California Regional Water Quality Control Board
Central Coast Region

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Edmund G. Brown Jr.
Governor

ORDER NO. R3-2011-0003
NPDES NO. CA0047364

WASTE DISCHARGE REQUIREMENTS FOR THE CARPINTERIA SANITARY DISTRICT WASTEWATER TREATMENT PLANT

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

Table 1. Discharger Information

Discharger	Carpinteria Sanitary District
Name of Facility	Wastewater Treatment Facility
Facility Address	5351 Sixth Street
	Carpinteria, CA 93013
	Santa Barbara 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 Carpinteria Sanitary District Wastewater Treatment Facility 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	Secondary Treated Municipal Effluent	34° 23' 18" N	119 ° 31' 18" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**February 3, 2011**
This Order shall become effective on:	**March 25, 2011**
This Order shall expire on:	**March 25, 2016**
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:	180 days prior to the Order expiration date

IT IS HEREBY ORDERED, that Order No. R3-2005-0110 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Roger Briggs 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 Coastal Region, on February 3, 2011.

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Roger W. Briggs, Executive Officer

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I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	Carpinteria Sanitary District
Name of Facility	Wastewater Treatment Plant
Facility Address	5351 Sixth Street
	Carpinteria, CA 93013
	Santa Barbara County
Facility Contact, Title, and Phone	Craig Murray, PE, General Manager, (805) 684-7214 ext. 12
Mailing Address	5300 Sixth Street, Carpinteria, CA 93013
Type of Facility	Publically Owned Treatment Works (POTW)
Facility Design Flow	2.5 million gallons per day (MGD)

II. FINDINGS

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

A. **Background.** The Carpinteria Sanitary District (hereinafter Discharger) is currently discharging pursuant to Order No. R3-2005-0110 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047364. The Discharger submitted a Report of Waste Discharge, dated April 16, 2010, and applied for an NPDES permit renewal to discharge up to 2.5 MGD of treated wastewater from the Carpinteria Sanitary District Wastewater Treatment Facility (hereinafter Facility). The application was deemed complete on July 9, 2010.

For the purposes of this Order, references to the "Discharger," "Facility," 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 wastewater collection, treatment, and disposal system which provides sewerage service for the City of Carpinteria and portions of Santa Barbara County. The treatment system consists of pretreatment, screening, grit removal, primary sedimentation, aerated activated sludge tanks, secondary sedimentation, chlorination, and dechlorination. Wastewater is discharged from Discharge Point No. 001 (see table on cover page) to the Pacific Ocean, a water of the United States within the South Coast Hydrologic Unit. Attachment B provides a topographic map of the area around the Facility. Attachment C provides a flow diagram of the Facility.

Storm water from the site is collected and directed to the headworks for treatment, and is discharged as treated effluent. Storm water does not discharge from the site.

C. **Legal Authorities.** This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (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 Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

D. **Background and Rationale for Requirements.** The Central Coast Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E 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 USEPA's NPDES regulations at 40 CFR 122.44 require that permits include, at a minimum, conditions meeting applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards. Discharges authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards established at 40 CFR Part 133 and Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of development of technology-based effluent limitations 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.

NPDES regulations at 40 CFR 122.44 (d) (1) (i) mandate that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential is established for a pollutant, but there is no numeric criterion or objective for the pollutant, 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 at 40 CFR 122.44 (d) (1) (vi).

H. **Water Quality Control Plans.** The Central Coast Water Board has adopted a *Water Quality Control Plan for the Central Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan).

The Basin Plan implements 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 (MUN). Because TDS levels of marine waters exceed 3,000 mg/L, such waters are not considered suitable for municipal or domestic supply and therefore meet an exception to Resolution No. 88-63. Beneficial uses established by the Basin Plan for coastal waters between Coal Oil Point and Rincon Point are presented in Table 5, below.

Table 5. Basin Plan Beneficial Uses for the Pacific Ocean

Discharge Point	Receiving Water	Beneficial Use(s)
001	Coastal Waters from Coal Oil Point to Rincon Point	• Water Contact and Non-Contact Recreation • Industrial Service Supply • Navigation • Marine Habitat • Shellfish Harvesting • Commercial and Sport Fishing • Rare, Threatened, or Endangered Species • Wildlife Habitat • Migration of aquatic organisms • Spawning, reproduction, and/or early development

In order to protect the beneficial uses, the Basin Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Basin Plan.

I. California Ocean Plan

The State Water Board adopted the *Water Quality Control Plan for the Ocean Waters of California, California Ocean Plan* (*Ocean Plan*) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005, and it became effective on February 14, 2006. The *Ocean Plan* is applicable, in its entirety, to point source discharges to the Ocean. The *Ocean Plan* identifies the following beneficial uses of ocean waters of the State.

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Pacific Ocean	• Industrial Water Supply • Water Contact and Non-Contact Recreation, including aesthetic enjoyment • Navigation • Commercial and Sport Fishing • Mariculture • Rare and Endangered Species • Marine Habitat • Fish Migration • Fish Spawning and Shellfish Harvesting

In order to protect beneficial uses the *Ocean Plan* establishes water quality objectives and programs of implementation to achieve and maintain those objectives. Requirements of this Order implement the *Ocean Plan*.

J. **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.

K. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. As discussed in section IV. B of the Fact Sheet, the Order establishes technology-based effluent limitations for biochemical oxygen demand (BOD_5), total suspended solids (TSS), settleable solids, oil and grease, turbidity, and pH for Discharge Point No. 001. These technology-based limitations implement the minimum, applicable federal technology-based requirements. The Order also contains effluent limitations in addition to the minimum, federal technology-based requirements, necessary to meet applicable water quality standards. These limitations are not more stringent than required by the CWA.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. The water quality objectives and beneficial uses implemented by this Order are contained in the Basin Plan and the 2005 Ocean Plan, which was approved by USEPA on February 14, 2006. These water quality objectives and beneficial uses are the applicable water quality standards pursuant to 40 CFR 131.21 (c) (1) and have been approved pursuant to federal law. WQBELs for toxic pollutants are derived using procedures established by the Ocean Plan.

All beneficial uses and water quality objectives contained in the Basin Plan and Ocean Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 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.

L. **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 Central Coast Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in detail 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.

M. **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 section IV.D of the Fact Sheet, effluent limitations and other requirements established by this Order satisfy applicable anti-backsliding provisions of the CWA and NPDES regulations.

N. **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 State and federal law regarding threatened and endangered species.

O. **Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Central Coast Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.

P. **Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with NPDES regulations at 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. The Central Coast Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

Q. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

R. **Notification of Interested Parties.** The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet accompanying this Order.

S. **Consideration of Public Comment.** The Central Coast Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

T. **Privilege to Discharge.** A permit and the privilege to discharge waste into waters of the State are conditional upon the discharge complying with provisions of division 7 of the CWC and of the CWA (as amended or as supplemented by implementing guidelines and regulations); and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisances.

III. DISCHARGE PROHIBITIONS

A. Discharge of treated wastewater to the Pacific Ocean at a location other than as described by this Order at 34° 23' 18" N Latitude, 119° 31' 18" W Longitude is prohibited.

B. Discharge of any waste in any manner other than as described by this Order is prohibited.

C. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the Ocean is prohibited.

D. Federal law prohibits the discharge of sludge by pipeline to the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean is prohibited.

E. 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.

F. The Discharge of materials and substances in the wastewater that result in the following are prohibited:

1. float or become floatable upon discharge;
2. may form sediments which degrade benthic communities or other aquatic life;
3. accumulate to toxic levels in marine waters, sediments or biota;
4. decrease the natural light to benthic communities and other marine life; and
5. result in aesthetically undesirable discoloration of the ocean surface.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. **Conventional Pollutants.** The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001 with compliance measured at Monitoring Location EFF-001 as described in the attached MRP.

Table 6. Effluent Limitations for Conventional and Non-Toxic Pollutants

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
pH	s.u.	6.0 – 9.0 at all times		
Biochemical Oxygen Demand (5-day @ 20°C) (BOD)[1]	mg/L	30	45	90
	lbs/day	630	940	1,900
Total Suspended Solids (TSS) [1]	mg/L	30	45	90
	lbs/day	630	940	1,900
Oil & Grease	mg/L	25	40	75[2]
	lbs/day	520	830	1,600
Settleable Solids	mL/L	1.0	1.5	3.0[2]
Turbidity	NTUs	75	100	225[2]
Total Coliform	MPN/100 mL	--	23[3]	2,300[2],[3]

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

[2] Applied as an instantaneous maximum.

[3] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological result for the last 7 days for which have been completed. The number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL at any time.

2. **Toxic Pollutants.** The Discharger shall maintain compliance with the following effluent limitations for toxic pollutants at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

Table 7. Effluent Limitations for the Protection of Marine Aquatic Life

Pollutant	Unit	6-Month Median [1]	Daily Maximum [2]	Instantaneous Maximum [3]
Arsenic, Total Recoverable	µg/L	470	2,700	7,200
	lbs/day	9.9	57	150
Cadmium, Total Recoverable	µg/L	94	380	940
	lbs/day	2.0	7.8	20
Chromium (Hexavalent)[4]	µg/L	190	750	1,900
	lbs/day	3.9	16	39
Lead, Total Recoverable	µg/L	190	750	1,900
	lbs/day	3.9	16	39
Selenium, Total Recoverable	µg/L	1,400	5,600	14,000
	lbs/day	29	120	290

Pollutant	Unit	6-Month Median [1]	Daily Maximum [2]	Instantaneous Maximum [3]
Silver, Total Recoverable	µg/L	51	250	640
	lbs/day	1.1	5.2	13
Total Chlorine Residual	µg/L	190	750	5,600
	lbs/day	3.9	16	120
Endosulfan[5]	µg/L	0.85	1.7	2.5
	lbs/day	0.018	0.035	0.0530
Endrin	µg/L	0.19	0.38	0.56
	lbs/day	0.0039	0.0078	0.012
HCH[6]	µg/L	0.38	0.75	1.1
	lbs/day	0.0078	0.016	0.024
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
Acute Toxicity[7]	TU_a	--	3.1	--
Chronic Toxicity [8]	TU_c	--	94	--

[1] The average monthly percent removal of BOD and TSS shall not be less than 85 percent.

[2] The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[3] The daily maximum shall apply to flow weighted 24-hour composite samples. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[4] Dischargers may, at their option, meet this limitation as a total chromium objective.

[5] Endosulfan shall mean the sum of endosulfan-alpha and –beta and endosulfan sulfate.

[6] HCH shall mean the sum of alpha, beta, gamma (Lindane) and delta isomers of hexachlorocyclohexane.

[7] Acute Toxicity – Expressed in Toxic Units Acute (TU_a). As defined in section V.A of the MRP (Attachment E).

[8] Chronic Toxicity – Expressed in Toxic Units Chronic (TU_c). As defined in section V.B of the MRP (Attachment E).

Table 8. Effluent Limitations for the Protection of Human Health

Pollutant	Unit	30-day Average
Acrolein	µg/L	2.1×10^4
	lbs/day	430
Antimony	µg/L	1.1×10^5
	lbs/day	2,400
Bis(2-chloroethoxy)methane	µg/L	410
	lbs/day	8.6
Bis(2-chloroisopropyl)ether	µg/L	1.1×10^5

Pollutant	Unit	30-day Average
	lbs/day	2,400
Chlorobenzene	µg/L	5.4×10^4
	lbs/day	1100
Chromium (III)	µg/L	1.8×10^7
	lbs/day	370,000
di-n-butyl phthalate	µg/L	3.3×10^5
	lbs/day	6,900
Dichlorobenzenes	µg/L	4.8×10^5
	lbs/day	10,000
Diethyl phthalate	µg/L	3.1×10^6
	lbs/day	65,000
Dimethyl phthalate	µg/L	7.7×10^7
	lbs/day	1.6×10^6
4,6-dinitro-2-methylphenol	µg/L	2.1×10^4
	lbs/day	430
2,4-dinitrophenol	µg/L	380
	lbs/day	7.8
Ethylbenzene	µg/L	3.8×10^5
	lbs/day	8.0×10^3
Fluoranthene	µg/L	1.4×10^3
	lbs/day	29
Hexachlorocyclopentadiene	µg/L	5.4×10^3
	lbs/day	110
Nitrobenzene	µg/L	460
	lbs/day	9.6
Thallium	µg/L	190
	lbs/day	3.9
Toluene	µg/L	8.0×10^6
	lbs/day	1.7×10^5
Tributyltin	µg/L	0.13
	lbs/day	0.0027
1,1,1-trichloroethane	µg/L	5.1×10^7
	lbs/day	1.1×10^6
Acrylonitrile	µg/L	9.4
	lbs/day	0.20
Aldrin	µg/L	2.1×10^{-3}
	lbs/day	4.3×10^{-5}
Benzene	µg/L	550
	lbs/day	12
Benzidine	µg/L	6.5×10^{-3}
	lbs/day	1.4×10^{-4}
Beryllium	µg/L	3.1
	lbs/day	0.065

