



Regional Water Quality Control Board

Central Coast Region



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Arnold Schwarzenegger
Governor

ORDER NO. R3-2009-0047

NPDES NO. CA0048151

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF PISMO BEACH WASTEWATER TREATMENT FACILITY

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

Table 1. Discharger Information

Discharger	City of Pismo Beach
Name of Facility	Wastewater Treatment Plant
Facility Address	550 Frady Lane
	Pismo Beach, CA 93449
	San Luis Obispo County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge.	

Discharges by the City of Pismo Beach 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 Wastewater	35°, 05', 85" N	120°, 38', 75" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	October 23, 2009
This Order shall become effective on:	October 23, 2009
This Order shall expire on:	October 23, 2014
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:	<u>180 days prior to the Order expiration date</u>

IT IS HEREBY ORDERED, that Order No. R3-2004-0051 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water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 October 23, 2009.

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	City of Pismo Beach
Name of Facility	Wastewater Treatment Plant
Facility Address	550 Frady Lane
	Pismo Beach, CA 93449
	San Luis Obispo County
Facility Contact, Title, and Phone	Stuart S. Stewart, Wastewater Systems Supervisor 805-773-7075
Mailing Address	760 Mattie Road, Pismo Beach, CA 93449
Type of Facility	POTW
Facility Design Flow	1.9 million gallons per day (MGD)

II. FINDINGS

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

A. Background. The City of Pismo Beach is currently discharging pursuant to Order No. R3-2004-0051 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048151. The Discharger submitted a complete Report of Waste Discharge, dated March 10, 2009, and applied for an NPDES permit renewal to discharge up to 1.9 MGD of treated wastewater from the City's Wastewater Treatment Plant.

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. Facility Description. The Discharger owns and operates a wastewater collection, treatment, and disposal system, which serves the City of Pismo Beach. During the term of Order No. R3-2004-0051, the City's treatment facility was upgraded to incorporate extended aeration using oxidation ditches, secondary clarification, chlorine disinfection, and dechlorination capability with a design flow of 1.9 MGD. Treated wastewater is discharged to the Pacific Ocean at a depth of approximately 55 feet through a 4,400 foot outfall/diffuser system, jointly owned by the Discharger and the South San Luis Obispo County Sanitation District. Up to 1.9 MGD of secondary treated wastewater is discharged by the City of Pismo Beach, which is combined with up to 5.0 MGD of effluent from the South San Luis Obispo County Sanitation District through the outfall/diffuser system. The diffuser provides a minimum initial dilution of approximately 165 to 1 (ocean water to effluent). The South San Luis Obispo County Sanitation District discharge is regulated under NPDES Permit No. CA00480003.

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). This Order 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 3000 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 Point San Luis and Point Sal are presented in Table 5, below.

Table 5. Basin Plan Beneficial Uses for the Pacific Ocean

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean (Pt San Luis to Pt Sal)	<ul style="list-style-type: none"> • Water Contact and Non-Contact Recreation • Industrial Service Supply • Navigation • Commercial and Sport Fishing • Marine Habitat • Shellfish Harvesting • Rare, Threatened, or Endangered Species • Wildlife Habitat

- I. California Ocean Plan.** The State Water Board adopted the *Ocean Plan* in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The *Ocean Plan* is applicable to point source discharges to the Ocean, and it identifies the following beneficial uses of ocean waters.

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Pacific Ocean	<ul style="list-style-type: none"> • Industrial Water Supply • Water Contact and Non-Contact Recreation, including Aesthetic Enjoyment • Navigation • Commercial and Sport Fishing • Mariculture • Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS) • 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 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 (BOD₅), total suspended solids (TSS), settleable solids, oil and grease, turbidity, and pH for Discharge Point 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. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Procedures for calculating individual WQBELs are based on the *Ocean Plan*, as approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the 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 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 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 specie 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.

III. DISCHARGE PROHIBITIONS

- A.** Discharge to the Pacific Ocean Bay at a location other than as described by this Order at 35°05'85"N. Latitude, 120°38'75"W. Longitude is prohibited.
- B.** Discharges of any waste in any manner other than as described by this Order are prohibited.
- C.** The average monthly rate of discharge to the Pacific Ocean shall not exceed 1.9 MGD.
- D.** Wastes shall not be discharged to State Water Quality Protection Areas, described as Areas of Special Biological Significance by the Ocean Plan (2005), except in accordance with Chapter III.E of the Ocean Plan.
- E.** The discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste to the Ocean is prohibited.
- F.** 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 or digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.

- G. 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.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. **Conventional Pollutants.** The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP.

Table 7. Effluent Limitations for Conventional Pollutants

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅	mg/L	30	45	90
	lbs/day	475	713	1,426
TSS	mg/L	30	45	90
	lbs/day	475	713	1,426
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
Oil & Grease	mg/L	25	40	75
	lbs/day	396	634	1,188
Fecal Coliform Bacteria	MPN/100 mL		200 ^[1]	2,000
pH	pH units	6.0 – 9.0 at all times		

^[1] 7-sample median

2. **Toxic Pollutants.** The Discharger shall maintain compliance with the following effluent limitations for toxic pollutants at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, as described in the attached MRP.

Table 8. Effluent Limitations for Toxic Pollutants

Pollutant	Unit	6-Month Median ^[1]	Daily Maximum ^[2]	Instantaneous Maximum ^[3]
Arsenic	mg/L	0.83	4.82	12.79
	lbs/day	13	76	203
Cadmium	mg/L	0.17	0.66	1.66
	lbs/day	2.6	11	26
Chromium (+6) ^[4]	mg/L	0.33	1.33	3.32
	lbs/day	5	21	53
Copper	mg/L	0.17	1.66	4.65
	lbs/day	2.66	26	74
Lead	mg/L	0.33	1.33	3.32
	lbs/day	5	21	53
Mercury	µg/L	6.56	26.48	66.32
	lbs/day	0.10	0.40	1.1
Nickel	mg/L	0.83	3.32	8.30

Pollutant	Unit	6-Month Median ^[1]	Daily Maximum ^[2]	Instantaneous Maximum ^[3]
	lbs/day	13	53	132
Selenium	mg/L	2.49	9.96	24.90
	lbs/day	39	158	395
Silver	mg/L	0.09	0.44	1.14
	lbs/day	1.4	7	18
Zinc	mg/L	2.00	11.96	31.88
	lbs/day	32	190	505
Cyanide ^[5]	mg/L	0.17	0.66	1.66
	lbs/day	2.6	11	26
Total Chlorine Residual	mg/L	0.33	1.33	9.96
	lbs/day	5	21	158
Ammonia (as N)	mg/L	99.6	398.4	996
	lbs/day	1578	6313	15783
Acute Toxicity ^{[6],[7]}	TUa	---	5.25	---
Chronic Toxicity ^{[7],[8]}	TUc	---	166	---
Non-chlorinated Phenolics	mg/L	4.98	19.92	49.80
	lbs/day	79	316	789
Chlorinated Phenolics	mg/L	0.17	0.66	1.66
	lbs/day	2.6	11	26
Endosulfan ^[9]	µg/L	1.49	2.99	4.48
	lbs/day	0.024	0.05	0.07
Endrin	µg/L	0.33	0.66	1.00
	lbs/day	0.005	0.011	0.016
HCH ^[10]	µg/L	0.66	1.33	1.99
	lbs/day	0.011	0.021	0.032
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.			

^[1] 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).

^[2] 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).

^[3] The instantaneous maximum shall apply to grab sample determinations.

^[4] The Discharger may, at its option, meet this limitation as total chromium.

^[5] If a Discharger can demonstrate to the satisfaction of the Regional water Board (subject to USEPA approval) that an analytical method is available method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.

^[6] The mixing zone for the Ocean Plan's Table B acute toxicity objective shall be ten percent (10%) 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. This acute toxicity effluent limitation takes this requirement into consideration and was derived using Equation No. 2 of the Ocean Plan.

[7] Acute Toxicity - Expressed in Toxic Units Acute (TUa)

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

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 the 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.

[8] 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.

