring Periods and Reporting Schedule.....	E-15

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Code of Federal Regulations Section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### I. GENERAL MONITORING PROVISIONS

- A. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH), in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B. 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 approval of the Regional Water Board.
- C. 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  $\pm 10$  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.)
- D. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued

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

- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxics listed by the California Toxics Rule (CTR) shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005) (SIP).

**II. MONITORING LOCATIONS**

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

**Table E-1. Monitoring Station Locations**

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Influent	M-INF	Influent wastewater, prior to discharge to the oxidation ditches, and following all significant inputs to the collection system of untreated wastewater inflow and infiltration.
Effluent	M-001	Location representative of final effluent to the unnamed drainage way, prior to contact with receiving water flow.
Recycled Water	RCL-001	A location representative of disinfected recycled water prior to distribution.
Receiving Water	R-001	At the discharge from Chorro Reservoir, immediately below the dam <sup>[1]</sup> .
Receiving Water	R-002	Upstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of background conditions in Chorro Creek.
Receiving Water	R-003	Downstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of conditions within Chorro Creek after contact and mixing with the discharge.
Receiving Water	R-004	Approximately 0.6 miles downstream of the point of discharge, at the site of a washed out concrete diversion dam.
Receiving Water	R-005	Twin-Bridges at the bridge crossing with Chorro Creek and South Bay Boulevard.
Groundwater	GW-001	Upgradient of the WWTP, as approved by the Central Coast Water Board.
Groundwater	GW-002	Downgradient of the WWTP, as approved by the Central Coast Water Board.
Biosolids	BIO-001	A location where a representative sample of biosolids may be obtained, after handling, and prior to disposal.

<sup>[1]</sup> If conditions are determined to be unsafe for sample collection, the Discharger may monitor directly from Chorro Reservoir at a location that provides a representative sample of upsteam water quality. The Discharger shall provide a description of unsafe conditions and alternative monitoring location.

**III. INFLUENT MONITORING REQUIREMENTS**

The Discharger shall monitor the influent to the individual treatment plants at M-INF as follows.

**Table E-2. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	continuous	Continuous <sup>[1]</sup>
Max Daily Flow	MGD	calculated	1/Month
Mean Daily Flow	MGD	calculated	1/Month
Biochemical Oxygen Demand (5-day @ 20°C) (BOD)	mg/L	C-24	2/Month
Total Suspended Solids (TSS)	mg/L	C-24	2/Month

**Footnotes to Table E-2:**

Units:

- MGD = million gallons per day
- mg/L = milligrams per liter
- µg/L = micrograms per liter
- C-24 = 24-hour Composite

<sup>[1]</sup> Continuous monitoring for flow and daily reporting.

**IV. EFFLUENT MONITORING REQUIREMENTS**

**A. Monitoring Location M-001**

The Discharger shall monitor the discharge at Monitoring Location M-001 as follows:

**Table E-3. Effluent Monitoring Location M-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorine Used	lbs/day	Continuous	1/Day
pH <sup>[1]</sup>	s.u.	Grab	1/Day
Residual Chlorine <sup>[2]</sup>	mg/L	Continuous	1/Day
Settleable Solids	mL/L	Grab	1/Day
Turbidity	NTU	Grab	1/Day
Total Coliform Bacteria	MPN/100 mL	Grab	5/Week <sup>[3]</sup>
Dissolved Oxygen	mg/L	Grab	5/Week
	% removal	Calculated	1/Week
BOD	mg/L	C-24	1/Week
Nitrate (as N)	mg/L	Grab	1/Week
Nitrite (as N)	mg/L	Grab	1/Week
Temperature <sup>[1]</sup>	°F	instantaneous	1/Week
Total Ammonia (as N)	mg/L	Grab	1/Week
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	1/Week
Total Nitrogen (as N)	mg/L	Calculated <sup>[4]</sup>	1/Week
TSS	mg/L	C-24	1/Week
	% removal	Calculated	1/Week

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chloride	mg/L	Grab	1/Month
Dissolved Orthophosphate (as P)	mg/L	Grab	1/Month
Hardness (as CaCO3)	mg/L	Grab	1/Month
Oil and Grease	mg/L	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Bis(2-ethylhexyl)phthalate	µg/L	Grab	1/Month <sup>[8]</sup>
Chlorodibromomethane	µg/L	Grab	1/Month
Copper, Total Recoverable	µg/L	Grab	1/Month
Dichlorobromomethane	µg/L	Grab	1/Month
Acute Toxicity <sup>[5]</sup>	% survival	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Chronic Toxicity <sup>[5]</sup>	TUc	Grab	1/Year
Cobalt	mg/L	Grab	1/Year
CTR Pollutants <sup>[6]</sup>	µg/L	Grab	1/Year
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Phthalate Esters	µg/L	Grab	1/Year
Title 22 Pollutants <sup>[6]</sup>	µg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year

**Footnotes to Table E-3:**

Units:

- MGD = million gallons per day
- mg/L = milligrams per liter
- s.u. = standard units
- MPN/100 mL = Most probable number/100 mL
- °F = degree Fahrenheit
- µg/L = micrograms per liter
- C-24 = 24-hour composite

- [1] Temperature and pH shall be measured simultaneously with the sample taken for measurement of total ammonia. Results shall be used to calculate un-ionized ammonia concentration.
- [2] Compliance determinations for total residual chlorine (TRC) shall be based on 99 percent compliance. To determine 99 percent compliance with the effluent limitation for TRC, the following conditions shall be met: (1) the total time during which TRC exceeds 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no excursion above 0.1 mg/L shall exceed 30 minutes; and (3) no excursion shall exceed 2.0 mg/L. Verification of excursion length shall be submitted with monthly monitoring report. After the Facility upgrades disinfection from sodium hypochlorite injection to ultraviolet disinfection, monitoring for total residual chlorine may be reduced to only days on which sodium hypochlorite or other chlorinating agents are used.

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- [3] Total coliform bacteria should be analyzed daily when wastewater is being reclaimed/recycled for irrigation.
- [4] Total nitrogen shall be equal to the sum of total kjehldahl nitrogen, nitrite and nitrate.
- [5] Acute and chronic toxicity monitoring shall be conducted according to methods described in Section V of this MRP, below.
- [6] The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibrated standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML. Monitoring for the CTR pollutants in effluent shall occur simultaneously with monitoring required for the CTR pollutants in receiving water.
- [7] The Title 22 pollutants are those for which primary Maximum Contaminant Levels (MCLs) have been established by the Department of Health Services and which are listed in Tables 64431-A and 64444-A of the California Code of Regulations, Title 22, Division 4, Chapter 15. Where these pollutants are included in other groups of pollutants (CTR Priority Pollutants), monitoring does not need to be duplicated. Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 and 64445.1. Monitoring for the Title 22 pollutants in effluent shall occur simultaneously with monitoring required for the Title 22 pollutants in receiving water.
- [8] If bis (2-ethylhexyl) phthalate is found to be non-detect for 6 consecutive months, monitoring may be reduced to quarterly. If bis (2-ethylhexyl) phthalate is found to be non-detect for 2 years, monitoring may be reduced to annually as part of the annual CTR monitoring. If bis (2-ethylhexyl) phthalate is detected at anytime, monthly monitoring shall be resumed for a minimum of 6 consecutive months.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Whole Effluent Acute Toxicity – Monitoring Location M-001

1. Compliance with the acute toxicity effluent limitations of this Order shall be evaluated by measuring survival of test organisms exposed to 96-hour continuous flow-through bioassays.
2. Test organisms shall be fathead minnow unless the Executive Officer specifies in writing otherwise.
3. All bioassays shall be performed using the most sensitive species based on the most recent screening test results and in accordance with the most up-to-date protocols in 40 CFR 136, currently in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5<sup>th</sup> Edition.
4. If the Discharger can demonstrate that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limitation may be determined after the test samples are adjusted to remove the influence of those substances. The Discharger must obtain written approval from the Executive Officer to authorize such an adjustment.
5. The sample shall be taken from treated effluent after disinfection. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported in the monthly SMRs or as specified by the Regional Water Board.

6. The presence of acute toxicity shall be determined as significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test. The Discharger shall include with the SMR the percent survival of the organisms for both the effluent and control, and the results of the t-test ("statistically different" or "not statistically different").

If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

**B. Whole Effluent Chronic Toxicity – Monitoring Location M-001**

**1. Chronic Toxicity Monitoring Requirements**

- a. **Toxicity Trigger.** A toxicity trigger of 1 TUc is established for the discharge of effluent through Discharge Point No. 001.
- b. **Sampling.** The Discharger shall collect grab samples of the effluent at M-001, as specified in Table E-3 above, for critical life stage toxicity testing as indicated below.
- c. **Test Species.** The test species shall include a vertebrate, and invertebrate, and an aquatic plant. After a three month screening period, monitoring may be reduced to the most sensitive species. Screening phase chronic toxicity monitoring shall be conducted with the following three species with approved test protocols. The Executive Officer may change the test species if data suggest that another test species is more sensitive to the discharge.

**Table E-4. Short-Term Methods for Estimating Chronic Toxicity – Fresh Water**

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow	<i>Pimephales promelas</i>	Larval Survival and Growth	7
Water Flea	<i>Ceriodaphnia dubia</i>	Survival; number of young	6 to 8 days
Green Alga	<i>Selenastrum capricornutum</i>	Growth Rate	4 days

- d. **Methodology.** Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1 and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently third edition (EPA-821-R-02-014) and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, currently fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).
- e. **Dilution Series.** The Discharger shall conduct tests at 100%, 85%, 70%, 50%, and 25%. The "%" represents percent effluent as discharged. The Discharger may use the biological buffer MOPS (3-(N-Morpholino)propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test.

## 2. Chronic Toxicity Reporting Requirements

- a. *Routine Reporting.* Toxicity test results for the current reporting period shall include, at a minimum, for each test:
  - i. Sample dates
  - ii. Test initiation date
  - iii. Test species
  - iv. End point values for each dilution (e.g. number of young, growth rate, percent survival)
  - v. NOEC values in percent effluent
  - vi. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub>, and IC<sub>50</sub> values (or EC<sub>15</sub>, EC<sub>25</sub> ... etc.) in percent effluent
  - vii. TUC values (100/NOEC, 100/IC<sub>25</sub>, or 100/EC<sub>25</sub>)
  - viii. Mean percent mortality ( $\pm$ s.d.) after 96 hours in 100% effluent (if applicable)
  - ix. NOEC and LOEC values for reference toxicant tests
  - x. IC<sub>50</sub> or EC<sub>50</sub> values for reference toxicant tests
  - xi. Available water quality measurements for each test (pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia)
- b. *Compliance Summary.* The results of the chronic toxicity testing shall be provided in the next Self-Monitoring Report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under 2.a., item numbers i, iii, v, vi (IC<sub>25</sub> or EC<sub>25</sub>), vii, and viii.

## C. Quality Assurance

1. 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).
2. 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.).
3. 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 resample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger collects the first sample required to complete the retest.
4. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD)

for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

#### **D. Accelerated Monitoring Requirements**

1. When acute toxicity is detected in the effluent above the effluent limitation established by this Order or when the chronic toxicity trigger of 1 TUC is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results.
3. If implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the effluent limitation or toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the effluent limitation or toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
4. If none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

#### **E. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE)**

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 toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, section V.C.
  - b. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
  - c. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:
  - a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);
  - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);
  - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a); and
  - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b).

3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. 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 includes the following:
  - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002; and
  - 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.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**

**VII. RECLAMATION MONITORING REQUIREMENTS – RCL-001**

The Discharger shall comply with applicable State and local monitoring requirements regarding the production and use of reclaimed wastewater, including requirements established by the California Department of Public Health at Title 22, Sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria.

The Discharger shall maintain records of the volumes of water delivered to each reclamation site. For each location of reclamation/reuse, the following information shall be maintained and reported:

- Total volume and maximum daily volume of water reclaimed during the reporting period.
- Percent of total wastewater influent flow that is reclaimed.
- Uses of reclaimed water.

Reclaimed water shall be monitored for turbidity, total coliform bacteria, and total residual chlorine at the appropriate frequency to demonstrate compliance with section IV.C of the Order.

**VIII. RECEIVING WATER MONITORING REQUIREMENTS**

**A. Receiving Water Monitoring – R-001, R-002, R-003, R-004, and R-005**

1. The Discharger shall monitor the receiving water at Monitoring Station R-001 and R-004 as follows. Receiving water at Monitoring Station R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge (between Chorro Reservoir and the point of discharge).

**Table E-5. Receiving Water Monitoring Requirements- R-001 and R-004**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>(1)</sup>
Ammonia (as N)	mg/L	Grab	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
pH <sup>[2]</sup>	s.u.	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[2]</sup>	°F	Instantaneous	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Calculated <sup>[3]</sup>	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Unionized Ammonia (as N)	mg/L	Calculated <sup>[4]</sup>	1/Month

<sup>[1]</sup> Monitoring Station R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge. When there is no surface flow below the dam, upstream data shall be calculated from an average of the last three samples.