Pollutant	Unit	30-day Average
Bis(2-chloroethyl)ether	µg/L	4.2
	lbs/day	0.088
Bis(2-ethylhexyl)phthalate	µg/L	330
	lbs/day	6.9
Carbon tetrachloride	µg/L	85
	lbs/day	1.8
Chlordane[1]	µg/L	2.2×10^{-3}
	lbs/day	4.6×10^{-5}
Chlorodibromomethane	µg/L	810
	lbs/day	17
Chloroform	µg/L	1.2×10^{4}
	lbs/day	260
DDT[2]	µg/L	0.016
	lbs/day	3.3×10^{-4}
1,4-dichlorobenzene	µg/L	1.7×10^{3}
	lbs/day	35
3,3'-dichlorobenzidine	µg/L	0.76
	lbs/day	0.016
1,2-dichloroethane	µg/L	2.6×10^{3}
	lbs/day	55
1,1-dichloroethylene	µg/L	85
	lbs/day	1.8
Dichloromethane	µg/L	4.2×10^{4}
	lbs/day	880
1,3-dichloropropene	µg/L	840
	lbs/day	17
Dieldrin	µg/L	3.8×10^{-3}
	lbs/day	7.8×10^{-5}
2,4-dinitrotoluene	µg/L	240
	lbs/day	5.1
1,2-diphenylhydrazine	µg/L	15
	lbs/day	0.31
Halomethanes[3]	µg/L	1.2×10^{4}
	lbs/day	260
Heptachlor	µg/L	4.7×10^{-3}
	lbs/day	9.8×10^{-5}
Heptachlor Epoxide	µg/L	1.9×10^{-3}
	lbs/day	3.9×10^{-5}
Hexachlorobenzene	µg/L	0.020
	lbs/day	4.1×10^{-4}
Hexachlorobutadiene	µg/L	1.3×10^{3}
	lbs/day	27
Hexachloroethane	µg/L	240

Pollutant	Unit	30-day Average
	lbs/day	4.9
Isophorone	µg/L	6.9×10^4
	lbs/day	1.4×10^3
N-nitrosodimethylamine	µg/L	690
	lbs/day	14
N-nitrosodi-N-propylamine	µg/L	36
	lbs/day	0.74
N-nitrosodiphenylamine	µg/L	240
	lbs/day	4.9
PAHs[4]	µg/L	0.83
	lbs/day	0.017
PCBs[5]	µg/L	1.8×10^{-3}
	lbs/day	3.7×10^{-5}
TCDD equivalents[6]	µg/L	3.7×10^{-7}
	lbs/day	7.6×10^{-9}
1,1,2,2-tetrachloroethane	µg/L	220
	lbs/day	4.5
Tetrachloroethylene	µg/L	190
	lbs/day	3.9
Toxaphene	µg/L	0.020
	lbs/day	4.1×10^{-4}
Trichloroethylene	µg/L	2.5×10^3
	lbs/day	53
1,1,2-trichloroethane	µg/L	880
	lbs/day	18
2,4,6-trichlorophenol	µg/L	27
	lbs/day	0.57
Vinyl chloride	µg/L	3.4×10^3
	lbs/day	70

[1] Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

[2] DDT shall mean the sum of 4,4'-DDT; 2,4'-DDT; 4,4'-DDE; 4,4'-DDD; and 2,4'-DDD.

[3] Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).

[4] PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo[k]fluoranthene; 1,12benzoperylene; benzo(a)pyrene; chrysene; dibenzo(a,h)anthracene; fluorine; indeno(1,2,3-cd)pyrene; phenanthrene; and pyrene.

[5] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[6] TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

Pollutant	Unit	30-day Average
Isomer Group	Toxicity Equivalence Factor	
2,3,7,8-tetra CDD	1.0	
2,3,7,8-penta CDD	0.5	
2,3,7,8-hexa CDDs	0.1	
2,3,7,8-hepta CDD	0.01	
octa CDD	0.001	
2,3,7,8 tetra CDF	0.1	
1,2,3,7,8 penta CDF	0.05	
2,3,4,7,8 penta CDF	0.5	
2,3,7,8 hexa CDFs	0.1	
2,3,7,8 hepta CDFs	0.01	
octa CDF	0.001	

3. **Percent Removal:** The average monthly percent removal of BOD and TSS shall not be less than 85 percent.

4. **Dry Weather Flow:** Effluent daily dry weather flow shall not exceed a monthly average of 2.5 MGD.

5. Effluent shall be essentially free of materials and substances that:

   a. Float or become floatable upon discharge;

   b. May form sediments which degrade benthic communities or other aquatic life;

   c. Accumulate to toxic levels in marine waters, sediments, or biota;

   d. Decrease the natural light to benthic communities and other marine life; and

   e. Result in aesthetically undesirable discoloration of the ocean surface.

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The following receiving water limitations are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Central

Coast Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column.

30-Day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each receiving water monitoring location.

a. Total coliform density shall not exceed 1,000 CFU per 100 mL,

b. Fecal coliform density shall not exceed 200 CFU per 100 mL; and

c. Enterococcus density shall not exceed 35 CFU per 100 mL.

Single Sample maximum;

a. Total coliform density shall not exceed 10,000 CFU per 100 ml;

b. Fecal coliform density shall not exceed 400 CFU per 100 mL; and

c. Enterococcus density shall not exceed 104 CFU per 100 mL; and

d. Total coliform density shall not exceed 1,000 CFU per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1

2. At all areas where shellfish may be harvested for human consumption, as determined by the Central Coast Water Board, the following bacteriological objectives shall be maintained throughout the water column:

   a. The median total coliform density shall not exceed 70 organisms per 100 mL, and in not more than 10 percent of samples shall coliform density exceed 230 organisms per 100 mL.

3. Floating particulates and grease and oil shall not be visible.

4. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

5. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.

6. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

7. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally.

8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally, and shall be within the range of 7.0 to 8.5 at all times.

9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

10. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.

11. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.

12. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.

13. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Table B of the Ocean Plan.

14. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.

15. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

16. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

17. Discharge of radioactive waste shall not degrade marine life.

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.

1. Groundwater shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses.

2. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

VI. PROVISIONS

A. Standard Provisions

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

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

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order. All monitoring shall be conducted according to 40 CFR Part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants.*

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 water quality objective. 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. This provision contemplates, without limitation, effluent limitations that are necessary because monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a water quality objective in Table B of the Ocean Plan.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

If the discharge consistently exceeds an effluent limitation for toxicity specified by section IV of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan.

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, 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. 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 Toxicity Reduction Evaluation (TRE) Workplan, which describes steps that the Discharger intends to follow in the event that a toxicity effluent limitation 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/600/2-88-070 (for industrial discharges) or EPA/600/2-88/062 (for municipal discharges), 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 established by this Order, the Discharger shall resample immediately, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer (EO) as soon as possible following receipt of monitoring results. The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement a Toxicity Reduction Evaluation, or to implement other measures. The Discharger shall conduct a TRE giving due consideration to guidance provided by the U.S. EPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (EPA document nos. EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

Table 9. 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 EO
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
Implement corrective actions to meet Permit limits and conditions.	To be determined by the EO

b. Ocean Outfall and Diffuser Monitoring

At least once per year the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions. The outfall inspection will also check for possible external blockage of ports by sand and/or silt deposition. The Discharger shall report all findings and actions, including any observed cracks, breaks, or malfunctions to the Executive Officer in the applicable annual report. The inspection shall be completed under conditions of underwater visibility suitable to observe the outfall and diffuser structure.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Goal

The goal of the Pollutant Minimization Program is to reduce potential sources of Ocean Plan Table B toxic pollutants through pollutant minimization (control) strategies, including pollution prevention measures, to maintain effluent concentrations at or below the effluent limitation.

b. Determining the Need for a Pollutant Minimization Program

i. The Discharger shall develop and implement a Pollutant Minimization Program if:

1) A calculated effluent limitation is less than the reported Minimum Level,

2) The concentration of the pollutant is reported as DNQ, and

3) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation. Such evidence may include: health advisories for fish consumption; presence of whole effluent toxicity; results of benthic or aquatic organism tissue sampling; sample results from analytical methods more sensitive than methods included in the permit; and the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

ii. Alternatively, the Discharger shall develop and implement a Pollutant Minimization Program if:

1) A calculated effluent limitation is less than the Method Detection Limit (MDL),

2) The concentration of the pollutant is reported as ND, and

3) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation. Such evidence may include: health advisories for fish consumption; presence of whole effluent toxicity; results of benthic or aquatic organism tissue sampling; sample results from analytical methods more sensitive than methods included in the permit; and the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

c. Elements of a Pollutant Minimization Program

A Pollutant Minimization Program shall include actions and submittals acceptable to the Central Coast Water Board including, but not limited to, the following.

i. An annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable pollutant in influent to the wastewater treatment system;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant in the effluent at or below the calculated effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy;

v. An annual status report that shall be sent to the Executive Officer that includes:

1) All Pollutant Minimization Program monitoring results for the previous year;

2) A list of potential sources of the reportable pollutant;

3) A summary of all actions taken in accordance with the control strategy; and

4) A description of actions to be taken in the following year.

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**. The handling, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of USEPA regulations at 40 CFR 257,258, 501, and 503, including all monitoring, record keeping, and reporting requirements.

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. Sites for solids and sludge treatment and storage shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of such sites from erosion, and to prevent drainage from treatment and storage sites.

The treatment, storage, disposal, or reuse of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited into waters of the State. The Discharger is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with the above rules, whether the Discharger uses or disposes of the biosolids itself, or transfers them to another party for further treatment, use, or disposal. The Discharger is responsible for informing

subsequent preparers, appliers, and disposers of the requirements that they must adhere to under these rules.

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

   a. **Discharges of Storm Water.** Storm water and rainfall runoff which fall upon the grounds of the Facility and which may be exposed to on-site pollutant sources are routed to the Facility's headworks for treatment. This permit regulates all storm water discharges at this Facility and complies with Federal regulations for storm water management [Title 40, Code of Federal Regulations (CFR), Parts 122, 123, and 124], and therefore this Facility is exempt from coverage under the State's Water Quality Order No. 97-03-DWQ, NPDES General Permit for Discharges of Storm Water Associated with Industrial 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 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 General Permit requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals; an organizational description; legal authority; an operations and maintenance program; design and performance provisions; an overflow emergency response plan; a fats, oils, and greases (FOG) control program; a systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the General Permit requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General Permit. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination. Carpinteria Sanitary District filed a complete application package to the State Water Board dated July 11, 2006, and obtained full enrollment status on August 18, 2006 (Waste Discharge Identification No. 3 SSO 10245).

   c. **Sanitary Sewer Inspection.** The Discharger shall conduct sanitary sewer surveys when so directed by the Central Coast Water Board or the Executive Officer. The Discharger shall control any controllable discharges identified in a sanitary sewer survey.

   d. **Additional Connections.** The Central Coast Water Board must approve any additional connections outside the Sanitary District sewer service area to the effluent sewer main.

e. **Discharge of Pathogenic Organisms**. Waste that contains pathogenic organisms or viruses should be discharged a sufficient distance from shellfishing and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human health hazard should be used.

7. **Initial Dilution:**

a. The minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents (of sufficient strength to influence the initial dilution process) flow across the discharge structure.

b. The effluent limitations of this Order are based on California Ocean Plan criteria and equations as applicable therein, using a minimum initial dilution of 93:1 (seawater:effluent). If the actual dilution ratio is found to be different, then the ratio will be recalculated and this Order revised when and as appropriate.

8. **Compliance Schedules**

This section of the standardized permit template is 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

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where: S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

Areas of Special Biological Significance (ASBS): are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

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.**

Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity: This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

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

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

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

DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degrade: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

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

Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters shall mean waters downstream with respect to ocean currents.

Dredged Material: Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

Enclosed Bays are 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 headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

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).

Kelp Beds, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Mariculture is the culture of plants and animals in marine waters independent of any pollution source.

Material: (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

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

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, PART 136, Appendix B.

Minimum Level (ML) is the concentrations 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.

Natural Light: Reduction of natural light may be determined by the Central Coast Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Central Coast Water Board.

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. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

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 Ocean Plan Table B pollutants 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 Central Coast Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reported Minimum Level 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 Central Coast Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. 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 reported ML.

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.