Chronic Toxicity - Expressed as Toxic Units Chronic (TUc)

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

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 Appendix III.

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

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

Table 9. Effluent Limitations for the Protection of Human Health, Non-Carcinogens

Pollutant	Units	30-Day Average
Acrolein	mg/L	36.52
	lbs/day	579
Antimony	mg/L	199.2
	lbs/day	3157
Bis(2-Chloroethoxy)Methane	mg/L	0.73
	lbs/day	12
Bis(2-Chloroisopropyl)ether	mg/L	199.2
	lbs/day	3157
Chlorobenzene	mg/L	94.62
	lbs/day	1499
Chromium (+3)	g/L	31.54
	lbs/day	499783
Di-n-Butyl Phthalate	mg/L	581
	lbs/day	9207
Dichlorobenzenes ^[1]	mg/L	846.6
	lbs/day	13415
Diethyl Phthalate	g/L	5.478
	lbs/day	86804
Dimethyl Phthalate	g/L	136.12
	lbs/day	2156958
2-Methyl-4,6-Dinitrophenol	mg/L	36.52

Pollutant	Units	30-Day Average
	lbs/day	579
2,4-Dinitrophenol	mg/L	0.664
	lbs/day	11
Ethylbenzene	mg/L	680.6
	lbs/day	10785
Fluoranthene	mg/L	2.49
	lbs/day	39
Hexachlorocyclopentadiene	mg/L	9.628
	lbs/day	153
Nitrobenzene	mg/L	0.813
	lbs/day	13
Thallium	mg/L	0.332
	lbs/day	5
Toluene	g/L	14.11
	lbs/day	223587
Tributyltin	µg/L	0.23
	lbs/day	0.0037
1,1,1-Trichloroethane	g/L	89.64
	lbs/day	1420435

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

Table 10. Effluent Limitations for the Protection of Human Health, Carcinogens

Pollutant	Unit	30-Day Average
Acrylonitrile	µg/L	16.6
	lbs/day	0.26
Aldrin	ng/L	3.652
	lbs/day	0.00006
Benzene	µg/L	979.4
	lbs/day	16
Benzidine	ng/L	11.45
	lbs/day	0.00018
Beryllium	µg/L	5.478
	lbs/day	0.09
Bis(2-chloroethyl) ether	µg/L	7.47
	lbs/day	0.12
Bis(2-ethylhexyl) phthalate	µg/L	581
	lbs/day	9
Carbon Tetrachloride	µg/L	149.4
	lbs/day	0.24
Chlordane ^[1]	ng/L	3.818
	lbs/day	0.00006
Chlorodibromomethane	mg/L	1.428
	lbs/day	23
Chloroform	mg/L	21.58
	lbs/day	340

Pollutant	Unit	30-Day Average
DDT ^[2]	ng/L	28.22
	lbs/day	0.0004
1,4-Dichlorobenzene	mg/L	3.988
	lbs/day	47
3,3-Dichlorobenzidine	µg/L	1.345
	lbs/day	0.021
1,2-Dichloroethane	mg/L	4.648
	lbs/day	74
1,1-Dichloroethylene	µg/L	149.4
	lbs/day	2.4
Dichlorobromomethane	mg/L	1.029
	lbs/day	16
Dichloromethane	mg/L	74.7
	lbs/day	1184
1,3-Dichloropropene	mg/L	1.477
	lbs/day	23
Dieldrin	ng/L	6.64
	lbs/day	0.00011
2,4-Dinitrotoluene	µg/L	431.6
	lbs/day	7
1,2-Diphenylhydrazine	µg/L	26.56
	lbs/day	0.4
Halomethanes	mg/L	21.580
	lbs/day	342
Heptachlor	ng/L	8.3
	lbs/day	0.00013
Heptachlor Epoxide	ng/L	3.32
	lbs/day	0.00005
Hexachlorobenzene	ng/L	34.86
	lbs/day	0.0006
Hexachlorobutadiene	mg/L	2.324
	lbs/day	37
Hexachloroethane	µg/L	415
	lbs/day	6.6
Isophorone	mg/L	121.18
	lbs/day	1920
N-nitrosodimethylamine	mg/L	1.212
	lbs/day	19
N-nitrosdi-N-propylamine	µg/L	63.08
	lbs/day	1.0
N-nitrosodiphenylamine	µg/L	415
	lbs/day	7
PAHs ^[3]	µg/L	1.461
	lbs/day	0.023
PCBs ^[4]	ng/L	3.154

Pollutant	Unit	30-Day Average
	lbs/day	0.00005
TCDD Equivalents ^[5]	pg/L	0.6474
	lbs/day	0.00000001
1,1,2,2-Tetrachloroethane	µg/L	381.8
	lbs/day	6
Tetrachloroethylene	µg/L	332
	lbs/day	5
Toxaphene	ng/L	34.86
	lbs/day	0.006
Trichloroethylene	mg/L	4.482
	lbs/day	71
1,1,2-Trichloroethane	mg/L	1.56
	lbs/day	25
2,4,6-Trichlorophenol	µg/L	48.14
	lbs/day	0.76
Vinyl Chloride	mg/L	5.976
	lbs/day	95

^[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, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

^[3] 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.

^[4] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls with analytical characteristics resembling those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

^[5] TCDD equivalents shall mean the sum of 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

3. Percent Removal. The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.

4 Initial Dilution. The minimum initial dilution of treated effluent at the point of discharge to the Pacific Ocean shall not be less than 165 to 1 (seawater to effluent) at any time.

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. This section of the standardized permit is not applicable to the City of Pismo Beach.

C. Reclamation Specifications. If applicable, the Discharger shall comply with applicable State and local requirements regarding the production and use of reclaimed wastewater, including requirements established by the Department of Public Health at title 22, sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria.

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 designated for water contact recreation use by the Central Coast Water Board (i.e., waters designated as REC-1), 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 per 100 ml;
- b. Fecal coliform density shall not exceed 200 per 100 mL; and
- c. Enterococcus density shall not exceed 35 per 100 mL.

Single Sample maximum:

- a. Total coliform density shall not exceed 10,000 per 100 ml;
- b. Fecal coliform density shall not exceed 400 per 100 mL; and
- c. Enterococcus density shall not exceed 104 per 100 mL.
- d. Total coliform density shall not exceed 1,000 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 mLs, and in not more than 10 percent of samples shall coliform density exceed 230 organisms per 100 mLs.
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 as a result of the discharge of oxygen demanding waste material.
8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
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 II, 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:

- (1) Actions that will be taken to investigate/identify the causes/sources of toxicity,
- (2) 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
- (3) 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 Central Coast Water Board 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 USEPA'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 11. Toxicity Reduction Evaluation Schedule

Action Step	When Required
Take all reasonable measures 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, 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

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

(1) The Discharger shall develop and implement a Pollutant Minimization Program if:

- (i) A calculated effluent limitation is less than the reported Minimum Level,
- (ii) The concentration of the pollutant is reported as DNQ, and
- (iii) 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.

(2) Alternatively, the Discharger shall develop and implement a Pollutant Minimization Program if:

- (i) A calculated effluent limitation is less than the Method Detection Limit (MDL),
- (ii) The concentration of the pollutant is reported as ND, and
- (iii) 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.

- (1) An annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
- (2) Quarterly monitoring for the reportable pollutant in influent to the wastewater treatment system;
- (3) 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;
- (4) Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy;
- (5) An annual status report that shall be sent to the Executive Officer that includes:
 - (i) All Pollutant Minimization Program monitoring results for the previous year;
 - (ii) A list of potential sources of the reportable pollutant;
 - (iii) A summary of all actions taken in accordance with the control strategy; and
 - (iv) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications. This section of the standardized permit is not applicable to the City of Pismo Beach.

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.

- b. Pretreatment.** A Pretreatment Program is a regulatory program administered by the Discharger that implements National Pretreatment Standards. These standards are promulgated by the USEPA in accordance with Section 307(b) and (c) of the Federal Clean Water Act (CWA). This permit implements General Pretreatment Regulations of 40 CFR 403, latest revision.