<sup>[2]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate unionized ammonia concentration.

<sup>[3]</sup> Total nitrogen shall be equal to the sum of total kjeldahl nitrogen, nitrite and nitrate.

<sup>[4]</sup> Unionized Ammonia shall be calculated based on the following formula, or as otherwise approved by the Regional Water Board:

$$NH_3 = \frac{1}{1 + 10^{(pK - pH)}}$$

Where:

$$pK = 0.09018 + 2729.92/T$$

T = Temperature in degrees Kelvin

- The Discharger shall monitor the receiving water at Monitoring Station R-002 and R-003 as follows. Receiving water at Monitoring Station R-002 shall be monitored only when continuous surface flow exists between Chorro Reservoir and the point of discharge.

**Table E-6. Receiving Water Monitoring Requirements- R-002 and R-003**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Ammonia (as N)	mg/L	Grab	1/Month
Unionized Ammonia (as N)	mg/L	Calculated <sup>[2]</sup>	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
pH <sup>[2]</sup>	s.u.	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[3]</sup>	°F	Instantaneous	1/Month
Total Dissolved Solids	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Boron	mg/L	Grab	1/Year
Cobalt	mg/L	Grab	1/Year

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
CTR Pollutants <sup>[4]</sup>	µg/L	Grab	1/Year
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances (MBAS)	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Phthalate Esters	µg/L	Grab	1/Year
Sulfate	mg/L	Grab	1/Year
Title 22 Pollutants <sup>[5]</sup>	µg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year

<sup>[1]</sup> Monitoring Station R-002 shall be monitored only when surface flow exists between Chorro Reservoir and the point of discharge.

<sup>[2]</sup> Unionized Ammonia shall be calculated based on the following formula, or as otherwise approved by the Regional Water Board:

$$NH_3 = \frac{1}{1 + 10^{(pK - pH)}}$$

Where:

$$pK = 0.09018 + 2729.92/T$$

T = Temperature in degrees Kelvin

<sup>[3]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate unionized ammonia concentration.

<sup>[4]</sup> The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Monitoring of receiving water for the CTR pollutants shall occur simultaneously with effluent monitoring for the CTR pollutants.

<sup>[5]</sup> The Title 22 pollutants are those for which primary MCLs have been established by the Department of Health Services and which are listed in sections 64431-A and 64444-A of the California Code of Regulations, Title 22, Division 4, Chapter 15. Where these pollutants are also identified as CTR Priority Pollutants, monitoring does not need to be duplicated. Monitoring of receiving water for the Title 22 Pollutants shall occur simultaneously with effluent monitoring for Title 22 pollutants.

3. The Discharger shall monitor receiving water at Monitoring Station R-005 as follows:

**Table E-7. Receiving Water Monitoring Requirements- R-005**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	Percent	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month

<sup>[1]</sup> Sampling shall take place once per month between May and September.

**B. Groundwater Monitoring – GW-001 and GW-002**

The Discharger shall monitor groundwater at GW-001 and GW-002 as follows. After depth to groundwater has been measured, wells shall be purged before samples are collected for analysis.

**Table E-8. Groundwater Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	Feet	Measured	1/Quarter
Nitrate, Total (as N)	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Specific Conductance	µhoms/cm	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Chemical Oxygen Demand	mg/L	Grab	1/Quarter

**IX. OTHER MONITORING REQUIREMENTS**

**A. Biosolids Monitoring, Reporting, and Notification – BIO-001**

The Discharger shall collect a representative sample of residual solids (biosolids) from the last point in the handling process and perform the following analyses:

**Table E-9. Biosolids Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Quantity Removed	tons or yds <sup>3</sup>	Measured	During Removal
Location of Reuse/Disposal	General Public or Specific Site	Grab	1/Year
Moisture Content	Percent	Grab	1/Year
Ammonia (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Antimony	mg/kg <sup>[1]</sup>	Grab	1/Year
Arsenic	mg/kg <sup>[1]</sup>	Grab	1/Year
Barium	mg/kg <sup>[1]</sup>	Grab	1/Year
Beryllium	mg/kg <sup>[1]</sup>	Grab	1/Year
Boron	mg/kg <sup>[1]</sup>	Grab	1/Year
Cadmium	mg/kg <sup>[1]</sup>	Grab	1/Year
Chromium (IV)	mg/kg <sup>[1]</sup>	Grab	1/Year
Cobalt	mg/kg <sup>[1]</sup>	Grab	1/Year
Copper	mg/kg <sup>[1]</sup>	Grab	1/Year
Fluoride	mg/kg <sup>[1]</sup>	Grab	1/Year
Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
Mercury	mg/kg <sup>[1]</sup>	Grab	1/Year
Nickel	mg/kg <sup>[1]</sup>	Grab	1/Year
Nitrate (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Oil and Grease	mg/kg <sup>[1]</sup>	Grab	1/Year
Organic Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
PCBs	mg/kg <sup>[1]</sup>	Grab	1/Year
Pesticides	mg/kg <sup>[1]</sup>	Grab	1/Year
pH	s.u.	Grab	1/Year
Selenium	mg/kg <sup>[1]</sup>	Grab	1/Year
Silver	mg/kg <sup>[1]</sup>	Grab	1/Year
Thallium	mg/kg <sup>[1]</sup>	Grab	1/Year

Parameter	Units	Sample Type	Minimum Sampling Frequency
Tin	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Chromium	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Nitrogen (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Phosphorus (as P)	mg/kg <sup>[1]</sup>	Grab	1/Year
Trichloroethylene	mg/kg <sup>[1]</sup>	Grab	1/Year
Vanadium	mg/kg <sup>[1]</sup>	Grab	1/Year
Vinyl Chloride	mg/kg <sup>[1]</sup>	Grab	1/Year
Zinc	mg/kg <sup>[1]</sup>	Grab	1/Year

<sup>[1]</sup> Results shall be reported on a dry weight basis.

The following information shall be submitted with the Annual Report required by the Regional Water Board. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR 503.

1. Annual biosolids production in dry tons.
2. Percent solids content of biosolids which leave the site.
3. A schematic drawing showing handling facilities, including temporary and final storage areas. Include a narrative description of solids treatment and performance.
4. A description of disposal methods, including the following information as applicable related to the disposal methods used at the Facility.
  - a. For landfill disposal include: tons placed in the landfill; the Regional Water Board WDR numbers that regulate the landfills used; the present classification of the landfill; and the names and locations of the landfills which receive biosolids.
  - b. For land application include: tons applied to the land; the location of the land applications sites; the Regional Water Board's WDR numbers that regulate the land application sites; the application rates in lbs/acre/year (specify the weight basis, e.g., dry weight or percent solids); and the subsequent uses of the land.

**B. Pretreatment Monitoring – Not Applicable**

**X. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

The Discharger shall comply with all Federal Standard Provisions (Attachment D) and Regional Standard Provisions related to monitoring, reporting, and recordkeeping.

**B. Self-Monitoring Reports (SMRs)**

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, semi-annual, and annual SMRs including the results of all required monitoring using USEPA approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-10. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Day after permit effective date	All	First day of the second calendar month following month of sampling.
1/Day	Day after permit effective date	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling	
1/Week	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	
1/Month	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	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
2/Year	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 1 February 1
1/Year	Permit effective date if that date is January 1 through June 30.  January 1 after permit effective date if that date is July 1 through December 31 <sup>[1]</sup> .	January 1 through December 31	February 1

<sup>[1]</sup> For permit renewals with an effective date from July 1 through December 31, for that calendar year only the Discharger shall comply with its old permit's annual reporting requirements (including electronic submittal to CIWQS under the previous permit number), and then begin its annual monitoring and reporting according to the new permit on January 1. For example, if a new permit takes effect on October 15, 2012, then the Discharger would comply with the annual reporting requirements from its old permit for the reporting period of January 1, 2012, through December 31, 2012, and then begin complying with the new permit's annual reporting requirements beginning January 1, 2013

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

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

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

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

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

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
6. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
7. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format

within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. In the event that the CIWQS website is unavailable due to service interruption or other technical difficulties, the Discharger shall electronically submit SMRs to the Regional Water Board at [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov), signed and certified as required by the Standard Provisions (Attachment D. In the event that electronic mail is not available, the Discharger shall submit the SMR hard copy by mail, signed and certified as required by the Standard Provisions (Attachment D) to the address listed below:

California Regional Water Quality Board  
 Central Coast Region  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, California 93401

**C. Discharge Monitoring Reports**

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

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

- 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 will not be accepted unless they follow the exact same format of EPA Form 3320-1.

**D. Other Reports**

The Discharger shall report the results of any special studies, monitoring, and reporting required by section VI.C (Special Studies, Technical Reports, and Additional Monitoring) of the Order with the first monthly SMR following the respective due date.

In addition, the Discharger shall comply with the reporting requirements below.

### 1. Sewage Spill Reporting and Notifications

- a. Sanitary sewer overflows associated with the Discharger's collection system are subject to the online reporting and notification requirements set forth in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ. The Discharger has enrolled under the statewide waste discharge requirements for sanitary sewer systems. Therefore, all prohibitions, provisions, and monitoring and reporting requirements apply to the Discharger. For any unauthorized discharges of sewage to a drainage channel or surface water, the Discharger is required to notify the State Office of Emergency Services, the local health officer or director of environmental health with jurisdiction over affected water bodies, and the Central Coast Water Board, within two hours after becoming aware of the discharge. Additionally, within 24 hours the Discharger shall submit to the Central Coast Water Board certification that the appropriate agencies (i.e., Office of Emergency Services and local Environmental Health Department) have been notified of the sewage discharge to surface water bodies.
- b. In accordance with the requirements of Health and Safety Code Section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any spills that cause, or probably will cause, a discharge to any waters of the state.

In accordance with the requirements of Water Code Section 13271, the Discharger shall provide notification to the State Office of Emergency Services of reportable amounts of hazardous substance spills or sewage spills that cause, or probably will cause, a discharge to any waters of the state. The California Code of Regulations, Title 23, Section 2250, defines a reportable amount of a sewage spill as being 1,000 gallons. The phone number for reporting these releases to the **State Office of Emergency Services is (800) 852-7550**.

The Discharger shall notify the Central Coast Water Board of any spill from its wastewater treatment plant that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than **two hours** after becoming aware of the release. This notification does not need to be made if the Discharger has notified the State Office of Emergency Services first. The phone number for reporting these sewage spills to the Central Coast Water Board is **(805) 549-3147**. At a minimum, the following information shall be provided:

- i. The location, date, and times of the spill.
- ii. The water body that received or will receive the spill.
- iii. An estimate of the amount of sewage or other waste spilled and the amount that reached a surface water at the time of notification.
- iv. If ongoing, the estimated flow rate of the spill at the time of the notification.
- v. The name of the organization, phone number, and email address of the reporting representative.

- c. As soon as possible, but not later than 24 hours after becoming aware of a spill from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Central Coast Water Board by email at [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov). If the spill is 1,000 gallons or more, this statement shall certify that the State Office of Emergency Services has been notified of the spill in accordance with California Water Code Section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the spill in accordance with Health and Safety Code Section 5411.5. The statement shall also include at a minimum the following information:
  - i. Agency, NPDES No., Order No., and MRP No., if applicable.
  - ii. The location, date, and time of the spill.
  - iii. The water body that received the spill.
  - iv. A description of the level of treatment of the sewage spill or other waste spilled.
  - v. An initial estimate of the amount of sewage spilled or other waste spilled and the amount that reached a surface water.
  - vi. The State Office of Emergency Services control number and the date and time that notification of the incident was provided to the State Office of Emergency Services.
  - vii. The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

**2. Total Chlorine Residual Release Notification**

- a. The Discharger shall notify the following agencies **within two hours** if an individual total chlorine residual release to surface water is detected at 0.1 mg/L for more than 30 minutes and/or individual total chlorine residual exceeds 2.0 mg/L, which violate the effluent limitations as defined in section IV.A.1 of this Order:

Central Coast Water Board	805-542-4638
Office of Emergency Services	800-852-7550
Department of Fish and Game Dispatch <sup>[1]</sup>	831-649-2801
San Luis Obispo County Environmental Health Agency	805-781-5544

<sup>[1]</sup> Prompt dispatch to notify marine protected area warden, enforcement warden, and biologist.

- b. Within 24 hours of the release, the Discharger shall certify to the Central Coast Water Board that notifications have been made to appropriate agencies (above). Certification of such notifications shall be conducted through email notifications or by facsimile at 805-543-0397.