Shellfish are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs) are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution Nos. 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

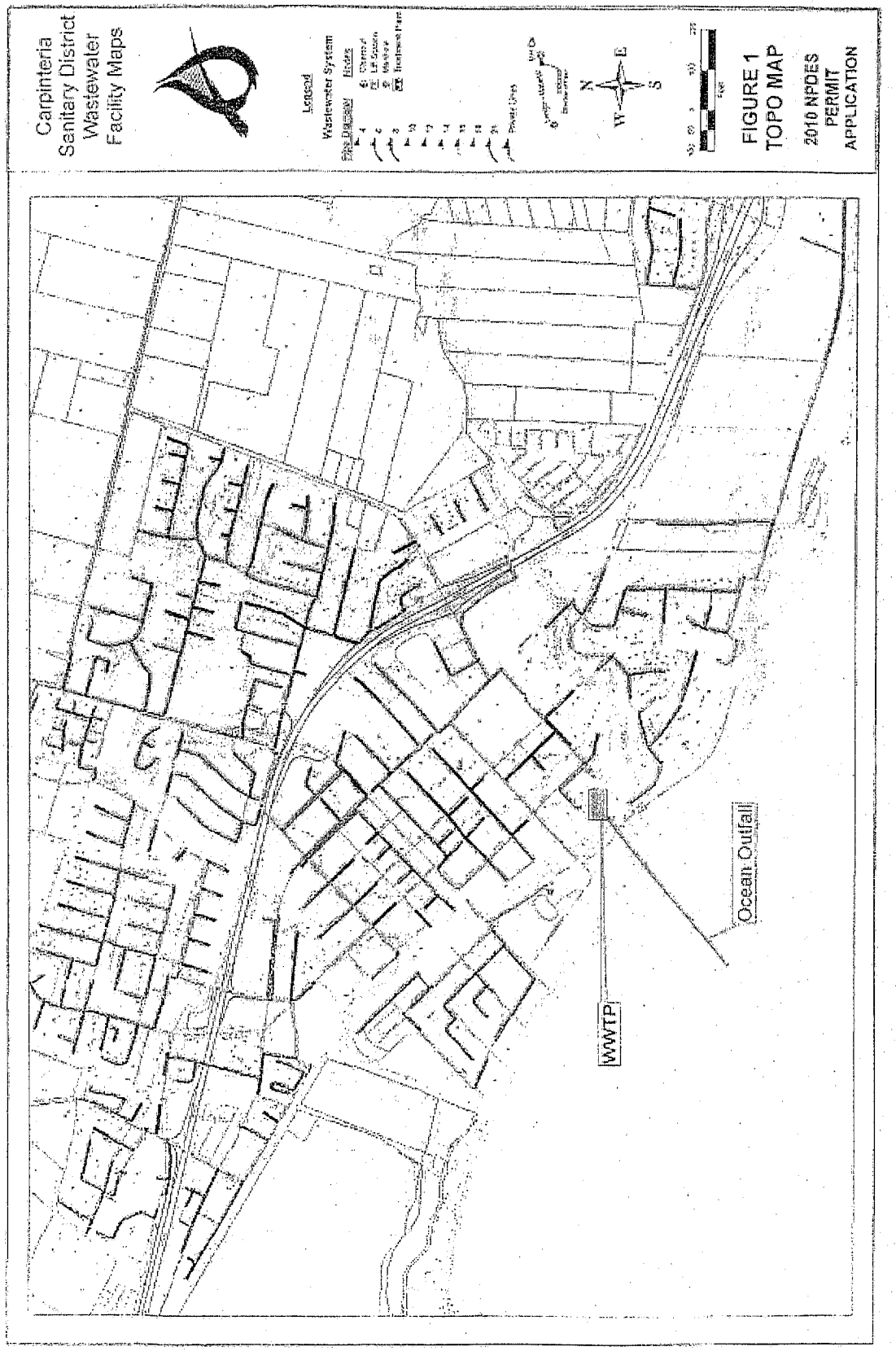
Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

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.)

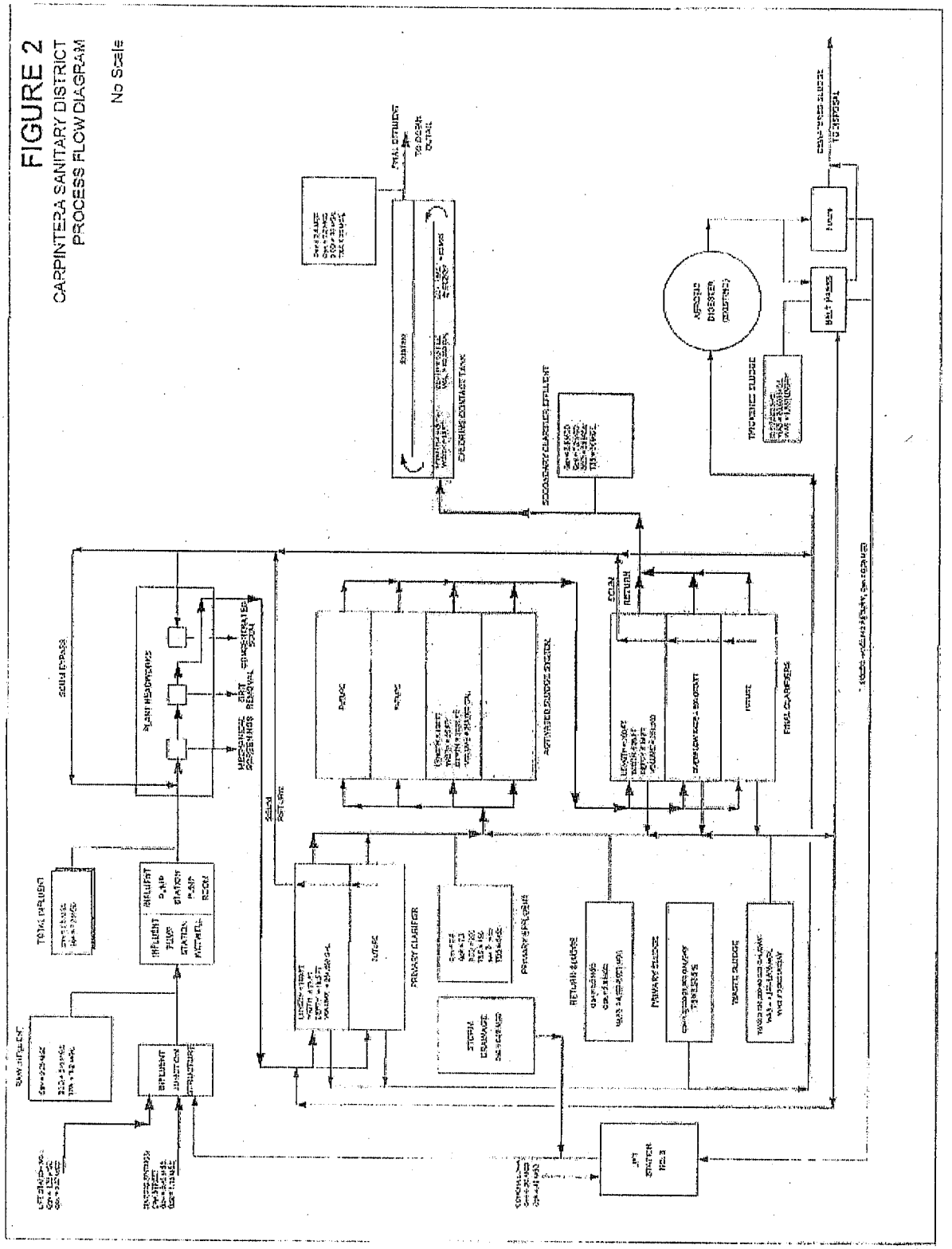
Waste: As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

Water Reclamation: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



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 a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR § 122.41(c).)

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)

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

F. Inspection and Entry

The Discharger shall allow the Central Coast 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 Central Coast Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Central Coast Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast 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 Central Coast Water Board. The Central Coast Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast 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 Central Coast Water Board, State Water Board, or USEPA within a reasonable time, any information which the Central Coast 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 Central Coast Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Central Coast 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 Central Coast 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 Central Coast 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 Central Coast Water

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

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

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast 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 Central Coast Water Board. (40 CFR § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates

and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

3. The Central Coast 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 Central Coast 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 Central Coast 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 Central Coast 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 Central Coast Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR § 122.42(b)(2).)

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

ATTACHMENT D-1 - CENTRAL COAST 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 Section 307(a) of the Clean Water Act 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 Section 13050 of the California Water Code.
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 assure 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. Production and use of reclaimed water is subject to the approval of the 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 California Water Code. 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 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 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.

D. 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.

E. Central Coast Standard Provisions – General Reporting Requirements

1. Reports of marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:

   a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

   b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).

   c. A description of the sampling procedures and preservation sequence used in the survey.

   d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

e. A brief discussion of the results of the survey. The discussion shall compare data from the control station with data from the outfall stations. All tabulations and computations shall be explained.

2. 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.

3. 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.

4. 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.

5. All "Dischargers" shall submit reports to the:

   California Regional Water Quality Control Board
   Central Coast Region
   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

6. 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.

7. 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.

8. By January 30th of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described Central Coast Standard Provision – Provision B.9., above), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to Section C above, General Monitoring Requirements.

   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.

   If applicable, 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 Programs."

F. 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.

G. 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 sewering 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 Section 311 of the Clean Water Act.

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:

$$\text{Log Mean} = (C1 \times C2 \times ... \times Cn)1/n,$$

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.

$$\text{Average} = (X1 + X2 + \ldots + Xn) / n$$

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):

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

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

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast 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 Department of Health Services, 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 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 ±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 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). Analyses for toxics listed in Table B of the California Ocean Plan (2005) shall adhere to guidance and requirements contained in that document.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point	Monitoring Location Name	Monitoring Location Description
--	INF-001	Influent wastewater prior to treatment and following all significant inputs to the collection system or to the headworks of untreated wastewater, upstream of any in-plant return flows, where representative samples of wastewater influent can be obtained.
001	EFF-001	Location where representative sample of effluent discharged through the ocean outfall can be collected, after treatment and before contact with additional wastewaters or the receiving water.
Ocean Sampling Stations (located at the depth of the diffuser midpoint)		
--	RSW-1	500 feet downcoast (eastward along the coastline) from the outfall terminus
--	RSW-2E	25 feet downcoast (eastward along the coastline) from the outfall terminus
--	RSW-2W	25 feet upcoast (westward along the coastline) from the outfall terminus
--	RSW-3	500 feet upcoast (westward along the coastline) from the outfall terminus
--	RSW-4	2,000 feet downcoast (eastward along the coastline) from the outfall terminus
Shore Sampling Stations (located in the surf)		
--	RSW-A	1,000 feet downcoast (eastward along the coastline) from the outfall
--	RSW-B	500 feet downcoast (eastward along the coastline) from the outfall

Discharge Point	Monitoring Location Name	Monitoring Location Description
--	RSW-C	At the outfall in the surf
--	RSW-D	500 feet upcoast (westward along the coastline) from the outfall
--	RSW-E	1,000 feet upcoast (westward along the coastline) from the outfall
		Disinfection Failure Monitoring Stations
--	RSW-F	Directly upcoast of the point of discharge
--	RSW-G	Directly downcoast of the point of discharge

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF - 001

1. Sampling stations shall be established at each point of inflow to the treatment plant, and shall be isolated from and/or corrected for any in-plant return flows in order to obtain representative samples of the influent. Composite samples may be taken by a proportional-sampling device approved by the Executive Officer, or by grab samples composited in proportion to the flow. In compositing grab samples, the sampling interval shall not exceed one hour. The Discharger may otherwise employ grab samples.

2. The Discharger shall monitor influent to the facility at Monitoring Location INF–001 in accordance with the following schedule.

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	1/Day
Instantaneous Flow	MGD	Metered	Continuous
Maximum Daily Flow	MGD	Metered	1/Month
Mean Daily Flow	MGD	Calculated	1/Month
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	24-hr Composite	1/Month
	lbs/day[1]	Calculated	
Total Suspended Solids (TSS)	mg/L	24-hr Composite	1/Month
	lbs/day[1]	Calculated	

[1] lbs/day shall be calculated using the following formula:
lbs/day = 8.34 * Flow$^{(\text{expressed as MGD})}$ * Parameter Concentration$^{(\text{expressed as mg/L})}$

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF - 001

1. The Discharger shall monitor effluent at Monitoring Location EFF – 001 in accordance with the following schedule.

Table E-3. Effluent Monitoring at EFF – 001

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]
pH	pH units	Grab	1/Day
Temperature	°F	Grab	1/6 days
Flow	MGD	Metered	1/Day
Instantaneous Flow	MGD	Metered	1/Day
Maximum Daily Flow	MGD	Metered	1/Month
Mean Daily Flow	MGD	Calculated	1/Month
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	24-hr Composite	1/6 Days
	lbs/day[2]	Calculated	
Total Suspended Solids (TSS)	mg/L	24-hr Composite	1/6 Days
	lbs/day[2]	Calculated	
Settleable Solids	mL/L	Grab	1/Day
Total Coliform Organisms[3],[4],[5]	MPN/100 mL	Grab	1/2 Days
Fecal Coliform Organisms[3],[4]	MPN/100 mL	Grab	1/2 Days
Total Chlorine Residual[5],[6]	mg/L	Metered	Continuous
Total Chlorine Used	lbs/day	Recorded	1/Day
Oil and grease	mg/L	Grab	1/6 Days
Turbidity	NTU	Grab	1/6 Days
Ammonia (as N)	mg/L	Grab	1/Month
Acute Toxicity[7]	TU_a	24-hr Composite	1/Quarter
Chronic Toxicity[7]	TU_c	24-hr Composite	1/Quarter
Remaining Table B Parameters[8]	µg/L	Grab	1/Year[9]

[1] If any constituents are detected at levels exceeding the effluent limitations established in section IV of Order No. R3-2011-0003, a new sample shall be collected and analyzed within one month for those constituents exceeding the applicable limit. Samples shall continue to be collected and analyzed monthly until the constituents no longer exceed the limit for two consecutive months.

[2] lbs/day shall be calculated using the following formula:

$$\text{lbs/day} = 8.34 * \text{Flow}^{(\text{expressed as MGD})} * \text{Parameter Concentration}^{(\text{expressed as mg/L})}$$

[3] For all bacterial analyses, sample dilutions should be performed so the range of bacterial density values extends from 2 to 16,000 /100 mL. The detection methods used for each analysis shall be reported with the results of the analysis.

[4] Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR PART 136 (revised edition of July 1, 2003, or later), unless alternate methods have been approved in advance by USEPA pursuant to 40 CFR PART 136.

[5] Discharger shall notify the Central Coast Water Board (telephone: 805-549-3147), Department of Health Services (telephone: 805-681-4900, and 510-412-4635), and any Mariculture Grower as soon as possible when there is a loss of disinfection or if three consecutive total effluent coliform bacteria tests exceed 2,300 per 100 mL.