The objective of the pretreatment program is to prevent the introduction of pollutants into the POTW which will interfere with the operation of the treatment works, pass through the treatment facility, reduce opportunities to recycle and reuse municipal wastewater and sludge, or expose POTW employees to hazardous chemicals.

In order to provide adequate legal authority for the Discharger to protect its POTW, and to evaluate sources of industrial discharges, the Discharger must perform the following pretreatment activities:

- (1) Maintain a sewer use ordinance to provide all of the legal authorities described in 40 CFR 403.8(f)(1).
- (2) By February 1, 2013, submit to this office the results of an updated industrial waste survey as described in 40 CFR 403.8(f)(2)(i)-(ii), and a report summarizing potential impacts of industrial discharges upon the POTW. The report must include an evaluation of the need for regulation of industrial discharges to implement the objectives of the federal pretreatment program.
- (3) If, in the evaluation of b.2. above, the Executive Officer determines that a formal pretreatment program is necessary to adequately meet program objectives, then the Discharger shall develop such a program in accordance with 40 CFR 403.9.^B
- (4) The Discharger shall comply, and ensure affected "indirect dischargers" comply, with Paragraph D.1. of "Standard Provisions and Reporting Requirements."

6. Other Special Provisions

- a. Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the

requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

- b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** This General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a 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. If applicable, the Discharger shall seek coverage under the General Permit and comply with its requirements.

- 7. 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 expressed in Toxic Units Acute (TUa) $TUa = \frac{100}{96\text{-hr } 50\%LC}$
- 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 expressed as Toxic Units Chronic (TUc) $TUc = \frac{100}{NOEL}$

- b. No Observed Effect Level (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 III.

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 one 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 Central Coast Water 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 Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional 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 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 Public Health 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 No.s 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

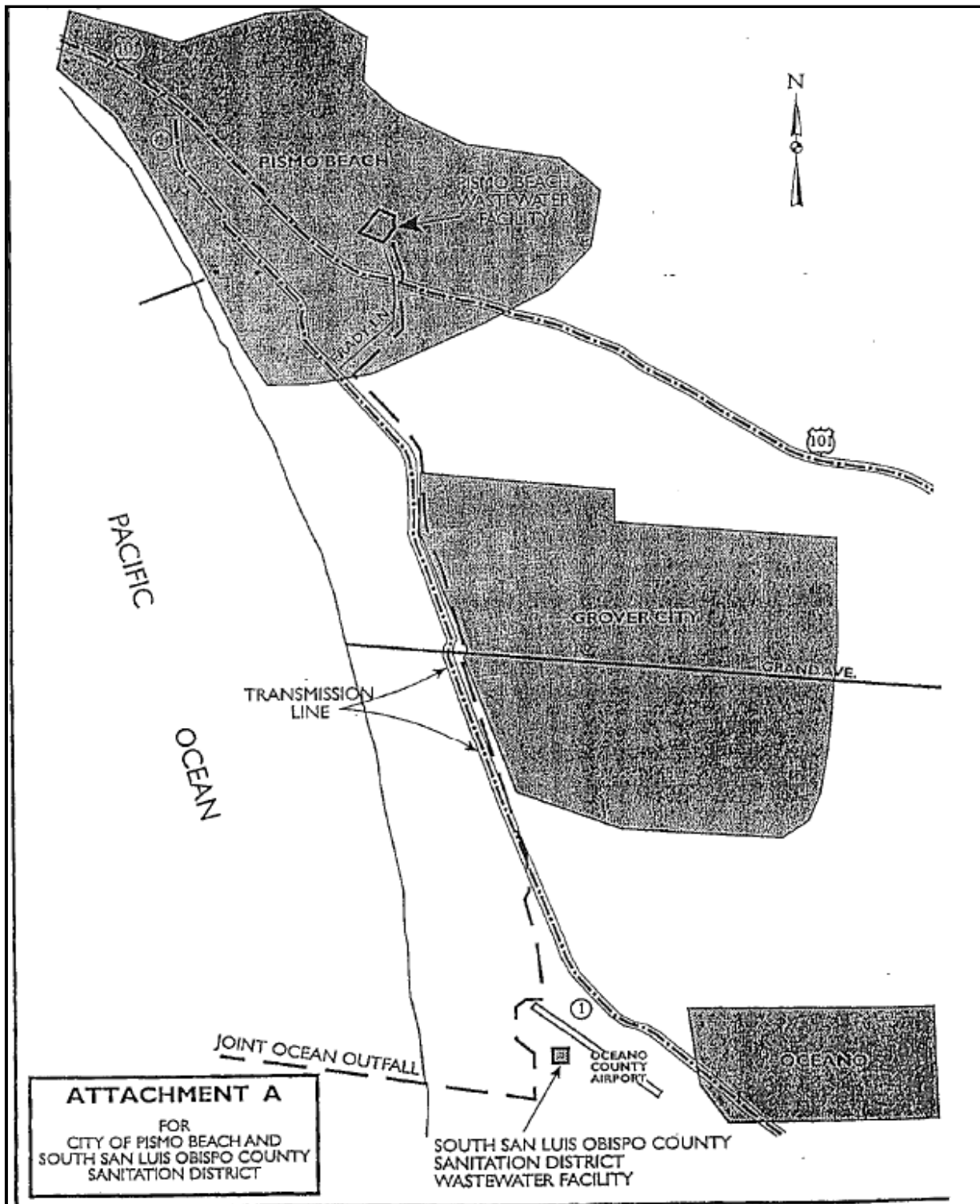
Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

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.)

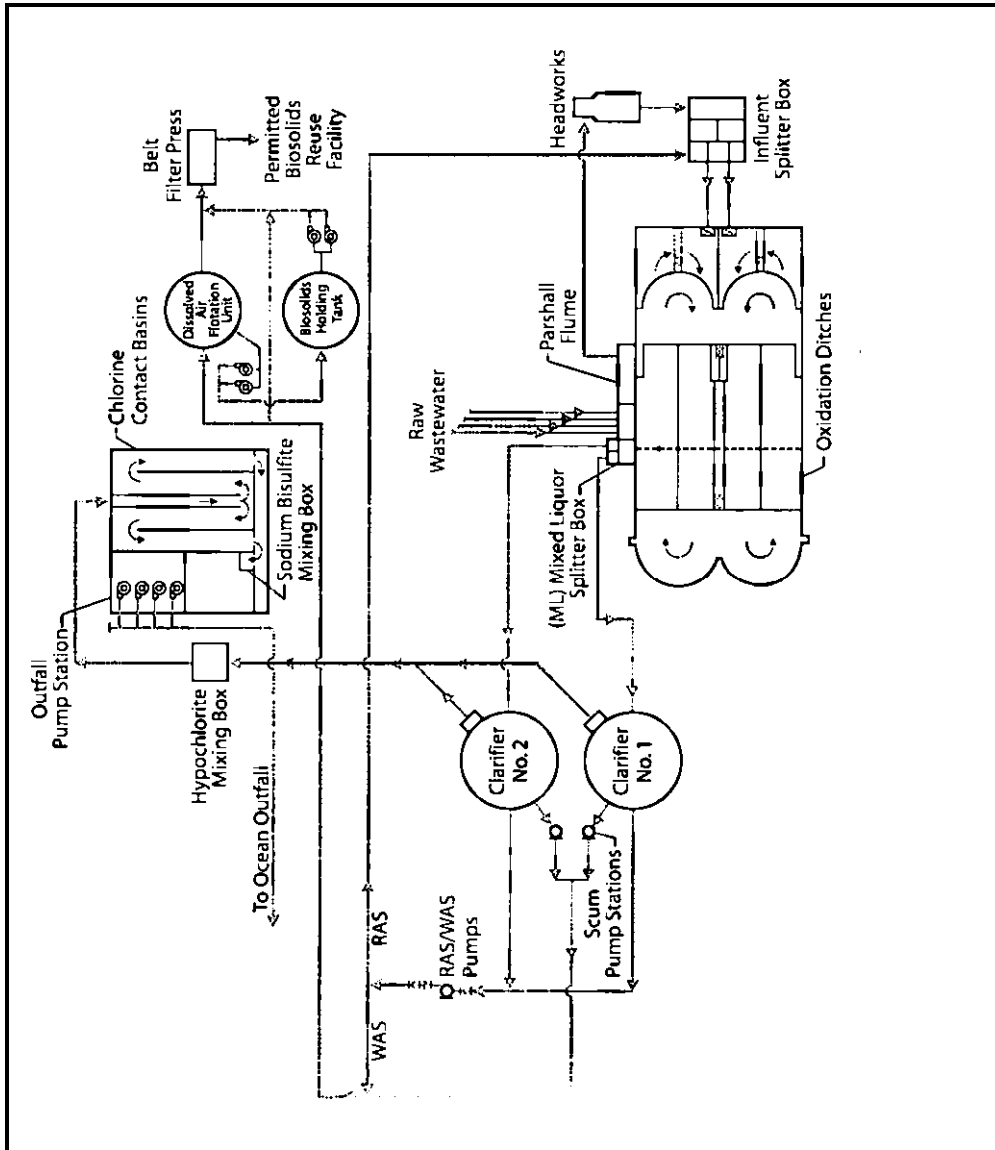
Waste: As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin (i.e., gross, not net, discharge.)