**3. Reporting of Non-Compliance**

The Discharger shall comply with section V.E. of Standard Provisions (Attachment D), following procedures described in a February 17, 1981, tri-agency memo from the Department of Health Services and any amendments thereto, and shall notify the following:

Department of Health Services Jill Baltan	510-412-4633
Office of Emergency Services	800-852-7550
Department of Fish and Game Dispatch	831-649-2819
County Board of Supervisors	805-781-5450
County Ag Commission	805-781-5910
Tomales Bay Shellfish Farms Inc Drew Aldeen	415-250-9905
Morro Bay Oyster Company Neal Maloney	805-234-7102
Grassy Bar Oyster Company George Trevelyan	805-471-9683
Morro Bay National Estuary Program	805-772-3834
Y. Hayashi & Sons	805-489-2595

#### 4. Report of Waste Discharge

**No later than July 28, 2017**, and pursuant to California Water Code section 13376, the Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements.

**ATTACHMENT F - FACT SHEET**

**Table of Contents**

I.	Permit Information .....	F-3
II.	Facility Description .....	F-4
	A. Description of Wastewater and Biosolids Treatment and Controls .....	F-4
	B. Discharge Points and Receiving Waters .....	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report Data.....	F-5
	D. Compliance Summary.....	F-7
	E. Planned Changes .....	F-9
III.	Applicable Plans, Policies, and Regulations .....	F-9
	A. Legal Authorities .....	F-9
	B. California Environmental Quality Act (CEQA).....	F-9
	C. State and Federal Regulations, Policies, and Plans .....	F-10
	D. Impaired Water Bodies on CWA 303(d) List.....	F-11
	E. Other Plans, Policies and Regulations .....	F-14
IV.	Rationale For Effluent Limitations and Discharge Specifications.....	F-14
	A. Discharge Prohibitions .....	F-15
	B. Technology-Based Effluent Limitations .....	F-16
	1. Scope and Authority .....	F-16
	1. Applicable Technology-Based Effluent Limitations .....	F-16
	C. Water Quality-Based Effluent Limitations (WQBELs) .....	F-17
	1. Scope and Authority .....	F-17
	2. Applicable Beneficial Uses and Water Quality Objectives .....	F-18
	3. Determining the Need for WQBELs.....	F-18
	4. WQBEL Calculations.....	F-23
	5. Whole Effluent Toxicity (WET).....	F-28
	6. Basin Plan.....	F-29
	D. Final Effluent Limitations .....	F-35
V.	Rationale for Surface Receiving Water Limitations .....	F-38
VI.	Rationale for Monitoring and Reporting Requirements .....	F-38
	A. Influent Monitoring .....	F-38
	B. Effluent Monitoring .....	F-38
	C. Whole Effluent Toxicity Testing Requirements .....	F-39
	D. Receiving Water Monitoring .....	F-39
	1. Surface Water .....	F-39
	2. Groundwater .....	F-39
	E. Other Monitoring Requirements .....	F-39
	1. Biosolids/Sludge Monitoring .....	F-39
	2. Pretreatment Monitoring – Not Applicable .....	F-39
	3. Salt and Nutrient Management Plan Reporting .....	F-39
VII.	Rationale for Provisions.....	F-39
	A. Standard Provisions.....	F-39
	B. Special Provisions.....	F-40
	1. Reopener Provisions.....	F-40
	2. Special Studies and Additional Monitoring Requirements.....	F-40
	3. Best Management Practices and Pollution Prevention .....	F-40
	4. Construction, Operation, and Maintenance Specifications – Not Applicable .....	F-41
	5. Special Provisions for Municipal Facilities (POTWs Only) .....	F-41
	Attachment F– Fact Sheet .....	F-1

6. Other Special Provisions .....	F-41
7. Compliance Schedules – Not Applicable .....	F-42
VIII. Public Participation .....	F-42
A. Notification of Interested Parties .....	F-42
B. Written Comments .....	F-42
C. Public Hearing .....	F-42
D. Waste Discharge Requirements Petitions .....	F-43
E. Information and Copying .....	F-43
F. Register of Interested Persons .....	F-43
G. Additional Information .....	F-43

**List of Tables**

Table F-1. Facility Information .....	F-3
Table F-2. Design Flows .....	F-5
Table F-3. Outfall Locations .....	F-5
Table F-4. Previous Effluent Limitations and Monitoring Data for Conventional and Non- Conventional Pollutants from Discharge Point No. 001 .....	F-6
Table F-5. Compliance Summary .....	F-7
Table F-6. Basin Plan Beneficial Uses of Chorro Creek .....	F-10
Table F-7. Phosphate and Orthophosphate Effluent Data Summary .....	F-13
Table F-8. Secondary Treatment Requirements .....	F-16
Table F-9. Technology-Based Effluent Limitations .....	F-17
Table F-10. Summary of RPA Results .....	F-19
Table F-11. WQBEL Calculations .....	F-26
Table F-12. Receiving Water .....	F-32
Table F-13. Groundwater .....	F-32
Table F-14. Municipal Supply Water .....	F-33
Table F-15. Collection System Data for Salts .....	F-33
Table F-16. Influent Data for Salts .....	F-33
Table F-17. Final Effluent Limitations .....	F-36

**ATTACHMENT F – FACT SHEET**

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

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

**I. PERMIT INFORMATION**

The following table summarizes administrative information related to the Facility.

**Table F-1. Facility Information**

<b>WDID</b>	3400108001
<b>Discharger</b>	California Department of Corrections and Rehabilitation
<b>Indirect Dischargers</b>	California Army National Guard, Camp San Luis Obispo Cuesta College San Luis Obispo County Education Center San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course San Luis Obispo County Operational Facility
<b>Name of Facility</b>	California Men's Colony Wastewater Treatment Plant (WWTP)
<b>Facility Address</b>	Hwy 1, North of San Luis Obispo, behind Cuesta College San Luis Obispo, CA 93401 San Luis Obispo County
<b>Facility Contact, Title, Phone</b>	Elvin Valenzuela, Acting Warden, (805) 547-7901
<b>Authorized Person to Sign and Submit Reports</b>	Elvin Valenzuela, Acting Warden, (805) 547-7901
<b>Mailing Address</b>	P.O. Box 8101, San Luis Obispo, CA 93401
<b>Billing Address</b>	Same
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Major or Minor Facility</b>	Major
<b>Threat to Water Quality</b>	1
<b>Complexity</b>	A
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	Yes, Department of Health Services regulations at Title 22 of the California Code of Regulations Chapter 3 (Water Recycling Criteria).
<b>Facility Permitted Flow</b>	1.2 million gallons per day (MGD) (dry weather monthly average)
<b>Watershed</b>	Estero Bay Hydrologic Unit
<b>Receiving Water</b>	Chorro Creek
<b>Receiving Water Type</b>	Inland, freshwater

- A.** The California Department of Corrections and Rehabilitation (hereinafter the Discharger) owns and operates a trunk sewer line and wastewater treatment facility located on the grounds of Camp San Luis Obispo, a National Guard training site. In addition to conveying and treating domestic wastewater from the East and West Facilities of the California Men's Colony, a correctional institution, the trunk sewer and treatment plant provide wastewater conveyance and treatment for the California National Guard's Camp San Luis Obispo, Cuesta College, and several County facilities, including a jail, an education center, and an operations facility.

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

- B.** The wastewater treatment facility discharges treated effluent to Chorro Creek, a water of the United States, and is currently regulated by Order No. R3-2006-0032, which was adopted on July 7, 2006.
- C.** The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on August 25, 2011.

## **II. FACILITY DESCRIPTION**

### **A. Description of Wastewater and Biosolids Treatment and Controls**

The California Men's Colony wastewater treatment plant was originally constructed in 1940 by the Army Corps of Engineers, which operated the facility until the early 1960s, when the Department of Corrections assumed responsibility for its operations. Treatment modifications and upgrades occurred in 1979 and 1985, and in the fall of 2006, major modifications and upgrades were completed.

In addition to treating domestic wastewater from the East and West Facilities of the California Men's Colony, the facility provides wastewater treatment for the California National Guard's Camp San Luis Obispo, Cuesta College, and several County facilities, including the County Jail, Education Center, and operations facility. The California National Guard, San Luis Obispo County, and Cuesta College own and maintain discrete wastewater collection and transport systems that discharge to the Department of Corrections' trunk sewer system. The entire service area includes approximately 13,000 acres with an estimated population of 16,000. Approximately 11,700 acres of the service area are public lands.

Design flows for the recently upgraded (2006) wastewater treatment facility are summarized below.

**Table F-2. Design Flows**

Average Dry Weather Flow	1.2 MGD
Average Annual Flow	1.3 MGD
Average Day Maximum Monthly Flow	1.8 MGD
Peak Hour Dry Weather Flow	2.4 MGD
Peak Hour Wet Weather Flow	5.2 MGD

The headworks of the new facility include a Parshall flume with a capacity of 5.73 MGD, barscreens, and an aerated chamber. Additional treatment is provided by two oxidation ditches and two secondary clarifiers. Tertiary treatment is accomplished by sand filtration, using eight filter cells with surface areas of 50 square feet each. The facility disinfects treated effluent with sodium hypochlorite and dechlorinates using sodium bisulfite before discharging to Chorro Creek. Two centrifuges are used to dewater sludge, generating up to 2.2 dry tons of solids per day. Wastewater solids are hauled from the site for disposal. Treated wastewater is used by the County to irrigate the Dairy Creek Golf Course and discharged to Chorro Creek at a minimum continuous flow rate of 0.75 cubic feet per second (cfs).

**B. Discharge Points and Receiving Waters**

Effluent from the California Men's Colony Wastewater treatment plant is discharged to Chorro Creek, within the Chorro Creek Subarea of the Estero Bay Hydrologic Unit. Chorro Creek is a drinking water source for the City of Morro Bay, as well as a fresh water source for the Morro Bay Estuary.

**Table F-3. Outfall Locations**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated domestic wastewater	35° 19' 30" N	120° 45' 9" W	Chorro Creek

**C. Summary of Existing Requirements and Self-Monitoring Report Data**

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 and representative monitoring data for Monitoring Location M-001, for the term of the previous Order, are presented in the following tables.

**Table F-4. Previous Effluent Limitations and Monitoring Data for Conventional and Non-Conventional Pollutants from Discharge Point No. 001**

Parameter	Units	Effluent Limitations			Monitoring Data (From July 2009-March 2011)		
		Monthly Average	Weekly Average	Daily Maximum	Highest Monthly Average	Highest Weekly Average	Highest Daily Discharge
Acute Toxicity	% survival	--	--	1	--	--	95
BOD, 5-day <sup>2</sup>	mg/L	10	30	50	4.9	7.1	7.1
	lbs/day	100	300	500	42	52	52
	kg/day	45	136	227	NA	NA	NA
Chlorine Residual	mg/L	--	--	ND <sup>3</sup>	--	--	0.12
Chlorodibromomethane <sup>4</sup>	µg/L	0.4	--	0.81	19	--	19
Chronic Toxicity	TUc	--	--	1	--	--	
Copper, Total Recoverable <sup>5</sup>	µg/L	8.5	--	17	11	--	11
Dichlorobromomethane <sup>4</sup>	µg/L	0.56	--	1.1	20	--	20
Dissolved Oxygen	mg/L	> 2.0 mg/L at all times					0.57 <sup>6</sup>
Flow Rate	MGD	1.2 <sup>7</sup>	--	--	1.4	--	--
Oil and Grease	mg/L	5	--	10	ND	--	ND
	lbs/day	50	--	100	ND	--	ND
	kg/day	23	--	45	ND	--	ND
pH	s.u.	6.5-8.3 at all times					6.8-8.0
Settleable Solids	mL/L	0.1	--	0.3	ND	--	0.2
Sulfate	mg/L	--	--	125	--	--	189
	lbs/day	--	--	1,251	--	--	NA
	kg/day	--	--	568	--	--	NA
Total Suspended Solids (TSS)	mg/L	10	30	50	7.7	20	38
	lbs/day	100	300	500	37	98	182
	kg/day	45	136	227	NA	NA	NA
Total Nitrogen (as N)	mg/L	--	--	10	--	--	9
	lbs/day	--	--	100	--	--	NA
	kg/day	--	--	45	--	--	NA
Turbidity	NTU	10	--	20	4.1	--	20

**Footnotes to Table F-4:**

mg/L = milligrams per liter  
 s.u. = Standard Units  
 ND = Non-detect  
 NA = Not Available

- (1) Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test, to the survival of control organisms
- (2) 5-day biochemical oxygen demand at 20°C
- (3) ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation specified above for total chlorine residual, the following conditions shall be satisfied: (1) the total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no individual excursion from 0.1 mg/L shall exceed 30 minutes; and (3) no individual excursion shall exceed 2 mg/L.
- (4) Final effluent limitations for the trihalomethanes became effective on May 19, 2010, pending results of the Trihalomethane Study required by Section VI.C.6 of the previous Order.
- (5) Final effluent limitations for copper will become effective on May 19, 2010, in accordance with the compliance schedule established by Section VI.C.6 of the previous Order

**Footnotes to Table F-4 continued:**

- (6) Represents the lowest reported value.
- (7) Average monthly dry weather flow

**D. Compliance Summary**

The Discharger violated numeric effluent limitations multiple times during the term of the previous Order. A majority of the violations are related to trihalomethane constituents, a by-product of chlorinated disinfection. The following table summarizes the violations of effluent limitations based on data collected from July 2009 through March 2011.

