CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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ORDER NO. R4-2008-XXXX
NPDES NO. CA0054097

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF OXNARD, OXNARD WASTEWATER TREATMENT PLANT DISCHARGE TO THE PACIFIC OCEAN VIA OUTFALL 001

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

Table 1. Discharger Information

Discharger	City of Oxnard
Name of Facility	Oxnard Wastewater Treatment Plant
Facility Address	6001 South Perkins Road
	Oxnard, CA 93033-9047
	Ventura County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Oxnard from the discharge points identified below is 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 wastewater	34º, 07', 24" N	119º,11', 26" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	May 1, 2008
This Order shall become effective on:	June 20, 2008
This Order shall expire on:	April 10, 2013
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date (Title 40, Code of Federal Regulations, part 122.21(d))

IT IS HEREBY ORDERED, that Order No. R4-2002-0129 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water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 and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Tracy J. Egoscue, 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, Los Angeles Region, on May 1, 2008.

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Tracy J. Egoscue, 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 Oxnard
Name of Facility	Oxnard Wastewater Treatment Plant
Facility Address	6001 South Perkins Road
	Oxnard, CA 93033-9047
	Ventura County
Facility Contact, Title, and Phone	Mark S. Norris, Assistant Public Works Director, (805) 271-2205
Mailing Address	Same as the Facility Address
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	31.7 Million Gallons per Day (MGD)

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board), finds:

A. Background. The City of Oxnard (hereinafter Discharger) is currently discharging to the Pacific Ocean pursuant to Order No. R4-2002-0129 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0054097. The Discharger submitted Report of Waste Discharge, dated January 9, 2007**,** and applied for an NPDES permit renewal to discharge up to 31.7 MGD of secondary-treated wastewater from the Oxnard Wastewater Treatment Plant**,** hereinafter Facility. The application for the NPDES permit renewal and Report of Waste Discharge was deemed complete on January 22, 2008.

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 the Facility. The treatment system consists of bar screening, aerated grit removal, primary clarification, bio-filtration, activated sludge, secondary clarification, flow equalization, chlorine disinfection, and dechlorination. Solid fractions recovered from wastewater treatment processes include screenings, grit, primary sludge and skimmings, thickened waste activated sludge. The fine solids (screenings and grit) which are primarily inorganic materials are hauled away to a landfill. The remaining solid fractions (primary sludge, skimmings, and thickened waste activated sludge) are anaerobically digested at the treatment plant. In addition, the Discharger operates the oil and grease program through which it cleans interceptors for food establishments and uses the oil and grease in its digesters to increase methane production. The methane is then used to generate electricity, which occupies approximately 60% of total electricity uses, for the Facility. The digested solids are dewatered using belt filter presses. The dewatered cake contains approximately 20% solids (Class B biosolids). Oxnard generates approximately 500 wet tons of Class B biosolids per week. The biosolids are managed by composting operations in Kern County. Treated wastewater is discharged from Discharge Point No. 001 (see Table on cover page) to the Pacific Ocean off Ormond Beach, a water of the United States. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

The Facility serves a population of approximately 220,000 in the City of Oxnard, the City of Port Hueneme, and the US Naval Base, Ventura County, and some unincorporated areas of Ventura County. Flow to the Facility consists of domestic, commercial and industrial wastewater. For Fiscal Year 2007, Industrial wastewater represented about 21% (high peak) and 11% (low peak) of the total flow to the Facility.

~~All of the storm water runoff traversing the treatment areas of the Facility premises is captured and treated in the plant.~~ Under previous permits, all of the storm water runoff traversing the treatment areas of the Facility premises was captured and treated in the plant. With the 2008 expansion of the treatment plant, including the new headworks facility, this is no longer the case. Runoff from the facility is now regulated under the Municipal Stormwater Permit for Ventura County as a public agency activity subject to development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Future expansions (see GREAT Program discussion under Section II.E. on Page F-8 of the accompanying Fact Sheet) will be added to the SWPPP as appropriate.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (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 Regional 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 O are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under California 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. Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations[1] require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at C.F.R. part 133 and Best Professional Judgment (BPJ) in accordance with C.F.R. part 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and part 122.44(d) require that permits include limitations more stringent than applicable

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated and will be abbreviated as "40 C.F.R. part number."

federal technology-based requirements where necessary to achieve applicable water quality standards.