[6] The Discharger shall review continuous monitoring data and submit a summary (chlorine residual daily minimum, maximum, mean) to the Central Coast Water Board with monthly monitoring reports. Grab samples for compliance with effluent limits may be collected at the last accessible measurement location before discharge to the ocean.

[7] Refer to section V of this MRP, Whole Effluent Toxicity Testing Requirements

[8] Table B parameters contained in Section II.D of the Ocean Plan.

[9] Annual sampling for Table B Parameters shall be conducted during dry-weather conditions according to the following schedule: July 2011, June 2012, May 2013, April 2014, and March 2015.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

Compliance with acute toxicity objective shall be determined using a USEPA approved methodology protocol as provided in 40 CFR 136 (*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).

Acute Toxicity (TU_a) = 100/96-hr LC 50.

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by 96-hour static or continuous flow bioassay techniques using standard marine test species as specified in EPA-821-R-02-012 and as noted in the following table.

Table E-4. Approved Tests - Acute Toxicity

Species	Scientific Name	Effect	Test Duration
shrimp	*Holmesimysis costata*	survival	48 or 96 hours
shrimp	*Mysidopsis bahia*	survival	48 or 96 hours
silversides	*Menidia beryllina*	survival	48 or 96 hours
sheepshead minnow	*Cyprinodon variegatus*	survival	48 or 96 hours

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) originates from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTY FATHOMS®) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

Reference toxicant test results shall be submitted with the effluent sample test results. Both tests must satisfy the test acceptability criteria specified in EPA-821-R-02-012. If the test acceptability criteria are not achieved or if toxicity is detected, the sample shall be retaken and retested within 5 days of the failed sampling event. The retest results shall be reported in accordance with EPA-821-R-02-012 (chapter on report preparation) and the results shall be attached to the next monitoring report.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$TU_a = [(\log(100 - S)]/1.7$ Where S = percentage survival in 100% waste.

If $S > 99$, TU_a shall be reported as zero.

When toxicity monitoring finds acute toxicity in the effluent above the limitation established by the Order, the Discharger shall immediately resample the effluent, if the discharge is continuing, and retest for acute toxicity. Results of the initial failed test and any toxicity monitoring results subsequent to the failed test shall be reported as soon as reasonable to the Executive Officer (EO). The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or to implement other measures.

B. Chronic Toxicity

The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA-821/600/R-95/136; *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA-600-4-91-003; *Procedures Manual for Conducting Toxicity Tests developed by the Marine Bioassay Project*, SWRCB 1996, 96-1WQ; and/or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA/600/4-87-028 or subsequent editions.

Chronic toxicity measures a sub lethal effect (e.g., reduced growth or reproduction) to experimental test organisms exposed to an effluent compared to that of the control organisms.

Chronic Toxicity (TU_c) = 100/NOEL

The no observed effect concentration (NOEC) is the maximum tested concentration in a medium which does not cause known adverse effects upon chronic exposure in the species in question (i.e. the highest effluent concentration to which organisms are exposed in a chronic test that causes no observable adverse effects on the test organisms; e.g., the highest concentration of a toxicant to which the values for the observed responses are not statistically significantly different from the controls). Examples of chronic toxicity include but are not limited to measurements of toxicant effects on reproduction, growth, and sublethal effects that can include behavioral, physiological, and biochemical effects.

In accordance with the 2005 Ocean Plan, Appendix III, *Standard Monitoring Procedures,* the Discharger shall use the critical life stage toxicity tests specified in the table below to measure TU_c. Other species or protocols will be added to the list after State Water board review and approval.

A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity limitation. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period of no fewer than three tests, monitoring can be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The

sensitivity to the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

Note: If the Discharger has already performed the screening described above, then the Discharger may continue using the identified most sensitive species for chronic toxicity testing without re-screening of three species. If an alternative species is proposed to be used for chronic toxicity testing, the Discharger shall perform the screening and include the proposed test species as one of those species screened.

Table E-5. Approved Tests—Chronic Toxicity

Species	Test	Tier [1]	Reference [2]
Giant kelp, *Macrocystis pyrifera*	percent germination; germ tube length	1	a, c
Red abalone, *Haliotis rufescens*	abnormal shell development	1	a, c
Oyster, *Crassostrea gigas*; mussels, *Mytilus spp.*	abnormal shell development; percent survival	1	a, c
Urchin, *Strongylocentrotus purpuratus*; sand dollar, *Dendraster excentricus*	percent normal development	1	a, c
Urchin, *Strongylocentrotus purpuratus*; sand dollar, *Dendraster excentricus*	percent fertilization	1	a, c
Shrimp, *Homesimysis costata*	percent survival; growth	1	a, c
Shrimp, *Mysidopsis bahia*	percent survival; fecundity	2	b, d
Topsmelt, *Atherinops affinis*	larval growth rate; percent survival	1	a, c
Silverside, *Menidia beryllina*	larval growth rate; percent survival	2	b, d

[1] First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the Discharger can use a second tier test method following approval by the Central Coast Water Board.

[2] Protocol References:

a. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. U.S. EPA Report No. EPA/600/R-95/136.

b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms. U.S. EPA Report No. EPA-600-4-91-003.

c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.

d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1998. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

Dilution and control waters shall be obtained from an area of the receiving waters, typically upstream, which is unaffected by the discharge. Standard dilution water can be used, if the receiving water itself exhibits toxicity or if approved by the Central Coast Water Board. If the dilution water used in testing is different from the water in which the test organisms were cultured, a second control sample using culture water shall be tested.

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) originates from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTY FATHOMS®) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

For this discharge, the presence of chronic toxicity at more than 85 TUc shall trigger the Toxicity Reduction Evaluation (TRE) requirement of this Order (section VI.C.2.a).

C. Toxicity Reporting

1. The Discharger shall include a full report of toxicity test results with the regular monthly monitoring report and include the following information.

   a. toxicity test results,

   b. dates of sample collection and initiation of each toxicity test, and

   c. acute and/or chronic toxicity discharge limitations (or value).

2. Toxicity test results shall be reported according to the appropriate guidance - 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, or Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012 (2002) or subsequent editions.

3. If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the monitoring report for the month in which investigations conducted under the TRE workplan occurred.

4. Within 14 days of receipt of test results exceeding the chronic toxicity discharge limitation, the Discharger shall provide written notification to the Executive Officer of:

   a. Findings of the TRE or other investigation to identify the cause(s) of toxicity,

   b. Actions the Discharger has taken/will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity. When corrective actions, including TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

   When corrective actions, including a TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken, will be completed.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Receiving Water Monitoring

1. If three consecutive effluent total coliform bacteria tests exceed 2,300 MPN/100 mL, samples of the receiving water shall be collected at Monitoring Locations RSW-A through RSW-E and analyzed as specified in Table E-1:

Table E-6. Bottom Sediment Sampling

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Coliform[1], [2]	MPN/100 mL	Grab	1/6 Days
Fecal Coliform[1], [2]	MPN/100 mL	Grab	1/6 Days
Enterococcus[1], [2]	MPN/100 mL	Grab	1/6 Days
Visual Observations[1], [3]	--	--	1/6 Days

[1] Monitoring shall continue for a minimum of 30 days and until the effluent bacteria concentrations return to compliance for a minimum of 14-days. The Discharger shall, to the best of its ability, conduct the receiving water sampling during dry weather or at least three days after a significant rain event. The EO may grant a discretionary exception to this sampling requirement during extreme rain events where receiving water sampling is unlikely to provide data representative of the Discharger's effluent. The Discharger shall conduct effluent monitoring for total and fecal coliform daily during such events or the subsequent period of its influence on receiving waters. Once shore station sampling can resume, effluent sampling can return to its normal frequency.

[2] Sample dilutions shall be performed so the range of values extends from 20 to 16,000/100 mL. Detection methods used for total and fecal coliform shall be those presented in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*, or any improved method determined appropriate by the Central Coast Water Board and approved by USEPA. Detection methods used for Enterococcus shall be those presented in USEPA publication EPA 600/4-85/076, Test *Methods for Escherichia and Enterococci in Water by Membrane Filter Procedure*, or any improved method determined appropriate by the Central Coast Water Board and approved USEPA.

[3] Monitoring shall also include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), whether rainfall occurred over the preceding seven days, sea conditions, longshore currents (e.g., direction), and tidal conditions (e.g., high, slack, or low tide). Observations of water discoloration, floating oil and grease, turbidity, odor, materials of sewage origin in the water or on the beach, and temperature (°C) shall be recorded and reported.

2. The Discharger shall monitor for total coliform, fecal coliforms, and enterococcus at receiving water sampling stations RSW-F and RSW-G as identified in MRP section II above, in addition to three shore sampling stations approved by the Executive Officer, for seven days after loss of disinfection.

   The Discharger shall report the results to the Executive Officer within 24 hours after receiving them from the laboratory.

The Discharger shall notify: (i) the State Department of Public Health (DPH); (ii) Santa Barbara County Environmental Health Services Department; (iii) the Central Coast Water Board; and (iv) each certified commercial shellfish grower located offshore of the Santa Barbara Coast as set forth in a list to be provided and updated by DPH, in the event of a malfunction of the Discharger's disinfection process that results in a potential or actual discharge of inadequately disinfected effluent into the Santa Barbara Channel (an "Event"). The Discharger shall determine in its sole discretion whether an Event has occurred. Such notification by the Discharger shall be by telephone and facsimile transmission to the numbers provided to the Discharger by DPH. If the Discharger becomes aware of an Event between the weekday hours of 6:00 a.m. and 5:00 p.m., notification shall be given within four (4) hours of the time that the Discharger becomes aware of the Event. If the Discharger becomes aware of the Event after 5:00 p.m. or on a weekend, notification shall be given by 10:00 a.m. the next business day.

By providing notification of an Event as specified above, the Discharger shall not be deemed to have admitted any liability or concluded that the Event will or may impact any approved commercial shellfish growing areas ("growing area") or require the closure of any growing areas. Any decision or recommendation to close a growing area in response to a notification of an Event by the Discharger shall be made by DPH and/or the affected or potentially affected certified commercial shellfish grower(s). The Discharger shall have no liability (including but not limited to liability for lost sales, profits or interruption of business operations) arising from a decision by DPH or a shellfish grower to close a growing area in response to a notification of an Event.

B. Ocean Sampling Stations – Bottom Sediment at Monitoring Sampling Stations RSW-1 through RSW-4

Benthic sediment monitoring shall be conducted in 2013.

Benthic monitoring shall assess the temporal and spatial occurrence of pollutants in local marine sediments and evaluate the physical and chemical quality of the sediments in relation to the outfall. At all benthic monitoring stations, one grab sample shall be collected using a 0.1 m^3 Van Veen grab sampler.

Sediment samples shall be analyzed according to Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987) and Analytical Methods for EPA Priority Pollutants and 301(h) Pesticides in Estuarine and Marine Sediments (EPA 503-6-90-004, 1986). When processing samples for analysis, macrofauna and large remnants greater than 0.25 inches (0.64 cm) should be removed, taking care to avoid contamination.

All sediment results shall be reported in the raw form and expressed on a dry weight basis. For all non-detect results, parameter detection limits shall be reported. Dry weight concentration target detection levels are indicated for National Oceanic and Atmospheric Administration (NOAA) National Status and Trends Program analyses.

Benthic monitoring results shall be included in the Annual Report with a complete discussion of benthic sediment survey results and (possible) influence of the discharge on sediment conditions in the study area, if possible. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patters observed for raw sediment parameters. The Annual Report should also present an analysis of natural variation is sediment conditions, etc., which could influence the validity of study results. The Discharger's sediment results may also be compared with the results of other applicable studies, numerical protective levels, etc., as appropriate. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods if available.

Sampling specified in the following table shall occur at the ocean bottom directly below stations RSW-1 through RSW-4.

Table E-7. Bottom Sediment Sampling

Parameter	Units	Sampling Station
Sulfides (at pH 7)	mg/kg	RSW-1, 2E, 2W, 3, 4
Particle size distribution (incl. % retained on #200 sieve)	--	RSW-1, 2E, 2W, 3, 4
Organic matter (volatile solids or TOC)	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Coliform Organisms	MPN/100 g	RSW-1, 2E, 2W, 3, 4
Fecal Coliform Organisms	MPN/100 g	RSW-1, 2E, 2W, 3, 4
BOD	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Kjeldahl Nitrogen	mg/kg	RSW-1, 2E, 2W, 3, 4
Arsenic	mg/kg	RSW-1, 2E, 2W, 3, 4
Cadmium	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Chromium	mg/kg	RSW-1, 2E, 2W, 3, 4
Chromium (VI)	mg/kg	RSW-1, 2E, 2W, 3, 4
Copper, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Lead, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Mercury, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Nickel, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Iron, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Silver, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Zinc, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4

C. Ocean Sampling Stations – Benthic Biota at Monitoring Sampling Stations RSW-1 through RSW-4

Benthic infaunal monitoring shall assess the temporal and spatial status of local benthic communities in relation to the outfall. Benthic biota monitoring shall occur at the same time as benthic sediment monitoring. Sampling shall be conducted as follows:

1. At least five benthic samples shall be taken at each of the five ocean monitoring stations (RSW-1, RSW-2E, RSW-2W, RSW-3, and RSW-4) using a 0.1 m^3 Van Veen grab sampler.