**Table F-5. Compliance Summary**

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
11/25/2010	4th Quarter	Maximum Daily	Chlorine Residual	0.12	<0.1	mg/L
November 2010	4th Quarter	Average Monthly	Copper, Total Recoverable	11	8.5	µg/L
July 2009	3rd Quarter	Interim Average Monthly	Chlorodibromomethane	4.4	3.5	µg/L
August 2009	3rd Quarter	Interim Average Monthly	Chlorodibromomethane	4.4	3.5	µg/L
October 2009	4th Quarter	Interim Average Monthly	Chlorodibromomethane	11	3.5	µg/L
January 2010	1st Quarter	Interim Average Monthly	Chlorodibromomethane	9.3	3.5	µg/L
April 2010	2nd Quarter	Interim Average Monthly	Chlorodibromomethane	4.3	3.5	µg/L
June 2010	2nd Quarter	Final Average Monthly	Chlorodibromomethane	4	0.4	µg/L
6/18/2010	2nd Quarter	Final Maximum Daily	Chlorodibromomethane	4	0.81	µg/L
July 2010	3rd Quarter	Final Average Monthly	Chlorodibromomethane	19	0.4	µg/L
7/23/2010	3rd Quarter	Final Maximum Daily	Chlorodibromomethane	19	0.81	µg/L
January 2011	1st Quarter	Final Average Monthly	Chlorodibromomethane	4	0.4	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
1/13/2011	1st Quarter	Final Maximum Daily	Chlorodibromomethane	4	0.81	µg/L
July 2009	3rd Quarter	Interim Average Monthly	Dichlorobromomethane	20	13	µg/L
October 2009	4th Quarter	Interim Average Monthly	Dichlorobromomethane	17	13	µg/L
January 2010	1st Quarter	Interim Average Monthly	Dichlorobromomethane	19	13	µg/L
April 2010	2nd Quarter	Interim Average Monthly	Dichlorobromomethane	17	13	µg/L
June 2010	2nd Quarter	Final Average Monthly	Dichlorobromomethane	17	0.56	µg/L
6/18/2010	2nd Quarter	Final Maximum Daily	Dichlorobromomethane	17	1.1	µg/L
July 2010	3rd Quarter	Final Average Monthly	Dichlorobromomethane	4.3	0.56	µg/L
7/23/2010	3rd Quarter	Final Maximum Daily	Dichlorobromomethane	4.3	1.1	µg/L
November 2010	4th Quarter	Final Average Monthly	Dichlorobromomethane	2.1	0.56	µg/L
11/20/2010	4th Quarter	Final Maximum Daily	Dichlorobromomethane	2.1	1.1	µg/L
January 2011	1st Quarter	Final Average Monthly	Dichlorobromomethane	14	0.56	µg/L
1/13/2011	1st Quarter	Final Maximum Daily	Dichlorobromomethane	14	1.1	µg/L
5/1/2010	2nd Quarter	Maximum Daily	Dissolved Oxygen	0.57	>2.0	mg/L
January 2010	1st Quarter	Average Monthly	Flow Rate	1.3	1.2	MGD
December 2010	4th Quarter	Average Monthly	Flow Rate	1.4	1.2	MGD
4/15/2010	2nd Quarter	Maximum Daily	Sulfate	130	125	mg/L
11/20/2010	4th Quarter	Maximum Daily	Sulfate	189	125	mg/L

The Regional Water Board issued administrative civil liability orders (ACLs) for a wastewater spill to Chorro Creek and effluent limitation violations during the previous permit term. In January 2008, a power failure caused 20,000 gallons of untreated wastewater to be discharged to Chorro Creek, and the Discharger was assessed a related ACL of \$40,000. Two additional ACLs for effluent limitation violations were issued in February 2009 for a total of \$201,500. In November 2009, the Discharger paid a penalty of \$18,000 for effluent limitation violations subject to mandatory minimum penalties.

#### **E. Planned Changes**

Currently all flow at the Facility is disinfected by sodium hypochlorite and then dechlorinated by sodium bisulfite. The Discharger is planning a disinfection upgrade project to address ongoing trihalomethane and salt effluent violations. With the completion of the disinfection upgrade project, ultraviolet (UV) light will become the primary means of effluent disinfection. The sodium hypochlorite system will continue to be used to provide a chlorine residual to the water that will be used for water recycling activities at the Dairy Creek Golf Course, and for the Facility's plant water used for wash down and maintenance. With the conversion to UV disinfection, the dechlorination system will no longer be used for the treatment process of effluent discharged to Chorro Creek and sodium bisulfite will no longer be on the site.

The Facility is expected to construct the new UV system beginning in fall 2012 and should be completed within the following 14 to 16 months. Once the system is online, effluent will be disinfected through one channel of UV lights. A second channel of UV lights will be in service during peak flow events. A composite sampler will be installed in each channel that will be flow paced using the channel flow measurement from a Parshall flume.

### **III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in this 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 United States Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC, commencing with Section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

#### **B. California Environmental Quality Act (CEQA)**

Pursuant to Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 through 21177.

**C. State and Federal Regulations, Policies, and Plans**

**1. Water Quality Control Plans.** The California Water Resources Control Board, Central Coast Region (Regional Water Board) has adopted the *Water Quality Control Plan for the Central Coastal Basin* (the Basin Plan) that designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses established by the Basin Plan for Chorro Creek are presented below.

**Table F-6. Basin Plan Beneficial Uses of Chorro Creek**

Discharge Point	Receiving Water Name	Beneficial Uses
001	Chorro Creek	Municipal and Domestic Water Supply (MUN) Agricultural Supply (AGR) Groundwater Recharge (GWR) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Wildlife Habitat (WILD) Cold Fresh Water Habitat (COLD) Warm Fresh Water Habitat (WARM) Fish Migration (MIGR) Fish Spawning (SPWN) Preservation of Biological Habitats of Special Significance (BIOL) Preservation of Rare and Endangered Species (RARE) Fresh Water Replenishment (FRESH) Commercial and Sport Fishing (COMM)

Groundwater throughout the Central Coast Region is suitable for agricultural water supply, municipal and domestic water supply, and industrial use. Requirements of this Order implement the Basin Plan.

- 2. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
- 3. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that apply in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants that are applicable to the receiving water for discharges from the Facility.

4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (hereinafter State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control that are applicable to discharges to Chorro Creek.

Requirements of this Order implement the SIP.

5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes [40 CFR 131.21, 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
6. **Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in section IV.D.2 of this Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
7. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 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 limitations and requirements of this Order are consistent with anti-backsliding requirements of the CWA and NPDES Regulations.

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

CWA section 303(d) 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 Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The 2010 303(d) list identifies Chorro Creek as being impaired for E. coli, fecal coliform, nutrients, and sediment/siltation.

TMDLs establish WLAs for point source and LAs for non-point sources and are intended to achieve the water quality standards for the impaired waterbodies.

## 1. Nutrients and Dissolved Oxygen in Chorro Creek

The Regional Water Board adopted, and the USEPA approved, a TMDL for nutrients and dissolved oxygen in Chorro Creek on July 7, 2006, and July 19, 2007, respectively. The TMDL establishes WLAs for the Discharger to achieve water quality objectives for dissolved oxygen and biostimulatory substances. WLAs applicable to the Discharger as specified by the Nutrients and Dissolved Oxygen TMDL are summarized below.

- a. Effluent discharged shall not cause sodium concentration to exceed 50 mg/L in receiving waters, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- b. Effluent discharged shall not cause total dissolved solids to exceed 500 mg/L in receiving waters, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- c. Effluent discharged shall not cause receiving water temperature to be increased by more than 5 °F, measured as a monthly maximum determined from monitoring stations not more than 200 feet upstream and downstream of the discharge.
- d. The monthly nitrate concentration of effluent shall not exceed 10 mg/L-N.
- e. Median orthophosphorus concentrations of effluent from May through September shall not exceed current levels, as measured by a comparison to effluent concentrations from 2004 and 2005.

Section 7.1.1, Implementation to Achieve TMDLs for Nitrate-N, Sodium, Total Dissolved Solids, and Temperature states that the Regional Water Board will incorporate effluent and receiving water limitations consistent with the allocations assigned to the Discharger. Order No. R3-2012-0027 implements the Nutrients and Dissolved Oxygen TMDL through receiving water limitations and effluent limitations. Receiving water limitations equal to the applicable WLAs are established for ammonia (unionized, as N), dissolved oxygen, sodium, total dissolved solids, and temperature. An effluent limitation of 10 mg/L is established for total nitrogen, which is more conservative than the 10 mg/L for nitrate-N established in the TMDL.

Section 7.1.2, Implementation to Achieve the Orthophosphorus-P TMDL, states, *"To date, CMC's orthophosphorus-P levels have not caused receiving water increases above the acceptable range of orthophosphorus-P necessary to control nuisance levels of algae in the impaired lower reaches. Therefore, Central Coast Water Board expects these levels to be maintained with the upgraded treatment operations. To insure that the levels don't cause increases in the acceptable range of orthophosphorus-P, Central Coast Water Board staff will review monitoring data for orthophosphorus-P in monitoring reports submitted by CMC."*

The TMDL does not require the implementation of an effluent limitation for orthophosphorus, but does require the Regional Water Board to monitor and compare the effluent to 2004 and 2005 levels. Within the TMDL, because orthophosphorus data is not available, phosphorus data was used to determine the May through September median for 2004 and 2005. It is assumed that the orthophosphorus concentrations will be less than phosphorus. The

resulting median for phosphorus in 2004 and 2005 within the effluent is 2.4 mg/L. Relevant data for phosphorus compounds in the effluent collected over the current permit term are limited to phosphate and orthophosphate. The annual median effluent concentration based on available data for phosphate and orthophosphate are summarized below.

**Table F-7. Phosphate and Orthophosphate Effluent Data Summary**

Year (May through September)	Annual Median (mg/L)	
	Phosphate	Orthophosphate
2007	1.8	1.7
2009	2.0	1.6
2010	2.2	1.9

The available data does not indicate that phosphate concentrations have increased in the Discharger's effluent. Consistent with the requirements of the TMDL, continued monitoring for phosphate and orthophosphate have been carried over to this Order and will continue to be evaluated by the Regional Water Board.

**2. Sediment Loading to Morro Bay, Los Osos Creek, and Chorro Creek**

The Regional Water Board, State Water Board, California Office of Administrative Law, and USEPA approved Resolution No. R3-2002-0051 on May 16, 2003, September 16, 2003, December 3, 2003, and January 20, 2004, respectively. In Morro Bay, erosion and sedimentation have been accelerated due to anthropogenic watershed disturbances, resulting in impairment of beneficial uses for biological resources and recreational uses. Resolution No. R3-2002-0051 implements the TMDL through the Morro Bay National Estuary Program, Coastal San Luis Resources Conservation District, and other public and private groups, through self-determined activities and trackable implementation actions focusing on non-point sources. Trackable implementation actions or WLAs are not specified for the Discharger and consistent with the previous Order, have not been established in this Order.

**3. Pathogens for Morro Bay and Chorro and Los Osos Creeks**

The Regional Water Board, State Water Board, California Office of Administrative Law, and USEPA approved Resolution No. R3-2002-0117 on May 16, 2003, September 16, 2003, November 19, 2003, and January 20, 2004, respectively. Elevated levels of fecal coliform in Morro Bay and Chorro and Los Osos Creeks indicate that pathogens are impairing water contact recreation and shellfish harvesting in these water bodies. High levels of pathogens may cause disease in humans and may also adversely affect marine animals. Resolution No. R3-2002-0117 establishes WLAs and LAs for point sources and non-point sources that are equal to the numeric targets. For Chorro Creek, the geometric mean shall not exceed 200 MPN/100 mL over a 30-day period nor shall 10 percent of the samples exceed 400 MPN/100 mL over any 30-day period for fecal coliform.

However, the Regional Water Board established the following effluent limitations for total coliform in Order No. R3-2006-0032.

*“The median concentration to total coliform bacteria measured in treatment effluent at Discharge Point [No.] 001 shall not exceed a most probably number (MPN) of 2.2 organisms*

*per 100 milliliters (mL), as determined from the last seven days for which analyses have been completed. The number of total coliform bacteria shall not exceed a MPN of 23 per 100 mL in more than one sample in any 30-day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.”*

The effluent limitations for total coliform bacteria have been carried over to the current Order and are considered more protective of water quality than the WLAs established for fecal coliform. The implementation of total coliform limitations meets the requirements of the TMDL.

#### **E. Other Plans, Polices and Regulations**

- 1. Storm Water Management.** For the control of storm water discharged from the site of the wastewater treatment facilities, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resource Control Board's Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, if applicable.
- 2. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The General Permit, adopted on May 2, 2006, is applicable to all “federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger has obtained coverage under the General Permit.
- 3. Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. Pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution No. 2009-0011, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff. The policy was added to establish participation in development of a regional groundwater basin/sub-basin salt/nutrient management plan.

#### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44(a) permits are required to include applicable technology-based limitations and standards; and at 40 CFR 122.44(d) permits are required to 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. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 CFR 122.44(d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using USEPA criteria guidance published under CWA Section 304(a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

Several specific factors affecting the development of limitations and requirements in this Order are discussed below.

#### **A. Discharge Prohibitions**

- 1. Discharge Prohibition III.A** (Discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited): This prohibition is similar to the previous Orders and is based on 40 CFR 122.21(a), duty to apply, and CWC Section 13260, which requires filing a ROWD before discharges can occur. Discharges not described in the ROWD, and subsequently in this Order, are prohibited.
- 2. Discharge Prohibition III.B** (No discharge at a location or in a manner except as described by this Order). The Order authorizes a single, specific point of discharge to surface waters, and the limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Regional Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA Section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition has been retained from the previous Order.
- 3. Discharge Prohibition III.C** (The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited). The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR 122.41(m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order. This prohibition has been retained from the previous Order.
- 4. Discharge Prohibition III.D** (Creation of pollution, contamination, or nuisance, as defined by CWC Section 13050, is prohibited). This prohibition has been retained from the previous Order.
- 5. Discharge Prohibition III.E** (The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat). This prohibition has been retained from the previous Order.

**B. Technology-Based Effluent Limitations**

**1. Scope and Authority**

CWA Section 301(b) requires USEPA to develop secondary treatment standards for publicly-owned treatment works at a level of effluent quality attainable through applying secondary or equivalent treatment. USEPA promulgated such technology-based effluent guidelines at 40 CFR 133. These secondary treatment regulations include the following minimum requirements. In addition, the 30-day average percent removal for BOD and TSS, by concentration, is not to be less than 85 percent.

At 40 CFR 133, in the Secondary Treatment Regulations, USEPA has established the following minimum required level of effluent quality attainable by secondary treatment.

**Table F-8. Secondary Treatment Requirements**

Parameter	Units	30-Day Average	7-Day Average
BOD <sup>(1)</sup>	mg/L	30	45
TSS <sup>(1)</sup>	mg/L	30	45
pH	s.u.	6.0 – 9.0	

<sup>(1)</sup> The 30-day average percent removal for BOD and TSS shall not be less than 85 percent.

**1. Applicable Technology-Based Effluent Limitations**

Title 40 CFR 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration and mass limitations are not necessary to protect the beneficial uses of the receiving waters.

**a. BOD and TSS.** Federal Regulations, 40 CFR 133, establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD and TSS. However, effluent limitations contained within Order No. R3-2006-0032 for BOD and TSS are based on a tertiary level of treatment provided by the Facility. The application of tertiary treatment processes results in the ability to achieve lower levels for BOD and TSS than the secondary standards currently prescribed. Effluent limitations for BOD and TSS have been carried over from Order No. R3-2006-0032, and represent the degree of treatment capable of the Facility.

In addition to the average weekly and average monthly effluent limitations, a daily maximum effluent limitation for BOD and TSS is included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. These effluent limitations for BOD and TSS have been adopted for similar facilities in the Central Coast Region that have effluent limitations for this level of treatment.

Additionally, 40 CFR 133.012, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. If 85 percent removal of BOD and TSS must be achieved by a secondary treatment, it must also be achieved by a tertiary (i.e., treatment beyond secondary level) treatment plant. This Order contains a limitation requiring an average of 85 percent removal of BOD and TSS over each calendar month.

- b. pH.** Federal Regulations, 40 CFR 133, establishes technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. This technology-based effluent limitation is not as stringent as the WQBELs for pH as discussed in section IV.C of this Fact sheet; therefore, this Order establishes the more stringent WQBELs for pH.
- c. Flow.** The monthly average dry season flow limitation of 1.2 MGD is based on design figures of the wastewater treatment facility and is intended to ensure that wastewater flows do not exceed the treatment facility's dry weather design capacity.

The following table summarizes technology-based effluent limitations established by the Order.

**Table F-9. Technology-Based Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD <sup>[1]</sup>	mg/L	10	30	50
	lbs/day <sup>[2]</sup>	100	300	500
TSS <sup>[1]</sup>	mg/L	10	30	50
	lbs/day <sup>[2]</sup>	100	300	500
Flow	MGD	1.2	--	--

<sup>[1]</sup> The average monthly percent removal for BOD and TSS shall not be less than 85 percent.

<sup>[2]</sup> Mass-based effluent limitations were calculated using the following formula:  
 lbs/day = pollution concentration (mg/L) \* Design flow (1.2 MGD) \* conversion factor (8.34)

**C. Water Quality-Based Effluent Limitations (WQBELs)**

**1. Scope and Authority**

NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

The process for determining "reasonable potential" and calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin Plan and achieve applicable WQOs and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the CTR and NTR.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the

requirements of 40 CFR 122.44(d)(1)(vi), using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information.

## **2. Applicable Beneficial Uses and Water Quality Objectives**

Beneficial uses described by the Basin Plan for Chorro Creek and are presented in section II.H, Table 5 of the Order. Water quality criteria applicable to this receiving water are established by the CTR, the NTR, and by the Basin Plan. Reasonable potential for pollutants with applicable water quality criteria was evaluated for Discharge Point No. 001.

## **3. Determining the Need for WQBELs**

NPDES regulations at 40 CFR 122.44(d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

The SIP, statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants which show reasonable potential.

The SIP Section 1.3 requires the Regional Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. Here, the Discharger has collected and analyzed samples for the CTR pollutants and the toxic pollutants with WQOs established in the Basin Plan from July 2006 through March 2011.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. Regional Water Board staff used the most conservative upstream hardness of 150 mg/L (as CaCO<sub>3</sub>) to conduct the RPA.

To conduct the reasonable potential analysis, the Regional Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each priority, toxic pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

- Trigger 1 – If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.
- Trigger 2 – If B is greater than C, and the pollutant is detected in effluent (MEC > ND), there is reasonable potential, and an effluent limitation is required.

- Trigger 3 – After reviewing other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

The following table summarizes the RPA for each priority, toxic pollutant or Title 22 pollutant that was measured in effluent during monitoring events from July 2006 through March 2011.

**Table F-10. Summary of RPA Results**

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
1	Antimony	4.0	6.0	ND	No
2	Arsenic	1.4	10	ND	No
3	Beryllium	<0.10	4.0	<0.10	No
4	Cadmium	<0.10	3.4	ND	No
5a	Chromium (III)	0.62	50	2.4	No
5b	Chromium (VI)	<0.00025	11	.002	No
<b>6</b>	<b>Copper</b>	<b>28</b>	<b>13</b>	<b>.72</b>	<b>Yes</b>
7	Lead	0.31	5.3	<0.20	No
8	Mercury (303d listed)	<0.0001	0.050	<0.0001	No
9	Nickel	3.6	74	6.3	No
10	Selenium	0.42	10	2.5	No
11	Silver	<0.10	8.2	<0.10	No
12	Thallium	<0.20	1.7	<0.20	No
13	Zinc	27	169	<2.5	No
14	Cyanide	ND	5.2	ND	No
15	Asbestos	ND	No Criteria	.4	Ud
16	2,3,7,8-TCDD (303d listed)	<1.4	1.3E10 <sup>-8</sup>	<2.2	No
17	Acrolein	ND	320	ND	No
18	Acrylonitrile	ND	0.059	ND	No
19	Benzene	ND	1.0	ND	No
20	Bromoform	ND	4.3	ND	No
21	Carbon Tetrachloride	ND	0.25	ND	No
22	Chlorobenzene	ND	70	ND	No
<b>23</b>	<b>Chlorodibromomethane</b>	<b>19</b>	<b>0.40</b>	<b>ND</b>	<b>Yes</b>
24	Chloroethane	ND	No Criteria	ND	Ud
25	2-Chloroethylvinyl ether	ND	No Criteria	ND	Ud
26	Chloroform	49	No Criteria	ND	Ud
<b>27</b>	<b>Dichlorobromomethane</b>	<b>25</b>	<b>0.56</b>	<b>ND</b>	<b>Yes</b>
28	1,1-Dichloroethane	ND	5.0	ND	No
29	1,2-Dichloroethane	ND	0.38	ND	No
30	1,1-Dichloroethylene	ND	0.057	ND	No
31	1,2-Dichloropropane	ND	0.52	ND	No
32	1,3-Dichloropropylene	ND	0.50	ND	No
33	Ethylbenzene	ND	300	ND	No
34	Methyl Bromide	ND	48	ND	No
35	Methyl Chloride	ND	No Criteria	ND	Ud

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
36	Methylene Chloride	ND	4.7	ND	No
37	1,1,2,2-Tetrachloroethane	ND	0.17	ND	No
38	Tetrachloroethylene	ND	0.80	ND	No
39	Toluene	ND	150	ND	No
40	1,2-Trans-Dichloroethylene	ND	10	ND	No
41	1,1,1-Trichloroethane	ND	200	ND	No
42	1,1,2-Trichloroethane	ND	0.60	ND	No
43	Trichloroethylene	ND	2.7	ND	No
44	Vinyl Chloride	ND	0.50	ND	No
45	2-Chlorophenol	ND	120	ND	No
46	2,4-Dichlorophenol	ND	93	ND	No
47	2,4-Dimethylphenol	ND	540	ND	No
48	2-Methyl- 4,6-Dinitrophenol	ND	13	ND	No
49	2,4-Dinitrophenol	ND	70	ND	No
50	2-Nitrophenol	ND	No Criteria	ND	Ud
51	4-Nitrophenol	ND	No Criteria	ND	Ud
52	3-Methyl 4-Chlorophenol	ND	No Criteria	ND	Ud
53	Pentachlorophenol	ND	0.28	ND	No
54	Phenol	ND	21000	ND	No
55	2,4,6-Trichlorophenol	ND	2.1	ND	No
56	Acenaphthene	ND	1200	ND	No
57	Acenaphthylene	ND	No Criteria	0.095	Ud
58	Anthracene	ND	9600	ND	No
59	Benzdine	ND	0.00012	ND	No
60	Benzo(a)Anthracene	ND	0.0044	ND	No
61	Benzo(a)Pyrene	ND	0.0044	ND	No
62	Benzo(b)Fluoranthene	ND	0.0044	ND	No
63	Benzo(ghi)Perylene	ND	No Criteria	ND	Ud
64	Benzo(k)Fluoranthene	ND	0.0044	ND	No
65	Bis(2-Chloroethoxy)Methane	ND	No Criteria	ND	Ud
66	Bis(2-Chloroethyl)Ether	ND	0.03	ND	No
67	Bis(2-Chloroisopropyl)Ether	ND	1,400	ND	No
<b>68</b>	<b>Bis(2-Ethylhexyl)Phthalate</b>	<b>3.8</b>	<b>1.8</b>	<b>2.2</b>	<b>Yes</b>
69	4-Bromophenyl Phenyl Ether	ND	No Criteria	ND	Ud
70	Butylbenzyl Phthalate	1.2	3,000	0.99	No
71	2-Chloronaphthalene	ND	1,700	ND	No
72	4-Chlorophenyl Phenyl Ether	ND	No Criteria	ND	Ud
73	Chrysene	ND	0.0044	ND	No
74	Dibenzo(a,h)Anthracene	ND	0.0044	ND	No
75	1,2-Dichlorobenzene	ND	600	ND	No
76	1,3-Dichlorobenzene	ND	400	ND	No
77	1,4-Dichlorobenzene	ND	5.0	ND	No
78	3,3 Dichlorobenzidine	ND	0.040	ND	No
79	Diethyl Phthalate	ND	23,000	ND	No
80	Dimethyl Phthalate	ND	313,000	ND	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
81	Di-n-Butyl Phthalate	ND	2,700	ND	No
82	2,4-Dinitrotoluene	ND	0.11	ND	No
83	2,6-Dinitrotoluene	Not Available	No Criteria	ND	Ud
84	Di-n-Octyl Phthalate	ND	No Criteria	ND	Ud
85	1,2-Diphenylhydrazine	ND	0.04	ND	No
86	Fluoranthene	ND	300	ND	No
87	Fluorene	ND	1,300	ND	No
88	Hexachlorobenzene	ND	0.00075	ND	No
89	Hexachlorobutadiene	ND	0.44	ND	No
90	Hexachlorocyclopentadiene	ND	50	ND	No
91	Hexachloroethane	ND	1.9	ND	No
92	Indeno(1,2,3-cd)Pyrene	ND	0.0044	ND	No
93	Isophorone	ND	8.4	ND	No
94	Naphthalene	ND	No Criteria	ND	Ud
95	Nitrobenzene	ND	17	ND	No
96	N-Nitrosodimethylamine	ND	0.00069	ND	No
97	N-Nitrosodi-n-Propylamine	ND	0.005	ND	No
98	N-Nitrosodiphenylamine	ND	5.0	ND	No
99	Phenanthrene	ND	No Criteria	ND	Ud
100	Pyrene	ND	960	ND	No
101	1,2,4-Trichlorobenzene	ND	5.0	ND	No
102	Aldrin	ND	0.00013	ND	No
103	Alpha-BHC	ND	0.0039	ND	No
104	beta-BHC	ND	0.014	ND	No
105	gamma-BHC	ND	0.019	ND	No
106	delta-BHC	ND	No Criteria	ND	Ud
107	Chlordane (303d listed)	ND	0.00057	ND	No
108	4,4'-DDT (303d listed)	ND	0.00059	ND	No
109	4,4'-DDE (linked to DDT)	ND	0.00059	ND	No
110	4,4'-DDD	ND	0.00083	ND	No
111	Dieldrin (303d listed)	ND	0.00014	ND	No
112	Alpha-Endosulfan	ND	0.06	ND	No
113	beta-Endosulfan	ND	0.06	ND	No
114	Endosulfan Sulfate	ND	110	ND	No
115	Endrin	ND	0.036	ND	No
116	Endrin Aldehyde	ND	0.76	ND	No
117	Heptachlor	ND	0.00021	ND	No
118	Heptachlor Epoxide	ND	0.0001	ND	No
119-125	PCBs sum (303d listed)	ND	0.00017	ND	No
126	Toxaphene	ND	0.0002	ND	No
<b>Drinking Water Quality Objectives</b>					
	Aluminum	340	1,000	26	No
	Barium	18	1,000	110	No
	Fluoride	0.37	1,000	0.29	No
	cis-1,2-Dichloroethylene	ND	6.0	ND	No
	Methyl-tert-butyl ether	ND	13	ND	No
	Styrene	ND	100	ND	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
	Trichlorofluoromethane	ND	150	ND	No
	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1,200	ND	No
	Xylenes	ND	1,750	ND	No
	Alachlor	ND	2.0	ND	No
	Atrazine	0.11	1.0	0.10	No
	Bentazon	0.51	18	ND	No
	Carbofuran	ND	18	ND	No
	2,4-D	ND	70	ND	No
	Dalapon	1.8	200	ND	No
	Dibromochloropropane (1,2-Dibromo-3-chloropropane)	ND	0.20	ND	No
	Di(2-ethylhexyl)adipate	1.1	400	1.1	No
	Dinoseb	ND	0.01	ND	No
	Diquat	ND	20	ND	No
	Endothall	ND	100	ND	No
	Ethylene Dibromide	ND	0.02	ND	No
	Glyphosate	ND	700	ND	No
	Methoxychlor	ND	30	ND	No
	Molinate	ND	20	ND	No
	Oxamyl	ND	50	ND	No
	Picloram	ND	500	ND	No
	Simazine	ND	4.0	0.09	No
	Thiobencarb	ND	70	ND	No
	2,4,5-TP (Silvex)	ND	10	ND	No
	<b>Nitrate (as NO3) (mg/L)</b>	<b>61.1<sup>(4)</sup></b>	<b>45</b>	<b>ND</b>	<b>Yes</b>
	<b>Nitrate+Nitrite (sum as nitrogen) (mg/L)</b>	<b>15.02</b>	<b>10</b>	<b>1.6</b>	<b>Yes</b>
	<b>Nitrite (as nitrogen) (mg/L)</b>	<b>1.22</b>	<b>1</b>	<b>&lt;0.00009</b>	<b>Yes</b>
	Perchlorate	Not Available	6.0	Not Available	Cannot Determine
<b>R3 Basin Plan WQO</b>					
	Cobalt	0.50	50	0.11	No
	Iron	<15	5,000	78	No
	Lithium	<30	2,500	<30	No
	Manganese	3.9	200	3.4	No
	Molybdenum	3.0	10	2.6	No
	Vanadium	4.4	100	5.7	No