Part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been 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 in part 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (MUN) designated water bodies, which is not applicable to this discharge. Beneficial uses applicable to the Pacific Ocean are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Ormond Beach	Existing: Industrial water supply (IND), navigation (NAV), hydropower generation (POW), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), rare, threatened or endangered species** (RARE), shellfish harvesting (SHELL). Potential: Spawning, reproduction, and/or early development (SPWN)**.
	Pacific Ocean Nearshore**	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats** (BIOL), RARE**, migration of aquatic organisms** (MIGR), SPWN**, and SHELL. Potential: None.

** See Attachment A for definition of terms.

Discharge Point	Receiving Water	Beneficial Use(s)
	Pacific Ocean Offshore	Existing: NAV, REC-1, REC-2, COMM, MAR, WILD, RARE**, MIGR**, SPWN**, and SHELL. Potential: None.

Requirements of this Order implement the Basin Plan.

The Basin Plan relies primarily on the requirements of the Water Quality Control Plan for Ocean Waters** of California (Ocean Plan) for protection of the beneficial uses of the State ocean waters**. The Basin Plan, however, may contain additional water quality objectives applicable to the Discharger.

The State Water Board adopted the *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 Thermal Plan contains temperature objectives for coastal waters.

The State Water Resources Control Board compiled the draft 2006 303(d) list following recommendations from the Regional Boards and information solicited from the public and other interested parties. The draft list was then revised based upon public comments. On October 25, 2006, the State Board adopted the California 2006 Revised 303(d) List. On November 30, 2006 US EPA gave partial approval to California's 2006 Section 303(d) List of Water Quality Limited Segments, with full approval pending further review of supporting information regarding Walnut Creek Wash (Los Angeles Region). There are no pollutants or stressors in the 2006 303(d) list for the Ormond Beach.

I. 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 ocean. The Ocean Plan identifies beneficial uses of ocean waters* of the State to be protected as summarized below:

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture**; preservation and enhancement of designated Area of Special Biological Significance**, [2] (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish** harvesting.

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. 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 (WQS) become effective for CWA purposes (40 C.F.R. § 131.21; 65 Fed. Reg. 24641; (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

K. 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 BOD, TSS, oil and grease, settleable solids, turbidity, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and pH are discussed in Section IV.B.2 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 carried over from the previous permit.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and water quality objectives contained in the Basin Plan and 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 C.F.R. part 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.

** See Attachment A for definition of terms.
[2] There are no ASBS in the vicinity of this discharge.

L. Antidegradation Policy. Part 131.12 requires that the 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. Resolution No. 68-16 incorporates the federal antidegradation policy, which requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of part 131.12 and State Water Board Resolution No. 68-16.

M. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations part 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. Some effluent limitations in this Order are less stringent that those in the previous Order. As discussed in detail in the Fact Sheet this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

N. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

O. Monitoring and Reporting. Part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

P. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with part 122.41, and additional conditions applicable to specified categories of permits in accordance with part 122.42, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

Q. Provisions and Requirements Implementing State Law. The provisions/requirements in subsection VI.C. 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. Performance Goals. Chapter III, Section F.2, of the 2005 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters[**].

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993)* that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

The performance goals are based upon the actual performance of Facility and are specified only as an indication of the treatment efficiency of the facility. Performance goals are intended to minimize pollutant loading (primarily for toxics) and while maintaining the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. They are not considered as limitations or standards for the regulation of the discharge from the treatment facility. The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted. The methodology for calculating performance goals is described in the Fact Sheet (Attachment F).