2. For benthic infauna analyses, each replicate sample shall be passed through a 1 mm screen, and the organisms retained and preserved as appropriate for subsequent identification. It is recommended that sample preservation, sample processing, and data analyses be conducted according to Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987).

3. Benthic infauna from each replicate sample shall be counted and identified to the lowest possible taxon. For each replicate sample, number of individuals, number of species, and number of individuals per species, and within each major taxonomic group (polychaetes, mollusks, crustaceans, echinoderms, and all other macroinvertebrates) shall be recorded.

4. The Annual Report shall include a complete discussion of benthic infaunal survey results and (possible) influence of the outfall on benthic infaunal communities in the study area. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patterns. Temporal trends in the number of individuals, number of species, number of individuals per species, and community structure indices, species richness (S), Margalef index (d), ShannonWiener index (H'), Brillouin index (h), Simpson's index (SI), Swartz's dominance, and Infaunal Trophic Index (ITI) shall be reported. Statistical analyses shall include multivariate techniques consisting of classification and ordination analysis. The Annual Report should also present an analysis of natural community variation including the effects of different sediment conditions, oceanic seasons, and water temperatures, etc., that could influence the validity of study results. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods, if available.

IX. OTHER MONITORING REQUIREMENTS

A. Ocean Outfall Inspection

At least once per year the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions. The month for inspection specified by the Discharger shall be a month of good underwater visibility. This

inspection shall include general observations and video records of the outfall pipe/diffuser system and the surrounding ocean bottom in the vicinity of the outfall/diffuser. The inspection shall note leaks and potential leaks using dye studies, if necessary. The inspection shall be conducted along the outfall pipe/diffuser system from landfall to its ocean terminus. A report detailing inspection results shall be submitted to the Central Coast Water Board and USEPA with the Annual Report required by Central Coast Central Coast Water Board Standard Provision E-8.

B. Biosolids Monitoring, Notification and Reporting

1. The following information shall be submitted with the Annual Report Required by Central Coast Water Board Standard Provision E-8. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR 503.

   a. Annual biosolids production in dry tons and percent solids.

   b. A schematic drawing showing biosolids handling facilities (e.g., digesters, lagoons, drying beds, incinerators) and a solids flow diagram.

   c. A narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if biosolids are digested, report average temperature and retention time of the digesters. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.

   d. A description of disposal methods, including the following information as applicable, related to the disposal methods used at the Facility. If more than one method is used, include the percentage and tonnage of annual biosolids production disposed by each method.

      i. For landfill disposal include: 1) the Central Coast Water Board's WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.

      ii. For land application include: 1) the location of the site(s), 2) the Central Coast Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.

      iii. For offsite application by a licensed hauler and composter include: 1) the name, address and USEPA license number of the hauler and composter.

   e. Copies of analytical data required by other agencies (i.e. USEPA or County Health Department) and licensed disposal facilities (i.e. landfill, land application, or composting facility) for the previous year.

2. A representative sample of residual solids (biosolids) shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal) and shall

be analyzed for total concentrations for comparison with TTLC criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the STLC limit for that substance.

Table E-8. Biosolids Monitoring Requirements

Parameter	Units	Sample Type	Min. Analysis Frequency
Quantity	Tons (and yd^3)	Measured	As Transported
Disposal Location	--	--	As Transported
Moisture	%	Composite Sample	Annually (October)[3]
Total Kjeldahl Nitrogen[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Ammonia (as N)[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Nitrate (as N)[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Total Phosphorus[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
pH	pH Units	Composite Sample	Annually (October) [3]
Arsenic	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Cadmium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Chromium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Copper	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Lead	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Molybdenum	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Mercury	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Nickel	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Selenium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Silver	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Zinc	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Paint Filter Test (As per SW-846, Method 9095 - **Required only if sludge is disposed in a landfill**)	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Grease & Oil	mg/kg (dry weight)	Composite Sample	October 2013[2]
Priority Pollutants	mg/kg (dry weight)	Composite Sample	October 2013[2]

[1] Once per year if the District's biosolids are directly land applied without further treatment by another preparer; otherwise, once in October 2013.

[2] Coordinated with effluent sampling

[3] If 290 metric tons or more of biosolids are generated during any 365-day period, the frequency to monitor biosolids for these parameters shall increase to once per quarter.

C. Rainfall Monitoring

Daily rainfall totals (in inches) shall be tabulated on the monitoring report forms next to daily influent flow. The Discharger shall collect rainfall data from a representative gauge station or information source of its choice, subject to the Executive Officer's approval.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self Monitoring Reports (SMRs)

1. The Discharger must submit Self-Monitoring Reports (SMRs) electronically using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html).

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

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

Table E-9. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	The day after permit effective date	All	First day of second calendar month following month of sampling
1 / day and 1/2 days	The 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.	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1 / week and 1/ 6 days	The Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	First day of second calendar month following month of sampling
1 / month	The first day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1 / quarter	The closest of January 1st, April 1st, July 1st, or October 1st following (or on) permit effective date	January 1st through March 31st April 1st through June 30th July 1st through September 30th October 1st through December 31st	May 1st August 1st November 1st February 1st
1 / year	January 1st following (or on) permit effective date	January 1st through December 31st	Submit with Annual Report

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

   The Discharger shall report the results of analytical determination 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 shorted 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. The Discharger shall submit SMRs in accordance with the following requirements:

   a. 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 the tabular format within CIWQS. If 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. In the SMR, the Discharger must clearly identify violations of the WDRs and 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. An Annual Self Monitoring Report shall be due on February 1 following each calendar year and shall include:

      i. All data required by this MRP for the corresponding monitoring period, including appropriate calculations to verify compliance with effluent limitations.

      ii. A discussion of any incident of non-compliance and corrective actions taken.

C. Discharge Monitoring Reports (DMRs)

1. As described in section X.B.1 above, at any time during the term of this permit, the State or Central Coast Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

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

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

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

D. Other Reports

1. The Discharger shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section VI.C, of the Order. The Discharger shall submit such reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	3 420101001
Discharger	Carpinteria Sanitary District
Name of Facility	Carpinteria Sanitary District Wastewater Treatment Facility
Facility Address	5351 Sixth Street
	Carpinteria, CA 93013
	Santa Barbara County
Facility Contact, Title and Phone	Craig Murray, General Manager, (805) 684-7214
Authorized Person to Sign and Submit Reports	Craig Murray, General Manager, (805) 684-7214
Mailing Address	5300 Sixth Street, Carpinteria, CA 93013
Billing Address	5300 Sixth Street, Carpinteria, CA 93013
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Yes, though not required by this Order.
Reclamation Requirements	NA
Facility Permitted Flow	2.5 million gallons per day (MGD)
Facility Design Flow	2.5 MGD
Watershed	South Coast Hydrologic Unit
Receiving Waters	Pacific Ocean
Receiving Water Type	Ocean Water

A. Carpinteria Sanitary District (hereinafter Discharger) is the owner and operator of the Carpinteria Sanitary District Wastewater Treatment Facility (hereinafter Facility), a wastewater collection, treatment, and disposal system which provides sewerage service for the City of Carpinteria and portions of Santa Barbara County.

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

B. The Facility discharges wastewater to the Pacific Ocean, waters of the United States, and is currently regulated by Order R3-2005-0110, which was adopted on October 21, 2005, and expires on October 21, 2010. The terms and conditions of the current Order will be automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its WDRs and NPDES permit on April 16, 2010. Central Coast Water Board staff inspected the site on October 26, 2010 to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

The Discharger owns and operates a wastewater collection, treatment and disposal system to provide sewerage service to the City of Carpinteria and portions of Santa Barbara County, serving a population of approximately 17,000. The treatment at the Facility consists of mechanical screening and grit removal, primary sedimentation, aerated activated sludge tanks, secondary sedimentation, and chlorination followed by effluent discharge. Biosolids are collected from the primary and secondary clarifiers, sent to an aerobic digester and belt press thickeners. Biosolids are composted and transported offsite to be sold for agricultural/landscape purposes. The Facility has a dry-weather design capacity of 2.5 MGD. The reported average annual flow rate over the last three years is approximately 1.5 MGD.

A flow diagram is included as Attachment C of this Order.

B. Discharge Points and Receiving Waters

Secondary treated wastewater is discharged to the Pacific Ocean at Discharge Point No. 001 though a 1,000 foot outfall/diffuser system. The outfall terminates in the Santa Barbara Channel (34°23'18" N Latitude; 119°31'18" W Longitude) in approximately 25 feet of water. The minimum initial dilution ratio of the outfall/diffuser system is 93:1 (seawater:effluent) and the hydraulic capacity of the outfall is 5.5 MGD.

C. Summary of Existing Requirements and Effluent Characterization

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

Table F-2a. Historic Effluent Limitations and Monitoring Data, Major Constituents and Properties of Wastewater, Discharge Point No. 001

Parameter	Units	Effluent Limitations	Monitoring Data (From January 2006 – To December 2009)

		30-Day Average	7-Day Average	Daily Maximum	Monthly Averages
pH	s.u		6.0-9.0		7.2-7.5
Biochemical Oxygen Demand (BOD)(5-day @ 20 °C)	mg/L	30	45	90	8.0
Total Suspended Solids (TSS)	mg/L	30	45	90	25
Oil and Grease	mg/L	25	40	75	13
Settleable Solids	mL/L	1.0	1.5	3.0	0.52
Turbidity	NTU	75	100	225	13
Total Coliform	MPN/ 100 mL	23[1]	--	2,400	10

[1] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological results for the last 7 days for which analyses have been completed, and the number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL.

Table F-2b. Historic Effluent Limitations for the Protection of Marine Aquatic Life, and Monitoring Data Discharge Point No. 001

Parameter	Units	Effluent Limitations			Monitoring Data (From January 2006 – To December 2009)		
		6-Month Median	Daily Maximum	Instantaneous Maximum	Highest 6-Month Median	Highest Daily Discharge	Highest Instantaneous Discharge
Arsenic	µg/L	470	2,700	7,200	1.2	1.2	1.2
Cadmium	µg/L	94	380	940	0.32	0.32	0.32
Chromium (VI)	µg/L	190	750	1,900	0.24	0.24	0.24
Copper	µg/L	96	940	2,600	11	11	11
Lead	µg/L	190	750	1,900	0.89	0.89	0.89
Mercury	µg/L	3.7	15	38	0.0178	0.0178	0.0178
Nickel	µg/L	470	1,900	4,700	22	22	22
Selenium	µg/L	1,400	5,600	14,000	8.8	8.8	8.8
Silver	µg/L	51	250	640	0.61	0.61	0.61
Zinc	µg/L	1,100	6,800	18,000	57	57	57
Cyanide	µg/L	94	380	940	8	8	8
Total Chlorine Residual	µg/L	190	750	5,600	34	40	40
Ammonia (expressed as N)	µg/L	56,000	230,000	560,000	430	32,500	32,500
Acute Toxicity	TU_a	--	3.1	--	--	0.41	--
Chronic Toxicity	TU_c	--	94	--	--	31.25	--

Parameter	Units	Effluent Limitations			Monitoring Data (From January 2006 – To December 2009)		
		6-Month Median	Daily Maximum	Instantaneous Maximum	Highest 6-Month Median	Highest Daily Discharge	Highest Instantaneous Discharge
Phenolic Compounds (non-chlorinated)	µg/L	2,800	11,000	28,000	142	142	142
Chlorinated Phenolics	µg/L	94	380	940	33	33	33
Endosulfan	µg/L	0.85	1.7	2.5	<0.001	<0.001	<0.001
Endrin	µg/L	0.19	0.38	0.56	0.017	0.017	0.017
HCH	µg/L	0.38	0.75	1.1	<0.004	<0.004	<0.004

Table F-2c. Historic Effluent Limitations for the Protection of Human Health, and Monitoring Data Discharge Point No. 001

Parameter	Units	Effluent Limitations	Monitoring Data (From January 2006 – To December 2009)
		30-Day Average	Highest 30-Day Average Discharge
Acrolein	µg/L	21,000	<1.9
Antimony	µg/L	110,000	5.7
Bis(2-chloroethoxy) methane	µg/L	410	<0.4
Bis(2-chloroisopropyl) ether	µg/L	110,000	<0.41
Chlorobenzene	µg/L	54,000	<0.071
Chromium (III)	µg/L	18,000,000	<0.0032
Di-n-butyl phthalate	µg/L	330,000	<0.66
Dichlorobenzenes	µg/L	480,000	<0.42
Diethyl Phthalate	µg/L	3,100,000	<0.45
Dimethyl Phthalate	µg/L	77,000,000	<0.43
4,6-dinitro-2-methylphenol	µg/L	21,000	<0.46
2,4-Dinitrophenol	µg/L	380	<2.3
Ethylbenze	µg/L	380,000	<0.089
Fluoranthene	µg/L	1,400	<0.16
Hexachlorocyclopentadiene	µg/L	5,400	<0.49
Nitrobenzene	µg/L	460	<0.37
Thallium	µg/L	190	1.5
Toluene	µg/L	8,000,000	<0.09
Tributyltin	µg/L	0.13	0.001
1,1,1-trichloroethane	µg/L	51,000,000	<0.067