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 Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR § 122.41(i); Water Code, § 13383]:

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

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. [40 CFR § 122.41(m)(1)(i)]
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR § 122.41(m)(1)(ii)]
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. [40 CFR § 122.41(m)(2)]
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR § 122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR § 122.41(m)(4)(i)(A)];

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR § 122.41(m)(4)(i)(B)]; and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. [40 CFR § 122.41(m)(4)(i)(C)]
 4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. [40 CFR § 122.41(m)(4)(ii)]
5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. [40 CFR § 122.41(m)(3)(i)]
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). [40 CFR § 122.41(m)(3)(ii)]

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. [40 CFR § 122.41(n)(2)]
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR § 122.41(n)(3)]:

- a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR § 122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [40 CFR § 122.41(n)(3)(ii)];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR § 122.41(n)(3)(iii)]; and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. [40 CFR § 122.41(n)(3)(iv)]
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. [40 CFR § 122.41(n)(4)]

II. STANDARD PROVISIONS – PERMIT ACTION

- A. General.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. [40 CFR § 122.41(f)]
- B. Duty to Reapply.** If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. [40 CFR § 122.41(b)]
- C. Transfers.** This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. [40 CFR § 122.41(l)(3); § 122.61]

III. STANDARD PROVISIONS – MONITORING

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

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance

records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the 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 Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the 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 Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. [40 CFR § 122.41(k)]

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

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. [40 CFR § 122.41(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 Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. [40 CFR § 122.41(l)(6)(iii)]

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

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

G. Anticipated Noncompliance. The Discharger shall give advance notice to the 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 REGIONAL WATER BOARD STANDARD PROVISIONS (JANUARY 1985)**I. Central Coast General Permit Conditions****A. Central Coast Standard Provisions – Prohibitions**

1. Introduction of "incompatible wastes" to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under 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 Central Coast Water Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the 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 Water Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Water Board.

C. Central Coast Standard Provisions – General Monitoring Requirements

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

For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (Central Coast Standard Provisions – Definitions I.G.13.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (Central Coast Standard Provisions – Definitions I.G.14.)

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Public Health 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 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 Public Health 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 Water 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 sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger," it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
 - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
 - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
 - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.

6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.
7. "Incompatible wastes" are:
- Wastes which create a fire or explosion hazard in the treatment works;
 - 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;
 - Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
 - 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,
 - Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40 °C (104 °F) unless the treatment works is designed to accommodate such heat.
8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

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

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

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

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

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

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

11. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.

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

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

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, storm waters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

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

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass." It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.

22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
- a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
 - b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
 - c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
 - d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.)
24. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Resources Control Board

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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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 Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. Laboratories analyzing monitoring samples shall be certified by the 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 Central Coast Water Board.
- C. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 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 of this Order. The shoreline and ocean monitoring stations have previously been identified only by letter or number designations (e.g., A-D and 001-004). Designation of monitoring locations is being modified for consistency with other current permits issued by the Regional Water Board.

Table E-1. Monitoring Station Locations

Discharge Point Name	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 and inflow and infiltration
001	EFF-001	Location where representative sample of effluent, discharged through the ocean outfall can be collected, after treatment and chlorination/dechlorination and before mixing with South San Luis Obispo County Sanitation District effluent and contact with receiving water
---	SRF-A	At a location along the shoreline 300 meters south of the outfall in surf zone, formerly identified as shoreline monitoring station A
---	SRF-B	At a location along the shoreline adjacent to the outfall in surf zone, formerly identified as shoreline monitoring station B
---	SRF-C	At a location near the shoreline 300 meters north of the outfall in surf zone, formerly identified as shoreline monitoring station C
---	SRF-D	At a location near the shoreline at the mouth of Arroyo Grande Creek, formerly identified as shoreline monitoring station D

---	RSW-001	At a location in the receiving water 300 meters north of outfall at mid-depth of diffuser, formerly identified as ocean water monitoring station 1
---	RSW-002N	At a location in the receiving water 20 meters north of outfall at mid-depth of diffuser, formerly identified as ocean water monitoring station 2N
---	RSW-002S	At a location in the receiving water 20 meters south of outfall at mid-depth of diffuser, formerly identified as ocean water monitoring station 2S
---	RSW-003	At a location in the receiving water 300 meters south of outfall at mid-depth of diffuser, formerly identified as ocean water monitoring station 3
---	RSW-004	At a location in the receiving water 1000 meters south of outfall at mid-depth of diffuser, formerly identified as ocean water monitoring station 4

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF - 001

1. The Discharger shall monitor influent to the treatment facility at Monitoring Location INF-001 in accordance with the following schedule.

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
BOD ₅ (20 °C)	mg/L	24 Hr Composite	Weekly
TSS	mg/L	24 Hr Composite	Weekly

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF - 001

1. The Discharger shall monitor treated wastewater 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
Daily Flow	MG	Metered	Daily
Maximum Daily Flow	MGD	Metered	Daily
Mean Daily Flow	MGD	Calculated	Monthly
BOD ₅ (20 °C)	mg/L	24-hr composite	Weekly
TSS	mg/L	24-hr composite	Weekly
Settleable Solids	mL/L/hr	Grab	Monthly
Turbidity	NTUs	Grab	Weekly
Oil and Grease	mg/L	Grab	Monthly
Chlorine Residual	mg/L	Grab	Daily
Chlorine Used	lbs/day	Recorded	Daily
Total Coliform Organisms	MPN/100 mL	Grab	Weekly
Fecal Coliform Organisms	MPN/100 mL	Grab	5 Days/Week
pH	pH units	Grab	Monthly
Temperature	° F	Grab	Monthly
Ammonia	mg/L	Grab	Annually (April)

Acute Toxicity ^[1]	TUa	Grab	Once in life of permit
Chronic Toxicity ^[1]	TUc	24-hr composite	Annually (April)
Ocean Plan Table B Metals ^[2]	µg/L	24-hr composite	Annually (April)
Ocean Plan Table B Pollutants ^[3]	µg/L	24-hr composite	Annually (April)

^[1] Whole effluent, acute and chronic toxicity monitoring shall be conducted according to the requirements established in section V of this Monitoring and Reporting Plan.

^[2] Those twelve metals (Sb, As, Cd, Cr⁺³, Cr⁺⁶, Cu, Pb, Hg, Ni, Se, Ag, and Zn) with applicable water quality objectives established by Table B of the Ocean Plan. Analysis shall be for total recoverable metals.

^[3] Those pollutants identified in Table B of the Ocean Plan (2005). Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table B; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML. Monitoring for the Table B pollutants shall occur one time per year. Analysis for all Table B pollutants can coincide with monitoring for the Table B metals so that analysis for metals is not duplicated.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity. Compliance with acute toxicity objective shall be determined using a USEPA approved method 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, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition).