CTR #	Priority Pollutants	MEC or Minimum DL <sup>(1),(2)</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum DL <sup>(1),(2)</sup> (µg/L)	RPA Results <sup>(3)</sup>
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**Footnotes to Table F-10:**

- <sup>(1)</sup> The MEC or maximum background concentration is the actual detected concentration. Where detection values were available and the pollutant was not detected, the detection value was provided with a "<" before it. Where the pollutant was non-detect and a detection value was not available, "ND" was entered.
- <sup>(2)</sup> The MEC or maximum background concentration is "Not Available" when there are no monitoring data for the constituent.
- <sup>(3)</sup> RPA Results =
  - = Yes, if MEC => WQO/WQC, or B > WQO/WQC and MEC is detected;
  - = No, if MEC and B are < WQO/WQC or all effluent data are undetected;
  - = Undetermined (Ud), if no criteria have been promulgated;
  - = Cannot Determine, if there are insufficient data.
- <sup>(4)</sup> Converted from nitrate (as N).

Reasonable potential has been determined for copper, chlorodibromomethane, dichlorobromomethane, bis(2-ethylhexyl)phthalate, nitrite, nitrate, and nitrate+nitrite. WQBELs have been established for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate based on the procedures identified within Section 1.4 of the SIP, as discussed in section IV.C.4 below. WQBELs for nitrite, nitrate, and nitrate+nitrite have been established based on the Basin Plan and a TMDL, as discussed in section III.D.1 and IV.C.6.d.

**4. WQBEL Calculations**

- a.** If reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
  - i.** If applicable and available, use of the wasteload allocation (WLA) established as part of a TMDL.
  - ii.** Use of a steady-state model to derive MDELs and AMELs.
  - iii.** Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b.** Water quality based effluent limitations for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- c.** Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed.
- d.** WQBELs Calculation Example

Using copper as an example, the following demonstrates how WQBELs were established for this Order.

Concentration-Based Effluent Limitations

Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

*Calculation of aquatic life AMEL and MDEL:*

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

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

- Where
- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators.
  - D = The dilution credit, and
  - B = The ambient background concentration

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

$$ECA = C$$

For copper, the applicable ECAs are:

$$ECA_{\text{acute}} = 20 \mu\text{g/L}$$

$$ECA_{\text{chronic}} = 13 \mu\text{g/L}$$

$$ECA_{\text{human health}} = 200 \mu\text{g/L}$$

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

$$LTA_{\text{acute}} = ECA_{\text{acute}} \times \text{Multiplier}_{\text{acute } 99}$$

$$LTA_{\text{chronic}} = ECA_{\text{chronic}} \times \text{Multiplier}_{\text{chronic } 99}$$

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 copper, the calculated CV of 1.27 was used.

For copper, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier <sub>acute</sub>	ECA Multiplier <sub>chronic</sub>
15	1.27	0.17	0.31

$$LTA_{acute} = 20 \mu\text{g/L} \times 0.17 = 3.4 \mu\text{g/L}$$

$$LTA_{chronic} = 13 \mu\text{g/L} \times 0.31 = 4.0 \mu\text{g/L}$$

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

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

For copper, the most limiting LTA was the  $LTA_{acute}$ .

$$LTA_{copper} = LTA_{acute} = 3.4 \mu\text{g/L}$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and 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 CV of the data set, the number of samples (for AMEL) and whether it is a 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.

$$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$$

$$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$$

AMEL multipliers are based on a 95<sup>th</sup> percentile occurrence probability, and the MDEL multipliers are based on the 99<sup>th</sup> 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 copper, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4	1.27	6.03	2.20

Copper

$$AMEL = 3.4 \mu\text{g/L} \times 6.03 = 20.5 \mu\text{g/L}$$

$$MDEL = 3.4 \mu\text{g/L} \times 2.20 = 7.47 \mu\text{g/L}$$

*Calculation of human health AMEL and MDEL:*

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

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

For copper:

$$AMEL_{\text{human health}} = 200 \mu\text{g/L}$$

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

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

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

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$	Ratio
4	1.27	6.03	2.20	2.75

$$MDEL_{\text{human health}} = 200 \mu\text{g/L} \times 2.75 = 549 \mu\text{g/L}$$

**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 copper, the aquatic life criteria-based effluent limitations of 7.5  $\mu\text{g/L}$  (AMEL) and 20.5  $\mu\text{g/L}$  (MDEL) are established in this Order.

A summary of the calculations for copper, chlorodibromomethane, dichlorobromomethane, and bis(2-ethylhexyl)phthalate is provided below.

**Table F-11. WQBEL Calculations**

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromomethane	Dichlorobromomethane	Bis(2-Ethylhexyl) Phthalate
Units	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$
Basis and Criteria type	CTR Aquatic Life	CTR Human Health	CTR Human Health	CTR Human Health
Criteria -Acute	20	-----	-----	-----
Criteria -Chronic	13	-----	-----	-----

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromo- methane	Dichlorobromo- methane	Bis(2- Ethylhexyl) Phthalate
Units	µg/L	µg/L	µg/L	µg/L
HH criteria	200	0.401	0.56	1.8
Background (Maximum Conc. for Aquatic Life calc)	0.72	-----	-----	-----
Background (Average Conc. for Human Health calc)	0.72	ND	ND	2.0
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	N	N
ECA acute	20	-----	-----	-----
ECA chronic	13	-----	-----	-----
ECA HH	200	0.401	0.56	1.8
No. of data points <10 or at least 80 percent of data reported non detect? (Y/N)	N	N	N	N
Avg of effluent data points	6.4	7.1	15.8	3.8
Std Dev of effluent data points	8.2	4.2	5.4	NA
CV calculated	1.27	0.59	0.34	0.6
CV (Selected) - Final	1.27	0.59	0.34	0.6
ECA acute mult99	0.17	-----	-----	-----
ECA chronic mult99	0.31	-----	-----	-----
LTA acute	3.4	-----	-----	-----
LTA chronic	4.04	-----	-----	-----
minimum of LTAs	3.4	-----	-----	-----
AMEL mult95	2.2	1.54	1.30	1.55
MDEL mult99	6.03	3.06	2.05	3.11
AMEL (aq life)	7.5	-----	-----	-----
MDEL(aq life)	20.5	-----	-----	-----
MDEL/AMEL Multiplier	2.75	1.99	1.57	2.0
AMEL (human hlth)	200	0.4	0.56	1.8
MDEL (human hlth)	549	0.8	0.88	3.6
minimum of AMEL for Aq. life vs HH	7.5	0.40	0.57	1.8
minimum of MDEL for Aq. Life vs HH	20.5	0.80	0.88	3.6
Current limit in permit (30- day average)	8.5	0.40	0.56	-----

PRIORITY POLLUTANTS	Copper, Total Recoverable	Chlorodibromomethane	Dichlorobromomethane	Bis(2-Ethylhexyl) Phthalate
Units	µg/L	µg/L	µg/L	µg/L
Current limit in permit (daily)	17	0.81	1.1	-----
Final limit - AMEL	7.5	0.40	0.56	1.8
Final limit - MDEL	17	0.80	0.88	3.6
Max Effl Conc (MEC)	28	19	25	3.8

**5. Whole Effluent Toxicity (WET)**

WET limitations protect receiving water quality from the aggregated toxic effect of a mixture of pollutants in 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 requires that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic organisms in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge or for another control water.

The previous Order included effluent limitations for chronic and acute toxicity to ensure compliance with the Basin Plan narrative objective. The acute toxicity effluent limitation has been retained from the previous Order.

Numeric chronic WET effluent limitations have not been included in this Order. The SIP contains implementation gaps regarding the appropriate form and implementation of chronic toxicity limits. This has resulted in the petitioning of a NPDES permit in the Los Angeles Region<sup>1</sup> that contained numeric chronic toxicity effluent limitations. To address the petition, the State Water Board adopted WQO 2003-012 directing its staff to revise the toxicity control provisions in the SIP. The State Water Board states the following in WQO 2003-012, *“In reviewing this petition and receiving comments from numerous interested persons on the propriety of including numeric effluent limitations for chronic toxicity in NPDES permits for publicly-owned treatment works that discharge to inland waters, we have determined that this issue should be considered in a regulatory setting, in order to allow for full public*

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<sup>1</sup> In the Matter of the Review of Own Motion of Waste Discharge Requirements Order Nos. R4-2002-0121 [NPDES No. CA0054011] and R4-2002-0123 [NPDES NO. CA0055119] and Time Schedule Order Nos. R4-2002-0122 and R4-2002-0124 for Los Coyotes and Long Beach Wastewater Reclamation Plants Issued by the California Regional Water Quality Control Board, Los Angeles Region SWRCB/OCC FILES A-1496 and 1496(a).

*discussion and deliberation. We intend to modify the SIP to specifically address the issue. We anticipate that review will occur within the next year. We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits.”* The process to revise the SIP is currently underway. Proposed changes include clarifying the appropriate form of effluent toxicity limits in NPDES permits and general expansion and standardization of toxicity control implementation related to the NPDES permitting process. Since the toxicity control provisions in the SIP are currently under revision, it is inappropriate to carry over numeric effluent limitations for chronic toxicity. Therefore, this Order establishes a narrative chronic toxicity effluent limitation and a numeric chronic toxicity trigger consistent with the previous chronic toxicity effluent limitation which will require that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 CFR 122.44(k).