Parameter	Units	Effluent Limitations	Monitoring Data (From January 2006 – To December 2009)
		30-Day Average	Highest 30-Day Average Discharge
Acrylonitrile	µg/L	9.4	<0.5
Aldrin	µg/L	0.0021	<0.0022
Benzene	µg/L	550	<0.11
Benzidine	µg/L	0.0065	<0.7
Beryllium	µg/L	3.1	0.094
Bis(2-chloroethyl) ether	µg/L	4.2	<0.51
Bis(2-ethylhexyl) Phthalate	µg/L	330	0.64
Carbon Tetrachloride	µg/L	85	<0.055
Chlordane	µg/L	0.0022	<0.001
Chlorodibromomethane	µg/L	810	35
Chloroform	µg/L	12,000	16
DDT	µg/L	0.016	<0.001
1,4-Dichlorobenzene	µg/L	1,700	<0.069
3,3'-Dichlorobenzidine	µg/L	0.76	<0.3
1,2-Dichloroethane	µg/L	2,600	<0.12
1,1-Dichloroethylene	µg/L	85	<0.079
Dichlorobromomethane	µg/L	580	37
Dichloromethane	µg/L	42,000	0.75
1,3-Dichloropropene	µg/L	840	<0.062
Dieldrin	µg/L	0.0038	<0.001
2,4-Dinitrotoluene	µg/L	240	<0.069
1,2-Diphenylhydrazine	µg/L	15	<0.35
Halomethanes	µg/L	12,000	88
Heptachlor	µg/L	0.0047	<0.001
Heptachlor Epoxide	µg/L	0.0019	<0.001
Hexchlorobenzene	µg/L	0.020	<0.15
Hexachlorobutadiene	µg/L	1,300	<0.37
Hexachloroethane	µg/L	240	<0.36
Isophorone	µg/L	69,000	<0.33
N-nitrosodimethylamine	µg/L	690	<0.36
N-nitrosodi-N-propylamine	µg/L	36	<0.41
N-nitrosodiphenylamine	µg/L	240	<0.23
PAHs	µg/L	0.83	<0.09
PCBs	µg/L	0.0018	<0.05

Parameter	Units	Effluent Limitations	Monitoring Data (From January 2006 – To December 2009)
		30-Day Average	Highest 30-Day Average Discharge
TCDD Equivalents	µg/L	0.00000037	<0.0000077
1,1,2,2-Tetrachloroethane	µg/L	220	<0.19
Tetrachloroethylene	µg/L	190	<0.086
Toxaphene	µg/L	0.020	<0.01
Trichloroethylene	µg/L	2,500	<0.097
1,1,2-Trichloroethane	µg/L	880	<0.011
2,4,6-Trichlorophenol	µg/L	27	<0.47
Vinyl chloride	µg/L	3,400	<0.077

D. Compliance Summary

1. The following effluent limitation exceedances were observed in self monitoring data for the Discharger from January 2006 to December 2009:

Table F-3. Summary of Compliance History

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
8/13/2006	3rd Quarter 2006	7-Day Average	Total Suspended Solids	54	45	mg/L
8/14/2006[1]	3rd Quarter 2006	7-Day Average	Total Suspended Solids	82[1]	45	mg/L
8/15/2006	3rd Quarter 2006	7-Day Average	Total Suspended Solids	77	45	mg/L
8/15/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	36[1]	30	mg/L
8/18/2006	3rd Quarter 2006	7-Day Average	Total Suspended Solids	72	45	mg/L
8/18/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	39[1]	30	mg/L
8/18/2006[1]	3rd Quarter 2006	7-Day Average	Total Suspended Solids	962[1]	940	lbs/day
8/19/2006	3rd Quarter 2006	7-Day Average	Total Suspended Solids	57	45	mg/L
8/21/2006[1]	3rd Quarter 2006	7-Day Average	Total Suspended Solids	49[1]	45	mg/L
8/22/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	40[1]	30	mg/L
8/23/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	36[1]	30	mg/L
8/24/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	33[1]	30	mg/L
8/25/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	32[1]	30	mg/L
8/27/2006[1]	3rd Quarter 2006	30-Day Average	Total Suspended Solids	30.2[1]	30	mg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
10/5/2008	4th Quarter 2008	Total Coliform Maximum	Total Coliform	2,800	2,300	MPN/100 mL

[1] Violations caused by single operational upset. Discharger met all conditions for exemption from MMP according to California Water Code section 13385(f)(2).

Central Coast Water Board staff considers the facility to be well run and in compliance with the NPDES permit. An Expedited Payment Letter/ACL SWB-2008-3-0003 assessed $9,000 for three Minimum Mandatory Penalty (MMP) violations from August 2006. There are no outstanding violations warranting further MMPs and Central Coast Water Board staff does not recommend further action regarding these violations.

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (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 WDR 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 Central Coast Regional Water Quality Control Board (Central Coast Water Board) has adopted a *Water Quality Control Plan for the Central Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan), which was adopted in 1972 and amended in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The most recent amendment to the Ocean Plan was adopted by the State Water Resources Control Board (the State Water Board) on April 21, 2005 and became effective on February 14, 2006.

   The Basin Plan implements 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 (MUN). Because of very high levels of total dissolved solids (TDS) in the Pacific Ocean, the receiving waters for discharges from the Facility meet an exception to Resolution No. 88-63, which precludes waters with TDS levels greater than 3,000 mg/L from the MUN designation. Beneficial uses established by the Basin Plan and the Ocean Plan for the Pacific Ocean are described in section II.H and II.I of the Order.

Requirements of this Order implement the Basin Plan and Ocean Plan.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of 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 the following temperature objective for existing discharges to enclosed bays and coastal waters of California.

   Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.

   The Ocean Plan defines elevated temperature wastes as:

   Liquid, solid, or gaseous material discharged at a temperature higher than the natural temperature of receiving water.

3. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21. 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the Pacific Ocean.

4. **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.

5. **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 Central Coast Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

6. **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.

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 Central Coast Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations for non-point sources.

The USEPA approved the State's 2006 303(d) list of impaired water bodies on June 28, 2007. Certain receiving waters in Santa Barbara County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development. The 2006 State Water Board's California 303(d) List classifies the Pacific Ocean at the Carpinteria State Beach that is the receiving water of the Facility's discharge as impaired. The pollutants of concern include fecal and total coliform. A TMDL is developed for the pollutants of concern in a 303(d) listed waterbody to facilitate the waterbody's recovery of its ability to fully support its beneficial uses. To date, no TMDL's have been developed for the Pacific Ocean at the Carpinteria State Beach. As such, this Order establishes an effluent limitation for total coliform and receiving water limitations for total and fecal coliform based on applicable water quality objectives.

E. Other Plans, Polices and Regulations

1. **Storm Water Management.** Storm water runoff due to rainfall which falls upon the Facility and which may be exposed to on-site pollutant sources is routed to the Facility's headworks for treatment. This Order regulates all storm water discharges at the Facility and complies with Federal regulations for storm water management [40 CFR Parts 122, 123, and 124] , and therefore this facility is exempt from coverage under the State's Water Quality Order No. 97-03-DWQ, *NPDES General Permit for Discharges of Storm water Associated with Industrial Activities.*

2. **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 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 General Permit requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals; an organizational description;

legal authority; an operations and maintenance program; design and performance provisions; an overflow emergency response plan; a fats, oils, and greases (FOG) control program; a systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the General Permit requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General Permit. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination. Carpinteria Sanitary District filed a complete application package to the State Water Board dated July 11, 2006, and obtained full enrollment status on August 18, 2006 (Waste Discharge Identification No. 3 SSO 10245).

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.

A. Discharge Prohibitions

1. Discharge Prohibition III.A (Discharge to the Pacific Ocean at a location other than as described by the Order at 34° 23' 18" N. Latitude, 119° 13' 18" W. Longitude is prohibited). This prohibition is retained from the previous permit.

2. Discharge Prohibition III.B (Discharges in a manner, except as described by the Order, are prohibited). Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by to the Central Coast Water Board during the process of permit reissuance.

3. Discharge Prohibition III.C (Discharges of radiological, chemical, or biological warfare agent or high level radioactive waste to the Ocean is prohibited). This prohibition restates a discharge prohibition established in section III. H of the Ocean Plan.

4. Discharge Prohibition III.D (Federal law prohibits the discharge of sludge by pipeline the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.) This prohibition reflects the prohibition in section III.H of the Ocean Plan.

5. Discharge Prohibition III.E (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.

6. Discharge Prohibition III.G (Materials and substances that are prohibited). This prohibition is based on the requirements of the Ocean Plan.

B. Technology-Based Effluent Limitations

1. Scope and Authority

NPDES regulations at 40 CFR 122.44 (a) require that permits include applicable technology-based limitations and standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402 (a) (1) and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

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. A daily maximum effluent limitation for BOD and TSS is also included in the Order for the secondary treated wastewater to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. In addition, 40 CFR 133.102, 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.

The technology-based effluent limitations established for secondary treated wastewater in 40 CFR 133 are applicable to the wastewater discharged from the Facility.

b. **pH.** Federal Regulations, 40 CFR 133, also establish technology-based effluent limitations for pH for secondary treated wastewater. 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.

The technology-based effluent limitations established for secondary treated wastewater in 40 CFR 133 are applicable to the wastewater discharged from the Facility.

c. **Flow.** The Facility was designed to provide a secondary level of treatment for up to an average dry weather design flow of 2.5 MGD. Therefore, this Order contains an average monthly discharge flow effluent limit of 2.5 MGD for the Facility.

d. Table A of the Ocean Plan establishes technology-based requirements, applicable to POTWs and industrial discharges for which Effluent Limitations Guidelines (ELGs) have not been established. The Table A Ocean Plan effluent limitations are summarized below:

Table F-4. Table A Effluent Limitations

Parameter	Units	Monthly Average	Weekly Average	Instantaneous Maximum
Grease and Oil	mg/L	25	40	75
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	7.5	100	230

Table A of the Ocean Plan establishes effluent limitations for pH, which require pH to be within 6.0 and 9.0 pH units at all times. Further, Table A establishes a 75 percent minimum removal requirement for suspended solids, unless the effluent limitation is less than 60 mg/L. However, as discussed in section IV.B.1.a above, a percent removal of 85% is required for the secondary treated wastewater from the Facility. Therefore, this Order establishes effluent limitations for TSS and BOD based on secondary treatment standards in 40 CFR 133.

2. 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 water.

Mass-based effluent limitations were calculated based upon the permitted average daily discharge flow of the POTW of 2.5 MGD.

The following tables summarize technology-based effluent limitations established by the Order.

Table F-5. Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
pH	pH units	6.0 – 9.0 at all times		
BOD[1]	mg/L	30	45	90
	lbs/day[2]	630	940	1,900
Oil & Grease	mg/L	25	40	75
	lbs/day[2]	520	830	1,600
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTUs	75	100	230
TSS[1]	mg/L	30	45	90
	lbs/day[2]	630	940	1,900

[1] The average monthly percent removal of BOD and TSS shall not be less than 85 percent.

[2] The mass emissions rate is based on a maximum flow of 2.5 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

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 and Ocean Plans, and achieve applicable water quality objectives 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 Ocean Plan.

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 Criteria and Objectives

Beneficial uses for ocean waters of the Central Coast Region are established by the Basin Plan and Ocean Plan and are described by sections II.H and II.I of this Order.

Water quality criteria applicable to ocean waters of the Region are established by the Ocean Plan, which includes water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The water quality objectives from the Ocean Plan are incorporated as receiving water limitations into this Order. In addition, Table B of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR 122.44 (d) (1), and in accordance with procedures established by the Ocean Plan (2005), the Central Coast Water Board has performed a reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table B toxic pollutants.

3. Determining the Need for WQBELs

Procedures for performing a Reasonable Potential Analysis (RPA) for ocean dischargers are described in section III.C. and Appendix VI of the Ocean Plan. In general, the procedure is a statistical method that projects an effluent data set while taking into account the averaging period of water quality objectives, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set, and compares the 95th percentile concentration at 95 percent confidence of each Table B pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three following endpoints.

Endpoint 1 – There is "reasonable potential." An effluent limitation must be developed for the pollutant. Effluent monitoring for the pollutant, consistent with the monitoring frequency in Appendix III (Ocean Plan), is required.

Endpoint 2 - There is no "reasonable potential." An effluent limitation is not required for the pollutant. Appendix III (Ocean Plan) effluent monitoring is not required for the pollutant; the Regional Board, however, may require occasional monitoring for the pollutant or for whole effluent toxicity as appropriate.

Endpoint 3 - The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in Appendix III (Ocean Plan), is required. An existing effluent limitation for the pollutant shall remain in the permit, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the

reasonable potential to cause, or contribute to an excursion above a Table B water quality objective.

The State Water Resources Control Board has developed a reasonable potential calculator, which is available at:

http://www.waterboards.ca.gov/plnspols/docs/oplans/rpcalc.zip.

The calculator (RPcalc 2.0) was used in the development of this Order and considers several pathways in the determination of reasonable potential.

a. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Central Coast Water Board may decide that WQBELs are necessary after a review of such information. Such information may include: the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303 (d) status of the receiving water, or the presence of threatened or endangered species or their critical habitat, or other information.

b. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

c. Third Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the ML), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95^{th} percentile concentration is determined at 95 percent confidence for each pollutant, and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed lognormally. If the 95^{th} percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

(1) If the number of censored values (those expressed as a "less than" value) account for less than 80 percent of the total number of effluent values,

calculate the M_L (the mean of the natural log of transformed data) and S_L (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.

(2) If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described below for the Fifth Path. (A non-parametric analysis becomes necessary when the effluent data is limited, and no assumptions can be made regarding its possible distribution.)