Acute Toxicity (TUa) = 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	<i>Holmesimysis costata</i>	survival	48 or 96 hours
shrimp	<i>Mysidopsis bahia</i>	survival	48 or 96 hours
silversides	<i>Menidia beryllina</i>	survival	48 or 96 hours
sheepshead minnow	<i>Cyprinodon variegatus</i>	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:

$$TUa = [\log(100 - S)]/1.7 \quad \text{Where } S = \text{percentage survival in 100\% waste.}$$

If $S > 99$, TUa 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 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 Water Board Executive Officer (EO). The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements (section VI.C.2.a of the Order), 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.

$$\text{Chronic Toxicity (TUc)} = 100/\text{NOEL}$$

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 TUc. 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, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	a, c
Red abalone, <i>Haliotis rufescens</i>	abnormal shell development	1	a, c
Oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	abnormal sell development; percent survival	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent normal development; percent fertilization	1	a, c
Shrimp, <i>Homesimysis costata</i>	percent survival; growth	1	a, c
Shrimp, <i>Menidia beryllina</i>	percent survival; fecundity	2	b, d
Topsmelt, <i>Atherinops affinis</i>	larval growth rate; percent survival	1	a, c
Silverside, <i>Menidia beryllina</i>	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 Regional 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. Webber, C.I., W.B. Horning II, 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.

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 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. 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, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition, or, 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

This section of the standardized permit form is not applicable to this Discharger.

VII. RECLAMATION MONITORING REQUIREMENTS

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

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Receiving Water Monitoring. The following receiving water monitoring shall be performed if operational changes, plant upsets, or effluent violations occur that are likely to increase bacterial concentrations in the surf zone.

Table E-6. Receiving Water Monitoring Requirements

Monitoring Location	Parameters Sampled at Each Location	Units	Minimum Frequency of Sampling
SRF-A, SRF-B, SRF-C, SRF-D	Total and Fecal Coliform Organisms	MPN/100 mL	Monthly and immediately in the event of plant upset, operational changes, or effluent violations
SRF-A, SRF-B, SRF-C, SRF-D	Surf conditions (narrative)	Narrative	Monthly and immediately in the event of plant upset, operational changes, or effluent violations
SRF-D	Current direction, if discernible	Narrative	Monthly and immediately in the event of plant upset, operational changes, or effluent violations
SRF-D	If Arroyo Grande Creek is Flowing to Ocean	Narrative	Monthly and immediately in the event of plant upset, operational changes, or effluent violations
SRF-A, SRF-B, SRF-C	Shellfish Tissue Fecal Coliform Organisms	MPN/100 g	Annually

B. Benthic Sediment Monitoring. 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 sediment sample shall be collected using a 0.1 m³ 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. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patterns observed for raw sediment parameters. The Annual Report should also present an analysis of natural variation in 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.

Sampling specified in the following table shall occur in the period from July through October at the ocean bottom directly below stations RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004.

Table E-7. Benthic Sediment Monitoring Requirements

Parameter	Units	Minimum Frequency of Sampling
Particle Size	Phi (% volume)	Once every three years (2010 and 2013)
Sediment Sulphides at pH 7	mg/kg	“ “
BOD	mg/kg	“ “
Arsenic	mg/kg	“ “
Cadmium	mg/kg	“ “
Total Chromium	mg/kg	“ “
Chromium ⁺⁶	mg/kg	“ “
Copper	mg/kg	“ “
Lead	mg/kg	“ “
Nickel	mg/kg	“ “
Mercury	mg/kg	“ “
Silver	mg/kg	“ “
Zinc	mg/kg	“ “
Total Kjeldahl Nitrogen	mg/kg	“ “
Ammonia	mg/kg	“ “
Nitrate	mg/kg	“ “
TOC	mg/kg	“ “

C. Benthic Biota Monitoring. Benthic infaunal monitoring shall assess the temporal and spatial status of local benthic communities in relation to the outfall. Sampling shall be conducted as follows.

1. At least five benthic samples shall be taken at each of the five ocean monitoring stations (RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004) using a 0.1 m³ 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), Shannon-Wiener 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.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

1. The following information shall be submitted with the Annual Report required by Central Coast Regional Water Board Standard Provision E-8. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR Part 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.
 - (1) For landfill disposal include: 1) the Central Coast Water Board 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.

- (2) 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.
- (3) 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	Minimum Frequency of Sampling
Quantity	Tons or Yards	Measured	During Removal
Location of Disposal	Site		“ “
Moisture Content	Percent	Grab	Annually
Total Kjeldahl Nitrogen	mg/kg	Grab	“ “
Ammonia (as N)	mg/kg	Grab	“ “
Nitrate (as N)	mg/kg	Grab	“ “
Total Phosphorus	mg/kg	Grab	“ “
pH	Standard Units	Grab	“ “
Oil & Grease	mg/kg	Grab	“ “
Arsenic	mg/kg	Grab	“ “
Boron	mg/kg	Grab	“ “
Cadmium	mg/kg	Grab	“ “
Copper	mg/kg	Grab	“ “
Chromium	mg/kg	Grab	“ “
Lead	mg/kg	Grab	“ “
Nickel	mg/kg	Grab	“ “
Mercury	mg/kg	Grab	“ “
Molybdenum	mg/kg	Grab	“ “
Selenium	mg/kg	Grab	“ “
Zinc	mg/kg	Grab	“ “

B. Pretreatment Monitoring. At least once per year, influent, effluent, and biosolids shall be sampled and analyzed for the priority pollutants identified under Section 307(a) of the Clean Water Act. The Discharger shall summarize analytical results from representative, flow-proportioned, 24-hour composite sampling of the plant’s influent and effluent for those pollutants EPA has identified under CWA Section 307(a) which are known or are suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable

analytical technique under 40 CFR Part 136. Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent samples.

Wastewater and biosolids sampling and analysis shall be performed a minimum of annually and not less than the frequency specified in the required monitoring program for the plant. The Discharger shall also provide any influent, effluent, or biosolids monitoring data for non-priority pollutants for which the Discharger believes may be causing or contributing to interference, pass-through, or adversely impacting biosolids quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Biosolids samples shall be collected from the last point in solids handling before disposal. If biosolids is dried on-site, samples shall be composited from at least twelve discrete samples from twelve representative locations. Pretreatment monitoring may be coordinated with other required monitoring to minimize duplicate effort and expense.

- C. Outfall Inspection.** Every three years (in 2010 and 2013), the Discharger shall conduct an inspection of the outfall pipe/diffuser system to ensure the proper operation and structural integrity of the system. 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 collected 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 EPA with the Annual Report required by Central Coast Water Board Standard Provision E-8.

X. REPORTING REQUIREMENTS

- A. General Monitoring and Reporting Requirements.** The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly 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	October 23, 2009	All	Submit with monthly SMR
Hourly	October 23, 2009	Hourly	Submit with monthly SMR
Daily	October 23, 2009	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month	First day of second calendar month following the month of sampling
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	Submit with monthly SMR (May 1 st , August 1 st , November 1 st , February 1 st)
Semiannually	Closest of April 1 or October 1 following (or on) permit effective date	October 1 through March 31, April 1 through September 31	Submit with monthly SMR (May 1 st , and November 1 st)
Annually	April 1 following (or on) permit effective date	April 1 through March 31	Submit with Annual Report February 1 st
Triennially (2010 and 2013)	October 23, 2009	Any date during the period of July through October, 2010, July through October 2013	Submit with Annual Report February 1 st

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

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated

- Concentration” (may be shortened to “Est. Conc.”). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the 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 Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401
 - d. An Annual Report shall be due on February 1 following each calendar year and shall include:
 - All data required by this MRP for the corresponding monitoring period, including appropriate calculations to verify compliance with effluent limitations.
 - 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 Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The 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, 15 th Floor Sacramento, CA 95814

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

D. Other Reports. 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 400106001
Discharger	City of Pismo Beach
Name of Facility	Wastewater Treatment Plant
Facility Address	570 Frady Lane
	Pismo Beach, CA 93449
	San Luis Obispo County
Facility Contact, Title and Phone	Stuart S. Stewart, Wastewater Systems Supervisor, 805-773-7075
Authorized Person to Sign and Submit Reports	Dwayne Chisam, Public Works Director, 805-773-4656
Mailing Address	760 Mattie Road, Pismo Beach, CA 93449
Billing Address	760 Mattie Road, Pismo Beach, CA 93449
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	II
Complexity	A
Pretreatment Program	N
Reclamation Requirements	NA
Facility Permitted Flow	1.9 MGD
Facility Design Flow	1.9 MGD
Watershed	Pismo Creek
Receiving Waters	Pacific Ocean
Receiving Water Type	Ocean Water

- A.** The City of Pismo Beach is the owner and operator of a wastewater treatment plant, which treats domestic, commercial, and industrial wastewaters collected from the City’s service area. The wastewater treatment plant is located at 570 Frady Lane, Pismo Beach, San Luis Obispo 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, the City of Pismo Beach.