To ensure compliance with the Basin Plan's narrative toxicity objective, the Discharger is required to conduct acute and chronic WET testing, as specified in the Monitoring and Reporting Program (Attachment E, section V). Furthermore, the Special Provision contained at VI.C.2.a of this Order requires the Discharger to investigate the causes of, and identify and implement corrective actions to reduce or eliminate effluent toxicity. If the discharge demonstrates toxicity exceeding the acute toxicity effluent limitation or numeric chronic toxicity monitoring trigger, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) in accordance with an approved TRE workplan. The numeric chronic toxicity monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to perform accelerated chronic toxicity monitoring, as well as, the threshold to initiate a TRE if effluent toxicity has been demonstrated.

## **6. Basin Plan**

### **a. Bacteria.**

As previously discussed in section III.D of this Fact Sheet, a TMDL for pathogens is applicable to Chorro Creek. The TMDL for pathogens establishes the following WLAs for fecal coliform:

- i. The geometric mean shall not exceed 200 MPN/100mL over a 30-day period; and
- ii. Less than 10 percent of the samples shall not exceed 400 MPN/100 mL over any 30-day period.

These WLAs are consistent with the bacteria objectives for the REC1 beneficial use, which is applicable to the receiving water. However, Order No. R3-2006-0032 established effluent limitations for total coliform which are protective of water quality and meet the requirements of the WLAs:

- i. The median concentration shall not exceed 2.2 MPN/100mL from the last 7 days for which analyses have been completed;
- ii. No more than one sample in any 30-day period shall exceed 23 MPN/100mL; and
- iii. No sample shall exceed 240 MPN/100mL.

These effluent limitations for total coliform have been carried over to this Order.

- b. Total Residual Chlorine.** Order No. R3-2006-0032 established an effluent limitation of non-detect for total residual chlorine. Because the Facility currently disinfects using sodium hypochlorite, the Facility maintains reasonable potential for total residual chlorine to be present in the effluent. The total residual chlorine maximum daily effluent limitation of non-detect is protective of the Basin Plan's narrative toxicity objective and has been carried over from Order No. R3-2006-0032.
- c. Dissolved Oxygen.** As discussed in section III.D.1 of this Fact Sheet, a TMDL has been established for dissolved oxygen in Chorro Creek. The TMDL does not specify a WLA for dissolved oxygen, however Order No. R3-2006-0032 established an effluent limitation for dissolved oxygen of >2.0 mg/L at all times, and a receiving water limitation of 7.0 mg/L. The Regional Water Board determined that these limitations, when combined with an effluent limitation for total nitrogen, and receiving water limitations for unionized ammonia, sodium, total dissolved solids, and temperature, satisfy the requirements of the Chorro Creek Nutrient and Dissolved Oxygen TMDL. As such, this Order carries over the effluent limitation for dissolved oxygen of 2.0 mg/L. Further, the receiving water limitation of 7.0 mg/L for dissolved oxygen has been carried over.
- d. Nitrogen and Nitrite.** As discussed in section III.D.1 of this Fact Sheet, a TMDL has been established for nitrate in Chorro Creek. Further, as summarized in Table F-10 of this Fact Sheet, effluent data indicates the Discharger's effluent exceeds the applicable criteria (CCR Title 22, Table 64431-A, primary MCL) of 10 mg/L (as N) for nitrate + nitrite. Order No. R3-2006-0032 determined that total nitrogen is the most appropriate method of limiting all forms of nitrogen and established a maximum daily effluent limitation of 10 mg/L (as N) for total nitrogen. This Order carries over the maximum daily effluent limitation of 10 mg/L (as N) for total nitrogen and a mass-based effluent limitation based on a design flow of 1.2 MGD.

As summarized in Table F-10 of this Fact Sheet, effluent data indicates the Discharger's effluent exceeds the applicable criteria (CCR Title 22, Table 64431-A, primary MCL) of 1 mg/L (as N) for nitrite. This Order establishes a maximum daily effluent limitation of 1 mg/L (as N) for nitrite, consistent with the requirements of the Basin Plan's requirements for MUN designated waters.

- e. Oil and Grease.** The Basin Plan establishes a narrative effluent limitation for oil and grease, which states, "*Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.*"

The previous Order contained an AMEL and MDEL of 5.0 mg/L and 10 mg/L, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from the previous Order.

- f. pH.** The Basin Plan establishes a WQO for pH of between 6.5 to 8.3 standard units for the protection of receiving waters with the beneficial use of Municipal and Domestic

Supply (MUN), Agricultural Supply (AGR), and Water Recreation (REC1 and REC2). The Basin Plan establishes a WQO for pH between 7.0 to 8.5 standard units for the beneficial use of Freshwater Habitat (COLD and WARM) and Fish Spawning (SPWN). The previous Order established an effluent limitation of 6.5 to 8.3. However, since Chorro Creek has MUN, AGR, REC1, REC2, COLD, WARM, and SPWN beneficial uses, this Order establishes a pH effluent limitation of 7.0 to 8.3 in order to protect all beneficial uses. This effluent limitation is more stringent than effluent limitations for pH contained in the previous Order.

- g. Salinity (TDS, Sulfate, Chloride, Boron, and Sodium).** The previous Order established an effluent limitation for sulfate of 125 mg/L. This Order carries over the effluent limitation for maximum daily effluent limitation for sulfate of 125 mg/L and the mass-based effluent limitation of 1,251 lbs/day.

As described in the following discussion, the current discharge is not causing Chorro Creek to exceed WQOs since background concentrations of the pollutants naturally exceed WQOs in Basin Plan 3-7. Implementation of the maximum daily effluent limitation for sulfate, along with the implementation of a Salt Management Plan and discontinued use of sodium bisulfite for dechlorination, as described in section VII.B.3.a of this Fact Sheet, will prevent further degradation and protect beneficial uses of Chorro Creek.

#### Basin Plan Water Quality Objectives

The Basin Plan contains specific numeric surface WQOs within Table 3-7, presented as median values for the Chorro Creek Sub-Area of the Estero Bay Sub-Basin. According to the Basin Plan, "these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin." Chapter 3, Section II.A.3 of the Basin Plan also states:

*"It must be recognized that the median values indicated in Table 3-7 are values representing gross areas of a water body. Specific water quality objectives for a particular area may not be directly related to the objectives indicated. Therefore, application of these objectives must be based upon consideration of the surface and groundwater quality naturally present..."*

The language preceding Table 3-7 also indicates, "the issuance of requirements must be tempered by consideration of beneficial uses within the immediate influence of the discharge."

#### Site-Specific Water Quality

The Discharger monitors both the upstream receiving water to the discharge point to Chorro Creek at RSW-002, and the upgradient groundwater to the Facility at GW-001. Based on available data for TDS, sodium, and chloride, upstream receiving water data exceeds the surface WQOs, indicating background levels for salts are elevated prior to contributions from Facility effluent. Additionally, groundwater recharge is a specified beneficial use for the receiving water; thus surface water discharge may impact groundwater quality. Average running 12-month mean RSW-002 and GW-001

concentrations for TDS, chloride, and sodium are shown in Table F-12 and Table F-13, respectively.

**Table F-12. Receiving Water**

Site	TDS (mg/L) <sup>[1]</sup>	Chloride (mg/L) <sup>[1]</sup>	Sulfate (mg/L) <sup>[1]</sup>	Boron (mg/L) <sup>[1]</sup>	Sodium (mg/L) <sup>[1]</sup>
RSW-002 (up stream)	579	64	62	0.09	39
RSW-003 (down stream)	556	99	65	0.16	74
Basin Plan Table 3-7 WQO	500	50	50	0.2	50

<sup>[1]</sup> Average 12-month running mean.

**Table F-13. Groundwater**

Site	TDS (mg/L) <sup>[1]</sup>	Chloride (mg/L) <sup>[1]</sup>	Sulfate (mg/L) <sup>[1]</sup>	Boron (mg/L) <sup>[1]</sup>	Sodium (mg/L) <sup>[1]</sup>
GW-001	962	48	318	0.83	82
Basin Plan Table 3-8 WQO	1,000	250	100	0.2	50

<sup>[1]</sup> Median values based on data averages.

The data in Table F-12 demonstrates that the long-term background salinity concentrations exceed WQOs for surface waters listed in Table 3-7 of the Basin Plan for TDS chloride, and sulfate. Further, between July 2007 and March 2001, daily maximum concentrations up stream of the Facility's discharge indicate that levels of sodium (up to 55 mg/L), chloride (up to 84 mg/L), sulfate (up to 86 mg/L) and TDS (up to 790 mg/L) have exceeded the WQOs contained in Table 3-7 of the Basin Plan.

The data in Table F-13 demonstrates that the long-term background salinity concentrations for boron and sodium in the groundwater are greater than WQOs listed in Table 3-8 of the Basin Plan. Daily maximum concentrations of TDS (up to 1,200 mg/L), sulfate (up to 1,800 mg/L), boron (up to 1.2 mg/L) and sodium (up to 100 mg/L) in the upgradient groundwater have been detected.

Sources

Salts originate from both natural and unnatural sources. The Discharger does not control all of the source water. More than half of the overall drinking water for the service area comes from Central Coast Water Authority (CCWA). In 2007 and 2008, 64 percent of the drinking water came from CCWA. The CCWA utilizes State Water Project water as its primary water source. The remaining drinking water is from the Discharger's water treatment plant, which utilizes surface water from Chorro Reservoir in San Luis Obispo and Whale Rock Reservoir in Cayucos. Source water data (annual averages) for 2007 are summarized below.

**Table F-14. Municipal Supply Water**

Source	Boron (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)
State Water Project	0.142 <sup>[1]</sup>	87	48	35	266
CCWA Water	0.098 <sup>[1]</sup>	90	45	39	273
CMC Water	0.089 <sup>[1]</sup>	45	27	39	338

<sup>[1]</sup> Data for Boron is from 2005.

The data summarized in Table F-14 indicate that supply water exceeds the water quality objective for chloride (50 mg/L).

Based on the Discharger's May 2009 Salt Management Study, flow contributions to the Facility, and available collection system salinity data, are summarized below.

**Table F-15. Collection System Data for Salts**

Source	Percent Contribution	Chloride (mg/L)	Sodium (mg/L)	TDS (mg/L)
Cuesta College (Manhole 21B)	9	650	69	60
Cuesta College (Manhole 1A)		1,000	120	120
National Guard Camp (Manhole 31A)	8	750	93	74
National Guard Camp (Manhole 52A)		640	62	60
County Facilities	18	730	130	83
East Catch CMC	65	520	100	110
West Catch CMC		650	67	75
Flow Weighted Influent	100	89	92	642
Facility Influent <sup>[1]</sup>	100	99	95	610

<sup>[1]</sup> Based on a single influent sample taken concurrent with the collection system data.

Average influent data to the Facility for salts from December 2007 through April 2009, provided in the Discharger's May 2009 Salt Management Study, are summarized below.

**Table F-16. Influent Data for Salts**

Boron (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)
0.23	107	96	73	650

Data summarized in Table F-15 and Table F-16 indicate salinity within the influent to the Facility exceeds applicable WQOs for surface water for boron, chloride, sodium, sulfate, and TDS.

Control of Salts

The Discharger has made significant efforts to minimize the salt loading at the prison and related facilities. Reduced water softening is now possible with the conversion to State Water Project water. Water softeners for the central steam plant now discharge to brine ponds and the Facility no longer discharges any water from the brine ponds into the wastewater system.

The Discharger has multiple Prison Industry Authority programs that occur on-site, including a laundry program and a textile program. The laundry facility currently utilizes water softening to minimize the amount of detergents required. The Discharger is considering the use of a recycled water system to reduce the need for softening of raw water. The textile program no longer washes and bleaches textiles prior to use and has switched to purchasing pre-bleached materials, which have reduced loading of salts from the bleaching process. In addition, the Discharger has replaced kitchen equipment that utilizes water softeners that do not use salts to soften the water.

At the Facility, other than evaporation, the only known salts increase is due to chemical addition for chlorine disinfection and dechlorination (sodium hypochlorite and sodium bisulfate). The Discharger is currently assessing alternatives methods such as ultraviolet disinfection, which would reduce these salt loads to the Facility.

There are no water softeners used at the State Military Department facility and Cuesta College has one residential water softener, which is considered to have an insignificant impact on salt loading to the Facility. The Discharger has no control over the operation of these facilities.

#### Proposed Salt Limits

Typically, waste discharge requirements incorporate the Basin Plan's specific, numeric WQOs as effluent limitations. Although convention generally sets effluent limitations at the Basin Plan's WQOs, the previous Order does not use Table 3-7 Basin Plan numeric WQOs as effluent limitations. Instead, the existing effluent limitation (for sulfate) is greater than WQOs in Basin Plan Table 3-7 to account for high background salt concentrations and uncontrollable salt loading from the water supply in Facility influent. Consistent with the previous Order, this Order shall establish a limitation for sulfate that is characteristic of the natural receiving water. Effluent limitations for the Facility should be related to water quality naturally present in the vicinity of the discharge while also protecting beneficial uses within the immediate influence of the discharge. Effluent limitations for sulfate from the previous Order were more closely related to the backgroundwater quality and were protective of beneficial uses.