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than three detected and quantified values, or when the effluent data set contains three or more detected and quantified values but the number of censored values accounts for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective, and accounting for ties. The sample number is reduced by one for each tie, when the dilution-adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limits in the expiring permit are retained.

For the subject facility, an RPA was conducted using effluent data compiled from monitoring events between January 2006 and December 2009. The following tables present results of the RPA, performed in accordance with procedures described by the Ocean Plan for the Carpinteria Sanitary District Wastewater Treatment Facility. The RPA endpoint for each Table B pollutant is identified. Where RPA Endpoint 1 resulted, reasonable potential to exceed water quality objectives has been determined and effluent limitations must be established in the Order.

Where Endpoint 2 resulted, reasonable potential does not exist. Endpoint 2 was concluded for ammonia, total residual chlorine, chlorinated phenolics, non-chlorinated phenolics, copper, cyanide, mercury, nickel, zinc, and dichlorobromomethane.

Step 13 of the Appendix VI of the Ocean Plan allows for reasonable potential to be determined based on other available information. Because the Facility chlorinates the effluent prior to discharge, the effluent limitation for total residual chlorine has been retained, despite RPA steps 1 through 12 resulting in Endpoint 2.

As shown in the following tables, the RPA commonly lead to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as ND (not detected). In these circumstances, the Central Coast Water

Board concludes that additional monitoring will be required for those pollutants during the term of the reissued permit and existing effluent limits will be retained.

Table F-6. RPA Results for Discharges of Secondary Effluent

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment
Objectives for Protection of Marine Aquatic Life[3]					
Acute Toxicity (as TU_a)	0.3	12	11	0.41	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Ammonia (as N)	600	48	0	32.5	Endpoint 2 – Effluent limitation not required.
Arsenic, Total Recoverable	8	4	3	1.2	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Cadmium, Total Recoverable	1	4	2	0.32	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorinated Phenolics	1	15	7	32.9	Endpoint 2 – Effluent limitation not required.
Chlorine, Total Residual	2	38	0	0.07	Endpoint 2 – Effluent limitation not required.
Chromium (VI)	2	5	3	0.24	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chronic Toxicity (as TUc)	1	8	1	>31.25	Endpoint 1 – Effluent limitation required.
Copper, Total Recoverable	3	4	0	10.8	Endpoint 2 – Effluent limitation not required.
Cyanide, Total (as CN)	1	4	0	8	Endpoint 2 – Effluent limitation not required.
Endosulfan (total)	0.009	4	4	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Endrin	0.002	4	3	0.0172	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
HCH	0.004	4	1	0.0394	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Lead, Total Recoverable	2	4	2	0.89	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Mercury, Total Recoverable	0.04	4	1	0.0178	Endpoint 2 – Effluent limitation not required.
Nickel, Total Recoverable	5.0	4	1	21.6	Endpoint 2 – Effluent limitation not required.
Non-chlorinated Phenolics	30	16	3	142	Endpoint 2 – Effluent limitation not required.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment
Selenium, Total Recoverable	15	4	2	8.8	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Silver, Total Recoverable	0.7	4	3	0.61	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Zinc, Total Recoverable	20	4	0	56.9	Endpoint 2 – Effluent limitation not required.
Objectives for Protection of Human Health – Noncarcinogens					
1,1,1-Trichloroethane	540,000	4	4	<0.067	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrophenol	4.0	3	3	<2.3	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2-Methyl-4,6-Dinitrophenol	220	3	3	<0.46	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrolein	220	4	4	<1.9	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Antimony	1200	4	2	5.7	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethoxy)Methane	4.4	4	4	<0.4	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroisopropyl)Ether	1200	4	4	<0.41	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorobenzene	570	4	4	<0.071	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (III)	190,000	3	3	<0.0032	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dichlorobenzenes	5100	3	3	<0.42	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Diethyl Phthalate	33,000	3	3	<0.45	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dimethyl Phthalate	820,000	3	3	<0.43	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Di-n-Butyl Phthalate	3,500	3	3	<0.66	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment
Ethylbenzene	4,100	4	4	<0.089	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Fluoranthene	15	4	4	<0.16	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorocyclo-pentadiene	58	4	4	<0.49	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Nitrobenzene	4.9	4	4	<0.37	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Thallium	2	4	3	1.51	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toluene	85,000	4	4	<0.09	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tributylin	0.0014	4	3	0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Objectives for Protection of Human Health – Carcinogens					
1,1,2,2-Tetrachloroethane	2.3	4	4	<0.19	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1,2-Trichloroethane	9.4	4	4	<0.011	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1-Dichloroethylene	0.9	3	3	<0.079	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Dichloroethane	28	3	3	<0.12	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Diphenylhydrazine	0.16	3	3	<0.35	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,3-Dichloropropylene	8.9	4	4	<0.062	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,4-Dichlorobenzene	18	3	3	<0.069	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
TCDD Equivalents	3.9×10^{-9}	4	4	<0.0000077	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4,6-Trichlorophenol	0.29	4	4	<0.47	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment
2,4-Dinitrotoluene	2.6	3	3	<0.069	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
3,3'-Dichlorobenzidine	0.0081	3	3	<0.3	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrylonitrile	0.10	4	4	<0.5	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Aldrin	2.2E-5	4	4	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzene	5.9	4	4	<0.11	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzidine	6.9E-5	3	3	<0.7	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Beryllium	0.033	3	2	0.094	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethyl)Ether	0.045	2	2	<0.51	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Ethylhexyl)Phthalate	3.5	3	2	0.64	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Carbon Tetrachloride	0.90	3	3	<0.055	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlordane	2.3E-5	7	6	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorodibromomethane	8.6	3	1	35.2	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chloroform	130	3	1	15.7	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
DDT (total)	0.00017	5	5	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dichlorobromomethane	6.2	3	0	37	Endpoint 2 – Effluent limitation not required.
Dieldrin	0.00004	3	3	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Halomethanes	130	3	2	88.41	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment
Heptachlor	0.00005	4	4	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor Epoxide	0.00002	4	4	<0.001	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobenzene	0.00021	4	4	<0.15	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobutadiene	14	4	4	<0.37	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachloroethane	2.5	4	4	<0.36	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Isophorone	730	4	4	<0.33	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Methylene Chloride	450	3	2	0.75	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodimethylamine	7.3	4	4	<0.36	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodi-n-Propylamine	0.38	4	4	<0.41	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodiphenylamine	2.5	4	4	<0.23	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PAHs (total)	0.0088	3	3	<0.09	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PCBs	1.9E-5	4	4	<0.05	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tetrachloroethylene	2.0	4	4	<0.086	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toxaphene	0.00021	4	4	<0.01	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Trichloroethylene	27	4	4	<0.097	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Vinyl Chloride	36	4	4	<0.077	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)[1],[2]	RPA Result, Comment

[1] If there is a detected value, the highest, undiluted reported effluent concentration is summarized in the table. If there are no detected values, the lowest MDL is summarized in the table. All reasonable potential analyses were conducted accounting for a minimum possible dilution of 93:1.

[2] Effluent data used for this RPA were collected from January 2006 to December 2009.

Body contact water recreation is a beneficial use of the receiving water. Coliform limits are imposed to protect the beneficial uses of the receiving water, including public health through contact recreation. In a letter to the Central Coast Water Board dated 8 April 1999, the California Department of Public Health (DPH) indicated that DPH would consider wastewater discharged to water bodies with identified beneficial uses of irrigation or contact recreation and where the wastewater receives dilution of more than 20: 1 to be adequately disinfected if the effluent coliform concentration does not exceed 23 MPN/100 mL as a 7-day median and if the effluent coliform concentration does not exceed 240 MPN/10 mL more than once in any 30 day period. The Facility is capable of achieving a minimum initial dilution ration of 93:1. Therefore, a 23 MPN/100 mL limitation is found to be appropriate. Further, the previous Order established an instantaneous maximum effluent limitation for total coliform of 2,300 MPN/100 mL. These effluent limitations are established as WQBELs in this Order.

4. WQBEL Calculations

Based on results of the RPA, performed in accordance with methods of the Ocean Plan for discharges to the Pacific Ocean, the Central Coast Water Board is establishing WQBELs for chronic toxicity. As described by Section III. C of the Ocean Plan, effluent limits for Table B pollutants are calculated according to the following equation.

$$Ce = Co + Dm (Co - Cs)$$

Where ...

Ce = the effluent limitation (µg/L)

Co = the concentration (the water quality objective) to be met at the completion of initial dilution (µg/L).

Cs = background seawater concentration (µg/L)

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 93)

For the Carpinteria Sanitary District Wastewater Treatment Plant, the Dm of 93 is unchanged from Order No. R3-2005-0110. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. As site-specific water quality data is not available, in

accordance with Table B implementing procedures, Cs equals zero for all pollutants, except the following.

Table F-7. Background Concentrations (Cs) - Ocean Plan (Table C)

Pollutant	Background Seawater Concentration
Arsenic	3 µg/L
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

For all other Table B parameters, Cs=0

Using the equation, Ce = Co + Dm (Co – Cs), effluent limitations are calculated as follows (effluent limitations for arsenic and chronic toxicity are shown here for example only). Calculated effluent limitations for Table B pollutants are shown in section IV. A. 2. of the Order.

Arsenic

Ce = 8 + 93 (8 – 3) = 473 µg/L (6-Month Median)
Ce = 32 + 93 (32 – 3) = 2,822 µg/L (Daily Maximum)
Ce = 80 + 93 (80 – 3) = 7,241 µg/L (Instantaneous Maximum)

Chronic Toxicity

Ce = 1 + 93 (1 - 0) = 94 TU_c (Daily Maximum)

According to the Ocean Plan section III.C.4.b, the mixing zone for the acute toxicity shall be ten percent of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (zone of initial dilution). There is no vertical limitation on this zone. The effluent limitation for the acute toxicity objective shall be determined through the use of the following equation:

Ce = Ca + (0.1) Dm (Ca)

where:

Ca = the concentration (water quality objective) to be met at the edge of the acute mixing zone.

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 93)

Acute Toxicity

Ce = 0.3 + (0.1) (93) (0.3) = 3.1 TU_a (Daily Maximum)

5. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests - acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Central Coast Water Board staff have determined that treated wastewater from the Facility has a reasonable potential to cause or contribute to acute and chronic toxicity in the discharge. Such a determination is consistent with the RPA procedure of the Ocean Plan which requires consideration of all available information, including the "potential toxic impact of the discharge" to determine if WQBELs are necessary, notwithstanding the statistical procedure with which the RPA is conducted for most pollutants. Because the cumulative effects of various pollutants present at low levels in the discharge are unknown, acute and chronic toxicity limitations are retained from the previous permit.

The Discharger is required to maintain a Toxicity Reduction Evaluation (TRE) workplan, which describes the steps that the Discharger intends to follow in the event that acute and/or chronic toxicity limitations are exceeded. When monitoring measures WET in the effluent above the limitations established by the Order, the Discharger must resample, if the discharge is continuing, and retest. The Water Board Executive Officer will then determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE or to implement other measures.

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 established by the previous permit for pH, BOD, TSS, oil and grease, settleable solids, and turbidity. The Order also retains effluent limitations from the previous permit for Table B pollutants for which reasonable potential was determined and where the results of the RPA were inconclusive. The Ocean Plan was amended in 2005 to include a procedure for determining "reasonable potential" by characterization of effluent monitoring data. The elimination of WQBELs for copper, cyanide, mercury, nickel, zinc, ammonia, phenolic compounds (chlorinated and non-chlorinated), and dichlorobromomethane is consistent with the exception to the CWA's anti-backsliding requirements expressed at section 402(0)(2)(B)(i) of the Act, which allows a reissued permit to include less stringent limitations when "information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or

test methods), and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. In these circumstances, less stringent limitations (here, the removal of elimination of limitations) are based on new data, which was generated during the term of previous permit, and which demonstrates no reasonable potential for discharges from the Facility to cause or contribute to exceedances of applicable water quality standards.

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. The Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise ensure 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 pH, BOD, oil and grease, settleable solids, turbidity, 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

a. The following technology-based effluent limitations are applicable to the discharge of secondary treated wastewater from the Facility at Discharge Point No. 001.

Table F-8. Summary of Final Effluent Limitations for Major Constituents and Properties of Wastewater for Discharge Point No. 001

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
pH	s.u.	6.0 – 9.0 at all times		
Biochemical Oxygen Demand (5-day @ 20°C) (BOD)[1]	mg/L	30	45	90
	lbs/day	630	940	1,900
TSS[1]	mg/L	30	45	90
	lbs/day	630	940	1,900
Oil & Grease	mg/L	25	40	75[2]
	lbs/day	520	830	1,600
Settleable Solids	mL/L	1.0	1.5	3.0[2]
Turbidity	NTUs	75	100	225[2]
Total Coliform[3]	MPN/100 mL	23	--	2,300[2]

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

[2] Applied as an instantaneous maximum.

[3] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological result for the last 7 days for which have been completed. The number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL.

b. The following water quality-based effluent limitations are applicable to the discharge of secondary treated wastewater from the Facility at Discharge Point No. 001.