- B. The facility discharges wastewater to Pacific Ocean, waters of the United States, and is currently regulated by Order No. R3-2004-0051, which was adopted on September 10, 2004, and expires on September 10, 2009. The terms and conditions of the current Order will be automatically continued and remain in effect until new Waste Discharge Requirements 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 Waste Discharge Requirements (WDRs) and NPDES permit on March 10, 2009. A site visit was conducted on April 24, 2009, 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 City of Pismo Beach wastewater treatment plant currently serves a population of approximately 8,603. Residential, commercial, and industrial wastewater is conveyed to the recently upgraded treatment plant, which has a design treatment capacity of 1.9 MGD (monthly average).

A single mechanical bar screen captures large debris from the raw wastewater in the headworks. From the headworks, an influent splitter box divides flow between two oxidation ditches, each with a sidewall water depth of 12 ft. and a volume of 0.89 million gallons. Aeration is provided by mechanical aerators; about 12 percent of each tank is anaerobic, and 88 percent is aerobic. Effluent from the oxidation ditches passes through the mixed liquor splitter box and is evenly distributed between the plant's two 65-ft-diameter secondary clarifiers, which have a sidewall water depth of 14 ft and a volume of 0.35 million gallons each. Following secondary clarification, flow travels to the chlorine contact basin. Effluent is dechlorinated with sodium bisulfite before discharge through the ocean outfall line.

Effluent from the City's wastewater treatment plant and from the South San Luis Obispo County Sanitation District wastewater treatment facility is discharged through a jointly owned 4400 foot outfall/diffuser system, which terminates in the Pacific Ocean in approximately 55 feet of water. Dewatered biosolids are hauled to a composting facility.

- B. **Discharge Points and Receiving Waters.** Discharge from the wastewater treatment plant at Discharge Point 001 occurs through a 4400-foot outfall/diffuser system that terminates at a depth of approximately 55 feet in the Pacific Ocean at 35° 05', 85" N. latitude and 120° 38', 75" W longitude.

The minimum probable initial dilution (seawater to effluent) at Discharge Point 001 is 165 to 1, a figure that has been used by Central Coast Water Board staff to determine the need for water quality based effluent limitations, and, if necessary, to calculate those limitations.

- C. **Summary of Existing Requirements and Effluent Characterization.** Effluent limitations contained in the existing Order for discharges from Discharge Point 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-2. Historic Effluent Limitations, Discharge Point 001

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Daily Maximum
BOD ₅	mg/L	30	45	90
	lbs/day	438 (475) ^[1]	657 (713) ^[1]	1314 (1426) ^[1]
	kg/day	199 (215) ^[1]	298 (323) ^[1]	596 (647) ^[1]
TSS	mg/L	30	45	90
	lbs/day	438 (475) ^[1]	657 (713) ^[1]	1314 (1426) ^[1]
	kg/day	199 (215) ^[1]	298 (323) ^[1]	596 (647) ^[1]
BOD ₅ and TSS	%	Removal by treatment shall not be less than 85 percent		
Oil & Grease	mg/L	25	40	75
	lbs/day	365 (396) ^[1]	584 (634) ^[1]	1095 (1188) ^[1]
	kg/day	166 (180) ^[1]	265 (288) ^[1]	497 (539) ^[1]
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
pH	pH Units	6.0 – 9.0		
Fecal Coliform	MPN/100 mL	---	(7-sample median) 200	2000
Flow	MGD	Daily dry weather flow shall not exceed a monthly average of 1.75 MGD (1.9 MGD after facility upgrade)		
Ocean Plan Table B Pollutants	varies	Effluent limitations were established for all Table B pollutants based upon water quality objectives established in the 2001 Ocean Plan and a minimum initial dilution of 165:1.		

^[1] Values in parentheses apply after facility upgrade.

Table F-3. Effluent Characterization – 2004-2008

	Units	Highest Monthly Avg	Highest Daily Maximum
Effluent Flow	MGD	1.505	3.045
BOD ₅	mg/L	49	110
TSS	mg/L	23	130
Settleable Solids	mL/L	---	9.0
Turbidity	NTU	---	13.65
Oil & Grease	mg/L	---	4.5
Temperature	°C	25.0	26.5
pH	pH units	---	6.50 - 8.11
Fecal Coliform	MPN/100 mL	1600 (7-day median)	---
Total Coliform	MPN/100 mL	8688	160,000
Total Ammonia	mg/L	---	38

D. Compliance Summary. The Discharger experienced numerous incidents of noncompliance prior to upgrading the treatment facility. Those violations and resulting enforcement actions are summarized in Administrative Civil Liabilities Order No. R3-2005-0009. Since completion of the facility upgrade, effluent quality has improved in its

compliance with discharge limits and day-to-day consistency. Discharge violations occurring since the facility upgrade are characterized as follows.

May 24, 2006 – Fecal coliform bacteria violation due to equipment automatic equipment inadequately calibrated to new facility.

November 30, 2007 – Fecal coliform bacteria violation suspected to be due to inadequate chlorine contact chamber maintenance.

November 20, 2008 – Fecal coliform bacteria violation due to equipment malfunction.

In each instance, the problem has been rapidly identified and corrected. Based upon Central Coast Water Board staff inspections and Discharger self-monitoring, ongoing compliance with the permit requirements is anticipated.

E. Planned Changes. There are no significant operational or physical changes anticipated during the term of the Order for the wastewater treatment plant.

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 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 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 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 City of Pismo Beach Wastewater Treatment Plant 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 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 which is applicable to this Discharger.

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

The State's 2006 303 (d) list of impaired water bodies, which was approved by USEPA in June 2007, identifies the Pacific Ocean at Pismo Beach as impaired by "indicator bacteria". The outfall for this discharge is located approximately 4,400 feet offshore and south of Pismo Beach.

E. Other Plans, Policies and Regulations

- 1. Discharges of Storm Water.** Storm water flows from the wastewater treatment process areas are directed to the headworks and discharged with treated wastewater. These storm water flows constitute all industrial storm water at this facility and, consequently, this permit regulates all industrial storm water discharges at this facility along with wastewater discharges.
- 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 Order requires the Discharger to seek coverage under the General Permit and comply with its requirements. Sewage spill reporting requirements from the previous permit have not been retained in this Order, as coverage under the General Permit requires reporting by the Discharger.

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 this Order at 35°05'85" N. Latitude, 120°38'75" W. Longitude is prohibited.) This prohibition is retained from the previous permit.
2. Discharge Prohibition III.B. (Discharges of any waste in any manner other than as described by this 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 the Central Coast Water Board during the process of permit reissuance.
3. Discharge Prohibition III.C. (The average monthly rate of discharge to the Pacific Ocean shall not exceed 1.9 MGD.) This flow limitation is retained from the previous permit and reflects the current design treatment capacity of the Pismo Beach wastewater treatment plant. The limitation ensures that the influent flow will not exceed the treatment plant's design capacity.
4. Discharge Prohibition III.D. (Wastes shall not be discharged to State Water Quality Protection Areas, described as Areas of Special Biological Significance by the Ocean Plan (2005), except in accordance with Chapter III.E of the Ocean Plan.) This prohibition restates a discharge prohibition established in Chapter III.E of the Ocean Plan.
5. Discharge Prohibition III.E. (The discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste to the Ocean is prohibited.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
6. Discharge Prohibition III.F. (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 or 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 Chapter III.H of the Ocean Plan.