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

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

[**] See Attachment A for definition of terms.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged from Discharge Serial No. 001 shall be limited to secondary treated wastewater. Discharge of wastewater at a location different from Discharge Serial No. 001 in this Order is prohibited.

B. Waste management system that discharges to the Ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

C. Discharges not specifically authorized under this Order are prohibited.

D. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D.

E. The monthly average effluent dry weather discharge flow rate from the facility shall not exceed the design capacity.

F. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.

G. The discharge of sludge digester supernatant and centrate directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.

H. The Discharger shall not cause degradation of any water supply, except as consistent with State Water Board Resolution No. 68-16.

I. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in section 13050, subdivisions (l) and (m) of the California Water Code.

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

K. The discharge of any substances in concentrations toxic to animal or plant is prohibited.

IV. EFFLUENT LIMITATIONS, PERFORMANCE GOALS, AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations and Performance Goals – Discharge Point 001

1. Final Effluent Limitations and Performance Goals – Discharge Point 001

a. 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.

b. The performance goals for Discharge Point 001 are also given below. The listed performance goals are not enforceable effluent limitations or standards. However, the Discharger shall maintain, if not improve, its treatment efficiency. Any exceedance of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary. If there are three successive exceedances of the chronic toxicity performance goal, the Discharger shall implement the initial investigation Toxicity Reduction Evaluation workplan and initiate a Toxicity Identification Evaluation as specified in Section V (Whole Effluent Toxicity Testing Requirements) of the MRP.

Table 7. Effluent Limitations

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Major Wastewater Constituents							
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	--	--	--	--
	lbs/day	7,960	11,900	--	--	--	--

[3] Effluent limitations for conventional, nonconventional, and toxic pollutants were calculated based on effluent limitations in *Table A*, and water quality objectives in *Table B* of the Ocean Plan. The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants based on water quality objectives in *Table B* of the Ocean Plan is 98:1 (i.e., 98 parts seawater to one part effluent). This ratio was calculated by the State Board. However, effluent limitations for radioactivity are not dependent on the initial dilution ratio. The calculations of mass emission rates are available in the accompanying Fact Sheet.

** See Section VII of this Order and Attachment A for definition of terms.

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Major Wastewater Constituents							
Total Suspended Solids	mg/L	30	45	--	--	--	--
	lbs/day	7,960	11,900	--	--	--	--
pH	standard units	--	--	--	6.0	9.0	--
Oil and Grease	mg/L	25	40	--	--	75	--
	lbs/day	6,630	10,600	--	--	19,900	--
Settleable Solids	ml/L	1.0	1.5	--	--	3.0	--
Turbidity	NTU	75	100	--	--	225	--
Marine Aquatic Life Toxicants							
Arsenic[4]	µg/L	--	--	--	--	--	7.4
	lbs/day	--	--	--	--	--	2.0
Cadmium[4]	µg/L	--	--	--	--	--	1
	lbs/day	--	--	--	--	--	0.27
Chromium (VI)[4]	µg/L	--	--	--	--	--	8
	lbs/day	--	--	--	--	--	2.1
Copper[4]	µg/L	--	--	--	--	--	32
	lbs/day	--	--	--	--	--	8.5
Lead[4]	µg/L	--	--	--	--	--	23
	lbs/day	--	--	--	--	--	6.1
Mercury[4]	µg/L	--	--	--	--	--	0.3
	lbs/day	--	--	--	--	--	0.08
Nickel[4]	µg/L	--	--	--	--	--	19
	lbs/day	--	--	--	--	--	5.0
Selenium[4]	µg/L	--	--	--	--	--	4.9
	lbs/day	--	--	--	--	--	1.3
Silver[4]	µg/L	--	--	--	--	--	1
	lbs/day	--	--	--	--	--	0.27
Zinc[4]	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Cyanide	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
Chlorine Residual	mg/L	--	--	--	--	--	0.1
	lbs/day	--	--	--	--	--	0.027
Ammonia as N	mg/L	--	--	--	--	--	26
	lbs/day	--	--	--	--	--	6.9

[4] Represents total recoverable metals value.