Table F-9a. Summary of Final Effluent Limitations for the Protection of Marine Aquatic Life for Discharge Point No. 001

Pollutant	Unit	6-Month Median [1]	Daily Maximum [2]	Instantaneous Maximum [3]
Arsenic, Total Recoverable	µg/L	470	2700	7,200
	lbs/day	9.9	57	150
Cadmium, Total Recoverable	µg/L	94	380	940
	lbs/day	2.0	7.8	20
Chromium (Hexavalent)[4]	µg/L	190	750	1,900
	lbs/day	3.9	16	39
Lead, Total Recoverable	µg/L	190	750	1,900
	lbs/day	3.9	16	39
Selenium, Total Recoverable	µg/L	1,400	5,600	14,000
	lbs/day	29	120	290
Silver, Total Recoverable	µg/L	51	250	640
	lbs/day	1.1	5.2	13
Total Chlorine Residual	µg/L	190	750	5,600
	lbs/day	3.9	16	120
Endosulfan[5]	µg/L	0.85	1.7	2.5
	lbs/day	0.018	0.035	0.0530
Endrin	µg/L	0.19	0.38	0.56
	lbs/day	0.0039	0.0078	0.012
HCH[6]	µg/L	0.38	0.75	1.1
	lbs/day	0.0078	0.016	0.024
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
Acute Toxicity[7]	TU_a	--	3.1	--
Chronic Toxicity [8]	TU_c	--	94	--

[1] The average monthly percent removal of BOD and TSS shall not be less than 85 percent.

[2] The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[3] The daily maximum shall apply to flow weighted 24-hour composite samples. The daily

maximum mass emission shall be determined using the daily maximum effluent concentration limit as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[4] Dischargers may, at their option, meet this limitation as a total chromium objective.

[5] Endosulfan shall mean the sum of endosulfan-alpha and –beta and endosulfan sulfate.

[6] HCH shall mean the sum of alpha, beta, gamma (Lindane) and delta isomers of hexachlorocyclohexane.

[7] Acute Toxicity – Expressed in Toxic Units Acute (TU_a). As defined in section V.A of the MRP (Attachment E).

[8] Chronic Toxicity – Expressed in Toxic Units Chronic (TU_c). As defined in section V.B of the MRP (Attachment E).

Table F-9b. Summary of Final Effluent Limitations for the Protection of Human Health for Discharge Point No. 001

Pollutant	Unit	30-day Average
Acrolein	µg/L	2.1×10^4
	lbs/day	430
Antimony	µg/L	1.1×10^5
	lbs/day	2,400
Bis(2-chloroethoxy)methane	µg/L	410
	lbs/day	8.6
Bis(2-chloroisopropyl)ether	µg/L	1.1×10^5
	lbs/day	2,400
Chlorobenzene	µg/L	5.4×10^4
	lbs/day	1,100
Chromium (III)	µg/L	1.8×10^7
	lbs/day	370,000
di-n-butyl phthalate	µg/L	3.3×10^5
	lbs/day	6,900
Dichlorobenzenes	µg/L	4.8×10^5
	lbs/day	10,000
Diethyl phthalate	µg/L	3.1×10^6
	lbs/day	65,000
Dimethyl phthalate	µg/L	7.7×10^7
	lbs/day	1.6×10^6
4,6-dinitro-2-methylphenol	µg/L	2.1×10^4
	lbs/day	430
2,4-dinitrophenol	µg/L	380
	lbs/day	7.8
Ethylbenzene	µg/L	3.8×10^5
	lbs/day	8.0×10^3
Fluoranthene	µg/L	1.4×10^3
	lbs/day	29
Hexachlorocyclopentadiene	µg/L	5.4×10^3
	lbs/day	110

Pollutant	Unit	30-day Average
Nitrobenzene	µg/L	460
	lbs/day	9.6
Thallium	µg/L	190
	lbs/day	3.9
Toluene	µg/L	8.0×10^{6}
	lbs/day	1.7×10^{5}
Tributyltin	µg/L	0.13
	lbs/day	0.0027
1,1,1-trichloroethane	µg/L	5.1×10^{7}
	lbs/day	1.1×10^{6}
Acrylonitrile	µg/L	9.4
	lbs/day	0.20
Aldrin	µg/L	2.1×10^{-3}
	lbs/day	4.3×10^{-5}
Benzene	µg/L	550
	lbs/day	12
Benzidine	µg/L	6.5×10^{-3}
	lbs/day	1.4×10^{-4}
Beryllium	µg/L	3.1
	lbs/day	0.065
Bis(2-chloroethyl)ether	µg/L	4.2
	lbs/day	0.088
Bis(2-ethylhexyl)phthalate	µg/L	330
	lbs/day	6.9
Carbon tetrachloride	µg/L	85
	lbs/day	1.8
Chlordane[1]	µg/L	2.2×10^{-3}
	lbs/day	4.6×10^{-5}
Chlorodibromomethane	µg/L	810
	lbs/day	17
Chloroform	µg/L	1.2×10^{4}
	lbs/day	260
DDT[2]	µg/L	0.016
	lbs/day	3.3×10^{-4}
1,4-dichlorobenzene	µg/L	1.7×10^{3}
	lbs/day	35
3,3'-dichlorobenzidine	µg/L	0.76
	lbs/day	0.016
1,2-dichloroethane	µg/L	2.6×10^{3}
	lbs/day	55
1,1-dichloroethylene	µg/L	85
	lbs/day	1.8
Dichloromethane	µg/L	4.2×10^{4}

Pollutant	Unit	30-day Average
	lbs/day	880
1,3-dichloropropene	µg/L	840
	lbs/day	17
Dieldrin	µg/L	3.8×10^{-3}
	lbs/day	7.8×10^{-5}
2,4-dinitrotoluene	µg/L	240
	lbs/day	5.1
1,2-diphenylhydrazine	µg/L	15
	lbs/day	0.31
Halomethanes[3]	µg/L	1.2×10^{4}
	lbs/day	260
Heptachlor	µg/L	4.7×10^{-3}
	lbs/day	9.8×10^{-5}
Heptachlor Epoxide	µg/L	1.9×10^{-3}
	lbs/day	3.9×10^{-5}
Hexachlorobenzene	µg/L	0.020
	lbs/day	4.1×10^{-4}
Hexachlorobutadiene	µg/L	1.3×10^{3}
	lbs/day	27
Hexachloroethane	µg/L	240
	lbs/day	4.9
Isophorone	µg/L	6.9×10^{4}
	lbs/day	1.4×10^{3}
N-nitrosodimethylamine	µg/L	690
	lbs/day	14
N-nitrosodi-N-propylamine	µg/L	36
	lbs/day	0.74
N-nitrosodiphenylamine	µg/L	240
	lbs/day	4.9
PAHs[4]	µg/L	0.83
	lbs/day	0.017
PCBs[5]	µg/L	1.8×10^{-3}
	lbs/day	3.7×10^{-5}
TCDD equivalents[6]	µg/L	3.7×10^{-7}
	lbs/day	7.6×10^{-9}
1,1,2,2-tetrachloroethane	µg/L	220
	lbs/day	4.5
Tetrachloroethylene	µg/L	190
	lbs/day	3.9
Toxaphene	µg/L	0.020
	lbs/day	4.1×10^{-4}
Trichloroethylene	µg/L	2.5×10^{3}
	lbs/day	53

Pollutant	Unit	30-day Average
1,1,2-trichloroethane	µg/L	880
	lbs/day	18
2,4,6-trichlorophenol	µg/L	27
	lbs/day	0.57
Vinyl chloride	µg/L	3.4×10^3
	lbs/day	70

[1] Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

[2] DDT shall mean the sum of 4,4'-DDT; 2,4'-DDT; 4,4'-DDE; 4,4'-DDD; and 2,4'-DDD.

[3] Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).

[4] PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo[k]fluoranthene; '1,12benzoperylene; benzo(a)pyrene; chrysene; dibenzo(a,h)anthracene; fluorine; indeno(1,2,3-cd)pyrene; phenanthrene; and pyrene.

[5] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[6] TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications

The Order does not address use of reclaimed wastewater except to require compliance with applicable State and local requirements regarding the production and use of reclaimed wastewater, including those requirements established by the Department of

Public Health at title 22, sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria.

V. RATIONALE FOR 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. Receiving water limitations within the proposed Order generally include the receiving water limitations of the previous Order; however these limitations have been supplemented and modified to reflect all applicable, general water quality objectives of the Ocean Plan (2005).

B. Groundwater

Groundwater limitations established by the Order include general objectives for groundwater established by the Basin Plan for the Central Coast Region.

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 Central Coast 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 percent and 85 percent removal requirement for those pollutants. Influent monitoring has been carried over from Order No. R3-2005-0110.

B. Effluent Monitoring

Effluent monitoring requirements from Order No. R3-2005-0110 for Discharge Point 001 are retained in this Order with the exception of the following exceptions:

1. Because chronic toxicity demonstrated reasonable potential to cause or contribute to downstream impairment, monitoring has been increased to quarterly for this parameter.

2. Phenolic compounds and chlorinated phenolics compounds did not show reasonable potential to cause or contribute to downstream impairment. Monitoring frequencies for each of these have been changed to once per year to be consistent with monitoring for all other Table B parameters.

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 and chronic toxicity and monitoring requirements for acute toxicity for Discharge Point No. 001. Monitoring requirements for chronic toxicity has been increased to 1/quarter based on chronic toxicity showing reasonable potential to cause or contribute to downstream impairment.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is carried over from Order No. R3-2005-0110 as necessary to determine compliance with receiving water limitations and for the protection of public health. Benthic sediment and benthic biota monitoring of the receiving water has been established in the Order to establish a baseline of the current conditions surrounding the diffuser for future permitting efforts.

2. Groundwater - Not Applicable

E. Other Monitoring Requirements

1. Biosolids/Sludge Monitoring.

Biosolids monitoring requirements are retained from Order No. R3-2005-0110 and are consistent with the requirements of 40 CFR 503.

2. Rainfall Monitoring.

The Order retains the requirement of Order No. R3-2005-0110 to report daily rainfall totals alongside Facility flow measurement to facilitate the evaluation of the influence of inflow and infiltration on wastewater flows received at the Facility.

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 CFR123.25, 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 U.S. EPA. 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 requirement to perform a Toxicity Reduction Evaluation, if the acute and chronic toxicity limit is exceeded, is retained from Order No. R3-2005-0110. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitation established by the Order, the Discharger is required to resample and retest, if the discharge is continuing. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or whether other measures are warranted.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The 2005 Ocean Plan established guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order, no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a program becomes necessary. The 2005 Ocean Plan PMP language is included to provide guidance in the event that a PMP must be developed and implemented by the Discharger.

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

Provisions regarding sludge handling and disposal ensure that such activity will comply with all applicable regulations.

40 CFR Part 503 sets forth USEPA's final rule for the use and disposal of biosolids, or sewage sludge, and governs the final use or disposal of biosolids. The intent of this federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.

USEPA's regulations require that producers of sewage sludge meet certain reporting, handling, and disposal requirements. As the USEPA has not delegated the authority to implement the sludge program to the State of California, the enforcement of sludge requirements that apply to the Discharger remains under USEPA's jurisdiction at this time. USEPA, not the Central Coast Water Board, will oversee compliance with 40 CFR Part 503.

40 CFR Part 503.4 (Relationship to other regulations) states that the disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2, that complies with the requirements in 40 CFR 258 constitutes compliance with section 405 (d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit must ensure that the sewage sludge meets the applicable requirements of 40 CFR 503.

b. Pretreatment Program

Pretreatment requirements for POTWs are contained within 40 CFR Part 403. Per 40 CFR 403.8, any POTW or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards will be required to establish a POTW pretreatment program. The Discharger is not required to develop a pretreatment program at this time because its design flow is less than 5 MGD (design flow = 2.5 MGD).

The Central Coast Water Board may require that a POTW with a design flow less of 5 MGD or less develop a pretreatment program if the Central Coast Water Board finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent interference with the POTW or pass through. The Central Coast Water Board has no information indicating these conditions exist at the Facility, and therefore does not require the Discharger to develop a pretreatment program.

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 applicable 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. All storm water from the District's WWTP is returned to the headworks and the District is not subject to the Storm Water General Permit.

b. Sanitary Sewer System Requirements

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.

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The Central Coast Regional Water Quality Control Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Carpinteria Sanitary District Wastewater Treatment Facility. As a step in the WDR adoption process, the Central Coast Water Board staff has developed tentative WDRs. The Central Coast Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. The Notice of Public Hearing, which indicates the availability of the Draft Waste Discharge Requirements and describes the public comment procedures, was published in the Coastal View News on October 28, 2010 and November 4, 2010. Coastal View News is printed and published weekly in the County of Santa Barbara, and has been adjudged a newspaper of general circulation by the Superior Court of the County of Santa Barbara (Case Number 21046). The Notice of Public Hearing was publicly posted at the Carpinteria Sanitary District administrative office, located at 5300 Sixth Street in Carpinteria and uploaded to the District's web page at www.carpsan.com. The Notice was also publicly posted at the City Hall office of the City of Carpinteria.

B. Written Comments

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

To receive a full response from the Central Coast Water Board staff and to be considered by the Central Coast Water Board, written comments were to be received at the Central Coast Water Board offices by 5:00 p.m. December 9, 2010.

No written comments were received.

C. Public Hearing

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

Date: **February 3, 2011**
Time: **8:30 A.M.**
Location: **Central Coast Water Board**
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Interested persons are invited to attend. At the public hearing, the Central Coast 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 Central Coast Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Central Coast Water Board's action to the following address:

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

E. Information and Copying

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

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Peter von Langen at (805) 549-3688 or pvonlangen@waterboards.ca.gov.