7. Discharge Prohibition III.G. (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.

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, those factors are described below.

This Order includes limitations based on the minimum level of effluent quality attainable by secondary treatment, as established at 40 CFR 133. The Secondary Treatment Regulation includes the following limitations applicable to all publicly owned treatment works (POTWs).

Table F-5. Secondary Treatment Requirements

Parameter	Effluent Limitation		
	30-Day Avg	7-Day Avg	Percent Removal
BOD ₅	30 mg/L	45 mg/L	85
^[1] CBOD ₅	25 mg/L	40 mg/L	85
TSS	30 mg/L	45 mg/L	85
pH	6.0 – 9.0		---

^[1] At the option of the permitting authority, effluent limitations for CBOD₅ may be substituted for those limitations specified for BOD₅.

In addition, the State Water Board, in Table A of the Ocean Plan, has established technology-based requirements, applicable to all POTWs, for oil and grease, suspended and settleable solids, turbidity, and pH.

2. **Applicable Technology-Based Effluent Limitations.** The following table summarizes technology-based effluent limitations established by the Order.

Table F-6. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ^[1]	mg/L	30	45	90
	lbs/day	475	713	1426
TSS ^[1]	mg/L	30	45	90
	lbs/day	475	713	1426
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
Oil & Grease	mg/L	25	40	75
	lbs/day	396	634	1188
pH	pH units	6.0 – 9.0 at all times		

^[1] The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.

All technology-based limitations are retained from the previous permit and are required by NPDES regulations at 40 CFR 133 and/or Table A of the Basin Plan. Mass-based limitations for BOD₅, TSS, and oil and grease are based on a discharge rate of 1.9 MGD, the design treatment capacity of the wastewater treatment plant.

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 Section II. (Findings) H of the 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. Existing effluent limitations shall remain in the permit; or if the previous permit did not include limitations, the permit must include a reopener clause to allow for subsequent modification of the permit to include effluent limitations if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to excursions above Table B water quality objectives.

The State Water Resources Control Board has developed a reasonable potential calculator, which is available online on its website. 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 Regional 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 95th 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 95th 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.

Here, an RPA was conducted using secondary effluent monitoring data generated in 10 monitoring events between April 2004 and October 2008. The following tables present results of the RPA, performed in accordance with procedures described by the Ocean Plan for the City of Pismo Beach wastewater treatment plant. The RPA endpoint for each Table B pollutant is identified.

As shown in the following table, the RPA frequently leads to Endpoint 3, which as described previously is an inconclusive result. Following a finding of Endpoint 3, existing effluent limitations are retained by the permit; or if the previous permit did not include limitations, a reopener clause must be established by the new permit to allow for inclusion of effluent limitations at a later time if monitoring establishes that the discharge causes, has the reasonable potential to cause or contribute to excursions above Table B water quality objectives.

Because of the ongoing use of chlorine (sodium hypochlorite) at the facility and the several operating variables that impact its use, the Central Coast Water Board staff have determined that treated wastewater from the facility has a reasonable potential to cause or contribute to exceedances of applicable water quality criteria for chlorine. 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.

Table F-7. 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)	RPA Result, Comments
Objectives for Protection of Marine Aquatic Life					
Ammonia (as N)	99600	-----	-----	-----	-----
Arsenic	833	10	7	2.0	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Cadmium	166	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chlorinated Phenolics	166	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chromium (VI)	332	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Copper	168	10	6	6	Endpoint 2 -- Effluent limitation not required
Cyanide	166	10	7	12	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Endosulfan (total)	1.49	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Endrin	0.332	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
HCH	0.664	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Lead	332	10	5	0.4	Endpoint 2 -- Effluent limitation not required
Mercury	6.56	10	3	0.04	Endpoint 2 -- Effluent limitation not required
Nickel	830	10	5	10	Endpoint 2 -- Effluent limitation not required
Non-chlorinated Phenolics	4980	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Selenium	2490	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Silver	89.8	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Zinc	2000	2	0	80	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Objectives for Protection of Human Health - Noncarcinogens					
1,1,1-Trichloroethane	89640000	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
2,4-Dinitrophenol	664	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
2-Methyl-4,6-Dinitrophenol	36520	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Acrolein	36520	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Antimony	199200	10	8	3	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Bis(2-Chloroethoxy)Methane	730	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Bis(2-Chloroisopropyl)Ether	199200	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chlorobenzene	94620	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chromium ⁺³	31540000	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Dichlorobenzenes	846600	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Diethyl Phthalate	5478000	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Dimethyl Phthalate	136120000	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Di-n-Butyl Phthalate	581000	10	10	ND	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)	RPA Result, Comments
Ethylbenzene	680600	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Fluoranthene	2490	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Hexachlorocyclopentadiene	9628	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Nitrobenzene	8134	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Thallium	332	10	9	20	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Toluene	14110000	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Tributyltin	0.2324	10	4	0.00502	Endpoint 2 -- Effluent limitation not required
Objectives for Protection of Human Health - Carcinogens					
1,1,2,2-Tetrachloroethane	382	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,1,2-Trichloroethane	1560	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,1-Dichloroethylene	149	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,2-Dichloroethane	4648	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,2-Diphenylhydrazine	26.6	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,3-Dichloropropylene	1477	10	8	8.9	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
1,4-Dichlorobenzene	2988	10	6	1.2	Endpoint 2 -- Effluent limitation not required
TCDD Equivalents	6.5E-07	7	7	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
2,4,6-Trichlorophenol	48.1	10	8	10	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
2,4-Dinitrotoluene	432	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
3,3'-Dichlorobenzidine	1.34	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Acrylonitrile	16.6	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Aldrin	0.00365	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Benzene	979	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Benzidine	0.0115	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Beryllium	5.48	10	8	0.2	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Bis(2-Chloroethyl)Ether	7.47	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Bis(2-Ethylhexyl)Phthalate	581	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Carbon Tetrachloride	149	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chlordane	0.0038	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Chlorodibromomethane	1428	10	5	15.1	Endpoint 2 -- Effluent limitation not required
Chloroform	21580	10	0	1.6	Endpoint 2 -- Effluent limitation not required
DDT (total)	0.02822	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Dichlorobromomethane	1029	10	6	30.8	Endpoint 2 -- Effluent limitation not required
Dieldrin	0.0066	10	10	ND	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)	RPA Result, Comments
Halomethanes	21580	10	5	13.9	Endpoint 2 -- Effluent limitation not required
Heptachlor	0.0083	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Heptachlor Epoxide	0.0033	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Hexachlorobenzene	0.0349	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Hexachlorobutadiene	2324	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Hexachloroethane	415	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Isophorone	121180	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Methylene Chloride	74700	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
N-Nitrosodimethylamine	1212	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
N-Nitrosodi-n-Propylamine	63.1	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
N-Nitrosodiphenylamine	415	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
PAHs (total)	1.46	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
PCBs	0.00315	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Tetrachloroethylene	332	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Toxaphene	0.0349	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Trichloroethylene	4482	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND
Vinyl Chloride	5976	10	10	ND	Endpoint 3 -- RPA is inconclusive. Less than 3 detects or greater than 80% ND

ND indicates that the pollutant was not detected.

Minimum probable initial dilution for this Discharger is 165:1; WQOs presented above are adjusted for dilution.

Effluent data used for this RPA are from 10 monitoring events between April 2004 to October 2008.

All units are ug/L.

- 4. WQBEL Calculations.** Based on results of the RPA, performed in accordance with Ocean Plan methods for discharges to the Pacific Ocean, the Central Coast Water Board is establishing WQBELs for all Table B pollutants. Based upon available monitoring data, effluent limits are not required to be specified in the permit for copper, lead, mercury, nickel, tributyltin, 1,4-dichlorobenzene, chlorodibromomethane, chloroform, dichlorobromomethane, and halomethanes. However, based upon limited available data and the fact that water quality objectives are applicable to the discharge regardless of whether they are specified in the permit, applicable limitations for all Table B constituents are listed. As described by Section III. C of the Ocean Plan, effluent limits for Table B pollutants are calculated according to the following equation.

$$C_e = C_o + D_m (C_o - C_s)$$

Where ...