#### Conclusion

Consistent with the Basin Plan, the proposed effluent limitations for salinity are based on a regional assessment of water quality conditions, are within reasonable control of the Discharger to meet, and are protective of downstream beneficial uses.

Because of elevated levels of salinity in the source water and naturally present in the receiving water, this Order requires the Discharger to continue to implement and update the Salt Management Study and Plan as described in section VI.B.3.a of this Fact Sheet. This Special Provision is retained from the previous Order.

- h. Settleable Solids.** The Basin Plan establishes a narrative effluent limitation for settleable solids, which states, "*Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.*"

The previous Order contained an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) of 0.1 mL/L and 0.3 mL/L, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. Therefore, this Order retains the effluent limitations for settleable solids from the previous Order.

- i. **Turbidity.** The Basin Plan establishes a narrative effluent limitation for turbidity which states, *“Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.”*

The Basin Plan further establishes allowable numeric increases to the receiving water.

The previous Order contained an AMEL and MDEL of 10 NTU and 20 NTU, respectively. These effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from the previous Order.

#### **D. Final Effluent Limitations**

Final technology-based and water quality-based effluent limitations established by the Order are discussed in the preceding sections of the Fact Sheet.

##### **1. Satisfaction of Anti-Backsliding Requirements.**

The Order retains effluent limitations equal to, or more stringent than those established by the previous Order for flow, BOD, TSS, pH, oil and grease, settleable solids, dissolved oxygen, sulfate, total nitrogen, acute toxicity, turbidity, chlorine residual, and total coliform. A more stringent effluent limitation has been established for the maximum daily effluent limitation for chlorodibromomethane, and more stringent average monthly effluent limitations have been established for and dichlorobromomethane and copper. Further, additional effluent limitations for bis(2-ethylhexyl)phthalate, and nitrite have been established in this Order as described in section IV.C.4, and section IV.C.6.a, respectively, of this Fact Sheet.

As discussed in section IV.C.5 of this Fact Sheet, the numeric effluent limitation for chronic toxicity has not been carried over due to the State Water Board's finding that the SIP does not provide sufficient guidance on establishing chronic toxicity effluent limitations in NPDES permits. However, a narrative chronic toxicity effluent limitation and a numeric chronic toxicity trigger, consistent with the previous chronic toxicity effluent limitation, has been established. The numeric chronic toxicity trigger will ensure appropriate best management practices and toxicity reduction measures are implemented by the Discharger. Further, a receiving water limitation for toxicity is established in the Order. The narrative chronic toxicity effluent limitation, combined with the chronic toxicity trigger, TRE requirements, and receiving water limitations shall ensure the Discharger operates the Facility in a manner to comply with toxicity water quality objectives and does not represent less stringent requirements. In addition, the Regional Water Board retains the right to reopen this Order once guidance for establishing numeric chronic toxicity effluent limitations is provided by the State Water Board.

**2. Satisfaction of Antidegradation Policy**

Provisions of the Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. This Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise assure maintenance of the existing quality of receiving waters.

**3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on flow, BOD, and TSS. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

**4. Summary of Final Effluent Limitations – Discharge Point No. 001**

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (MRP) (Attachment E).

**Table F-17. Final Effluent Limitations**

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand (5-day @ 20°C) (BOD) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Total Suspended Solids (TSS) <sup>[1]</sup>	mg/L	10	30	50
	lbs/day	100	300	500
Oil and Grease	mg/L	5.0	--	10
	lbs/day	50	--	100
Settleable Solids	mL/L	0.1	--	0.3
pH	s.u.	7.0 – 8.3 <sup>[2]</sup>		
Turbidity	NTU	10	--	20
Chlorine Residual	mg/L	--	--	ND <sup>[3]</sup>
Dissolved Oxygen	mg/L	> 2.0 mg/L at all times		
Chlorodibromomethane	µg/L	0.40	--	0.80
Copper, Total Recoverable	µg/L	7.5	--	17
Dichlorobromomethane	µg/L	0.56	--	0.88
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	--	3.6
Sulfate	mg/L	--	--	125
	lbs/day	--	--	1,251
Total Nitrogen (as N)	mg/L	--	--	10
	lbs/day	--	--	100

Parameter	Units	Effluent Limitations		
Nitrite (as N)	mg/L	--	--	1.0
Acute Toxicity	% survival	--	--	<sup>[4]</sup>

- <sup>[1]</sup> The average monthly percent removal for BOD and TSS shall not be less than 85 percent.
- <sup>[2]</sup> When the Discharger continuously monitors effluent pH, levels shall be maintained within specified ranges 99 percent of the time. To determine 99 percent compliance, the following conditions shall be met:
- The total time during which pH is outside the range of 7.0 – 8.3 shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from the range of 7.0 – 8.3 shall exceed 30 minutes;
  - No single excursion shall fall outside the range of 6.0 – 9.0; and
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed (i.e., between 7.0 – 8.3 at all times, measured daily).
- <sup>[3]</sup> ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:
- The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed.
- <sup>[4]</sup> Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition) to the survival of control organisms, as defined in section V of Attachment E to this Order.

**b. Dry Weather Flow.** Effluent average dry weather flow shall not exceed a monthly average of 1.2 MGD.

**c. Floating Material.** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

**d. Bacteria – Discharge Point No. 001**

**i. Total Coliform**

- 1) The total coliform concentrations shall not exceed a median of 2.2 MPN/100 mL as determined from the last 7 days of sampling results for which analyses have been completed;
- 2) No more than one sample shall exceed 23 MPN/100 mL in any 30-day period; and
- 3) No sample shall exceed 240 MPN/100 mL.

**E. Interim Effluent Limitations – Not Applicable**

**F. Land Discharge Effluent Limitations and Specifications – Not Applicable**

**G. Reclamation Specifications**

The Order requires compliance with applicable State and local requirements regarding production and use of reclaimed wastewater, including those requirements established by the Department of Health Services for reclaimed water at Title 22, Sections 60301-60357 of the California Code of Regulations, Water Recycling Criteria.

Reclamation requirements have been carried over from Order No. R3-2006-0032.

## **V. RATIONALE FOR SURFACE RECEIVING WATER LIMITATIONS**

### **A. Surface Water**

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Specific WQOs established by the Basin Plan to meet this goal for all inland surface waters are included as Receiving Water Limitations in section V.A of the Order. All receiving water limitations are retained from the previous Order.

### **B. Groundwater**

Groundwater limitations included in section V.B of the Order include general objectives as established in Chapter 3, Section II.A.4 of the Basin Plan and specific numeric WQOs for groundwater within the Chorro Creek sub area of the Estero Bay groundwater unit as established in Table 3-8 of the Basin Plan. All groundwater limitations in this Order are retained from the previous Order.

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

### **A. Influent Monitoring**

In addition to influent flow monitoring, monitoring for BOD and TSS is required to determine compliance with the Order's 85 percent removal requirement for those pollutants. Influent monitoring requirements have been retained from the previous Order.

### **B. Effluent Monitoring**

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements from the previous Order for Discharge Point No. 001 are retained in this Order with the following exceptions:

1. Effluent monitoring for bis(2-ethylhexyl)phthalate has been established to determine compliance with the newly established effluent limitations. Because bis (2-ethylhexyl) phthalate is a common contaminate in sampling, and often not representative of the effluent concentrations, reduced monitoring requirements have been established for this parameter

over time if the data indicates that this parameter is non-detect within the effluent. If the pollutant is determined to be present in the effluent, monthly monitoring is required.

2. Because reasonable potential was determined for chlorodibromomethane, copper, and dichlorobromomethane, the monitoring frequency for these parameters has been increased to monthly.

### **C. Whole Effluent Toxicity Testing Requirements**

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and or growth. This Order retains limitations for acute toxicity, establishes a chronic toxicity trigger of 1 TUc, and established monitoring requirements for acute and chronic toxicity for Discharge Point No. 001.

### **D. Receiving Water Monitoring**

#### **1. Surface Water**

Surface water receiving water monitoring requirements are retained from the previous Order as necessary to determine compliance with surface water limitations and for the protection of public health.

#### **2. Groundwater**

Groundwater monitoring requirements are retained from the previous Order as necessary to determine compliance with groundwater limitations.

### **E. Other Monitoring Requirements**

#### **1. Biosolids/Sludge Monitoring**

Biosolids monitoring shall be reported in the annual report in accordance with 40 CFR 503. Biosolids monitoring requirements have been retained from the previous Order.

#### **2. Pretreatment Monitoring – Not Applicable**

#### **3. Salt and Nutrient Management Plan Reporting**

Salt and Nutrient Management Plan reporting requirements are retained in this Order to help identify and reduce salt and nutrient loading in effluent. This salt/nutrient management report shall be included as part of the annual report.

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D to the Order.

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

## **B. Special Provisions**

### **1. Reopener Provisions**

The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

### **2. Special Studies and Additional Monitoring Requirements**

#### **a. Toxicity Reduction Requirements**

The Order retains the requirement to perform a TRE, if the acute toxicity limitation is exceeded or if chronic toxicity is detected in the effluent above 1 TUc. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitations established by the Order, the Discharger is required to resample and retest. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement TRE requirements, or whether other measures are warranted.

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

#### **a. Salt and Nutrient Management Program**

Section VI.C.8 of the previous Order required the Discharger to conduct a Salt Management Study to control levels of TDS, chloride, sodium, sulfate, and boron (collectively referred to as salts) in discharges from the Facility and attain applicable WQOs for salts in the Chorro Creek Sub-Basin of the Estero Bay Drainage Basin.

The Discharger completed a Salt Management Study and Plan (Study) in May 2009. The purpose of the Study was to summarize effluent and receiving water data, characterize source water supply and wastewater quality, and evaluate and identify feasible source control strategies. The Study indicated that receiving water quality upstream and downstream of the Facility discharge point exceeds surface WQOs, indicating the background levels for salts are elevated prior to contributions from the Facility effluent. Further, the Study examined the relative contributions of the primary sources to Facility. In addition, the Discharger identified several source control options.

Data from the term of the previous Order indicated the Facility has reasonable potential to cause or contribute to downstream impairment for salts loading. Therefore, in addition to effluent limitations for TDS, sodium, and chloride, this Order requires the Discharger to continue to update and implement the Salt Management Program. Additionally, the Discharger shall develop and implement a Nutrient Management Program as part of the Salt and Nutrient Management Program, as discussed in section VI.C.3.a of this Order, based on the Recycled Water Policy discussed in section III.E.3 of this Fact Sheet.

**4. Construction, Operation, and Maintenance Specifications – Not Applicable**

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

**a. Biosolids Management**

The use and disposal of biosolids is regulated under federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503. The Discharger is required to comply with the standards and time schedules contained in 40 CFR 503.

Title 27, CCR, Division 2, Subdivision 1, Section 20005 establishes approved methods for the disposal of collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes. Requirements to ensure the Discharger disposes of solids in compliance with State and federal regulations have been included in this Order. These requirements have been retained from the previous Order.

**b. Pretreatment Requirements – Not Applicable**

**6. Other Special Provisions**

**a. Discharges of Storm Water.** Discharges of storm water from POTWs with a design capacity greater than 1.0 MGD are eligible for coverage under General State Water Board Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Dischargers of Storm Water Associated with Industrial Activities Excluding Construction Activities. The design capacity of the Facility is greater than 1.0 MGD. Therefore, the Discharger shall seek coverage under General Permit No. CAS000001 for all storm water discharges. This is retained from the previous Order.

**b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The Order requires coverage by and compliance with applicable provisions of General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ). This General Permit, adopted on May 2, 2006, is applicable to all “federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.” The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. This provision is retained from the previous Order.

## 7. Compliance Schedules – Not Applicable

## VIII. PUBLIC PARTICIPATION

The Central Coast Regional Water Quality Control Board is considering the issuance of WDRs that will serve as an NPDES permit for the California Department of Corrections and Rehabilitation, California Men's Colony Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through written publication in the Tribune newspaper and posting on the Central Coast Water Board website.

### B. Written Comments

Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order or via electronic mail to [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov)

To receive a full response from the Regional Water Board staff and to be considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on **October 5, 2012**. No public comments were received.

### 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: **December 6, 2012**  
Time: **8:30 a.m.**  
Location: **Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401**

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/centralcoast/> 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 (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (805) 549-3147.

#### **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 Katie DiSimone at (805) 542-4638 or [kdisimone@waterboards.ca.gov](mailto:kdisimone@waterboards.ca.gov) or Sheila Soderberg at (905) 549-3592 or [ssoderberg@waterboards.ca.gov](mailto:ssoderberg@waterboards.ca.gov).