C_e = the effluent limitation (µg/L)

Co = the concentration (the water quality objective) to be met at the completion of initial dilution ($\mu\text{g/L}$).

Cs = background seawater concentration ($\mu\text{g/L}$)

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 165)

For this facility, Dm is unchanged from Order No. R3-2004-0051. 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 are not available, in accordance with Table B implementing procedures, Cs equals zero for all pollutants, except the following.

Table F-8. Background Concentrations—Ocean Plan

Pollutant	Background Seawater Concentration
Arsenic	3 $\mu\text{g/L}$
Copper	2 $\mu\text{g/L}$
Mercury	0.0005 $\mu\text{g/L}$
Silver	0.16 $\mu\text{g/L}$
Zinc	8 $\mu\text{g/L}$

All effluent limitations are retained from the previous Order, except for silver and benzidine limits, which are revised to correct errors in the current permit. Effluent limitations for the Table B pollutants are presented in Section IV.A.1 of this Order.

- 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 Wastewater Treatment Plant has a reasonable potential to cause or contribute to acute and/or 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 must also 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 BOD₅, TSS, fecal coliform bacteria, oil and grease, settleable solids, turbidity, and pH. The Order also retains effluent limitations from the previous permit for all Ocean Plan Table B toxic pollutants. The effluent limitations for silver and benzidine have been revised to correct a prior calculation error. Other changes in WQBELs established by this Order reflect the updated list of Table B pollutants contained in the 2005 Ocean Plan.
- 2. Satisfaction of Antidegradation Policy.** Provisions of the Order are consistent with applicable antidegradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. The Central Coast Water Board has previously determined that the facility's discharge would not result in a significant impact to water quality in light of the extensive dilution ($D_m = 165$) provided by the outfall/diffuser system.
- 3. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD₅; TSS; settleable solids; turbidity; oil and grease; and pH. 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.

Final, technology and water quality based effluent limitations are summarized in sections IV.B and C of this Fact Sheet.

E. Interim Effluent Limitations. The Order does not establish interim effluent limitations or schedules for compliance with final limitations.

F. Land Discharge Specifications. This section of the standardized permit is not applicable to the City of Pismo Beach Wastewater Treatment Plant.

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 California 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). In particular, receiving water limitations for bacteria have been modified to accurately reflect the updated Ocean Plan.

B. Groundwater. Groundwater limitations established by the Order include general objectives for ground water 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 Regional Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

A. Influent Monitoring. In addition to influent flow monitoring, monitoring for BOD₅ and TSS is required to determine compliance with the Order's 85 percent removal requirement for those pollutants.

B. Effluent Monitoring. Effluent monitoring requirements of the previous permit for Discharge Point 001 (the Ocean outfall) are retained in this Order, with the following exceptions/changes.

- Monitoring frequencies for influent and effluent BOD and TSS are reduced from every six days to weekly. Past monitoring has demonstrated these constituents do not significantly vary on a day-of-the-week basis, which was the basis for the six-day schedule. The regular weekly schedule will enable the City to improve staff scheduling and convenience without reducing valuable information obtained from the monitoring.
- Monitoring frequencies for total coliform bacteria, temperature, pH, settleable solids, oil and grease, chronic toxicity, ammonia, and Ocean Plan metals are reduced in this permit. Past monitoring has demonstrated consistent concentrations of these constituents that can be adequately characterized by less frequent monitoring. Less frequent monitoring of these constituents will provide for cost savings for the City without significantly diminishing the value of compliance assessment data.
- Monitoring for all other Table B toxic pollutants is required one time per year in April, as required in the previous Order and by the Ocean Plan (Appendix III). Monitoring

data will provide on-going characterization of the discharge and will allow Regional Water Board staff to continually assess the levels of the Table B toxic pollutants.

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 and monitoring requirements for acute and chronic toxicity for Discharge Point 001 from the previous permit.

D. Receiving Water Monitoring

- 1. Surface Water.** Shoreline water monitoring and shellfish tissue bacterial monitoring specified in section VII.A of the MRP have been conditionally waived by the Executive Officer. If operational changes, plant upsets or effluent violations occur, then the listed receiving water monitoring must resume.

Benthic sediment and benthic biota monitoring of the receiving water is retained from the previous Order. The monitoring frequency of once every three years remains unchanged. During the life of this Order, monitoring shall occur in 2010 and 2013. These monitoring requirements are identical to those in the South San Luis Obispo County Sanitation District Order to allow the two facilities to share the monitoring and analytical responsibilities and costs.

- 2. Groundwater.** Groundwater monitoring is not established in this Order.

E. Other Monitoring Requirements

- 1. Biosolids/Sludge Monitoring.** Biosolids monitoring is required in this Order. The requirements are retained from the previous Order; however, the date of sampling is not specified so that the Discharger may coordinate with pretreatment monitoring requirements.
- 2. Pretreatment Monitoring.** Pretreatment monitoring requirements are retained from the previous Order.
- 3. Outfall Inspection.** The Order retains the requirement of the previous permit to conduct triennial visual inspections of the outfall and diffuser system and provide reports of those inspections to the Central Coast Water Board regarding the system's physical integrity.

VII. RATIONALE FOR PROVISIONS

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

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

B. Special Provisions

- 1. Reopener Provisions.** The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.
- 2. Special Studies and Additional Monitoring Requirements**
 - a. Toxicity Reduction Requirements.** The requirement to perform a Toxicity Reduction Evaluation if the Acute or Chronic Toxicity limit is exceeded is retained from Order No. R3-2004-0051. 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.
 - b. Benthic Sediment and Biota Monitoring Requirements.** Benthic sediment and benthic biota monitoring requirements are retained from the previous permit. The Central Coast Water Board has imposed identical requirements in this Order and the South San Luis Obispo County Sanitation District Order so that such monitoring can be coordinated between the two agencies, minimizing redundant effort and expense.

3. Best Management Practices and Pollution Prevention

- a. Pollutant Minimization Program.** The 2005 Ocean Plan establishes 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.** This section of the standardized permit template is not applicable.

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 Regional 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 part 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 Part 503.

6. Other Special Provisions

- a. Discharges of Storm Water.** Storm water flows from the wastewater treatment process areas are directed to the headworks and discharged with treated wastewater. These storm water flows constitute all industrial storm water at this facility and, consequently, this permit regulates all industrial storm water discharges at this facility along with wastewater discharges.
- 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.** The Order does not establish interim effluent limitations and schedules of compliance with final limitations.

VIII. PUBLIC PARTICIPATION

The Central Coast 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 City of Pismo Beach Wastewater Treatment Plant. 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. Notification was provided through the publication in the local newspaper (The San Luis Obispo Tribune) on July 9, 2009, and posting on the Central Coast Water Board’s website.
- B. Written Comments.** Central Coast Water Board staff determinations are tentative. Interested persons were invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Central Coast Water Board at the address above on the cover page of this Order. During the public comment period, a single letter was received regarding the proposed requirements. The City of Pismo Beach submitted minor editorial comments and corrections, which have been incorporated into the proposed Order. The City of Pismo Beach does not object to the specified requirements and supports reissuance of the permit.
- C. Public Hearing.** The Central Coast Water Board will hold a public hearing on the tentative WDRs during its regular Water Board meeting on the following date, time, and location:

Date: **October 23, 2009**

Time: **8:30 am**

Location: **Santa Barbara County Offices, Supervisors’ Hearing Room, 4th Floor
105 East Anapamu Street
Santa Barbara, CA 93101**

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 Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

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

- E. Information and Copying.** The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (805) 549-3147.
- F. Register of Interested Persons.** Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Central Coast Water Board, reference this facility, and provide a name, address, and phone number.
- G. Additional Information.** Requests for additional information or questions regarding this Order should be directed to Sorrel Marks at (805) 549-3695 or SMarks@waterboards.ca.gov.