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Marine Aquatic Life Toxicants							
Phenolic compounds (non-chlorinated)**	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Phenolic compounds (chlorinated)**	µg/L	--	--	--	--	--	0.42
	lbs/day	--	--	--	--	--	0.11
Endosulfan**	µg/L	--	--	--	--	--	0.05
	lbs/day	--	--	--	--	--	0.013
HCH**	µg/L	--	--	--	--	--	0.1
	lbs/day	--	--	--	--	--	0.027
Endrin	µg/L	--	--	--	--	--	0.05
	lbs/day	--	--	--	--	--	0.013
Chronic toxicity	TUc	--	--	99	--	--	18
Radioactivity							
Gross alpha	PCi/L	--	--	15	--	--	--
Gross beta	PCi/L	--	--	50	--	--	--
Combined Radium-226 & Radium-228	PCi/L	--	--	5.0	--	--	--
Tritium	PCi/L	--	--	20,000	--	--	--
Strontium-90	PCi/L	--	--	8.0	--	--	--
Uranium	PCi/L	--	--	20	--	--	--
Human Health Toxicants – Non Carcinogens							
Acrolein	µg/L	--	--	--	--	--	10
	lbs/day	--	--	--	--	--	2.7
Antimony[3]	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
Bis(2-chloroisopropyl) ether	µg/L	--	--	--	--	--	10
	lbs/day	--	--	--	--	--	2.7
Chlorobenzene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Chromium (III) [3]	µg/L	--	--	--	--	--	--8
	lbs/day	--	--	--	--	--	--2.1
Di-n-butyl-phthalate	µg/L	--	--	--	--	--	0.33
	lbs/day	--	--	--	--	--	0.0088

** See Attachment A for definition of terms.

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Human Health Toxicants – Non Carcinogens							
Dichlorobenzenes**	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Diethyl phthalate	µg/L	--	--	--	--	--	0.25
	lbs/day	--	--	--	--	--	0.066
Dimethyl phthalate	µg/L	--	--	--	--	--	10
	lbs/day	--	--	--	--	--	2.7
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
2,4-Dinitrophenol	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
Ethyl benzene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Fluoranthene	µg/L	--	--	--	--	--	0.25
	lbs/day	--	--	--	--	--	0.066
Hexachlorocyclopentadiene	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
Nitrobenzene	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Thallium[3]	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Toluene	µg/L	--	--	--	--	--	0.6
	lbs/day	--	--	--	--	--	0.16
Tributyltin	µg/L	--	--	--	--	--	0.0263
	lbs/day	--	--	--	--	--	0.007
1,1,1-Trichloroethane	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	--	10
	lbs/day	--	--	--	--	--	2.7
Aldrin	µg/L	--	--	--	--	--	0.025
	lbs/day	--	--	--	--	--	0.0066
Benzene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Benzidine[5]	µg/L	0.0068	--	--	--	--	--
	lbs/day	0.0018	--	--	--	--	--

[5] The result of reasonable potential analysis is inconclusive. Therefore, limitations are carried over from Order No. R4-2002-0129 to avoid backsliding.

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Human Health Toxicants –Carcinogens							
Beryllium[3]	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	--	2.0
	lbs/day	--	--	--	--	--	0.53
Carbon tetrachloride	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Chlordane	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Chlorodibromomethane	µg/L	--	--	--	--	--	1.3
	lbs/day	--	--	--	--	--	0.34
Chloroform	µg/L	--	--	--	--	--	1.4
	lbs/day	--	--	--	--	--	0.37
DDT**	µg/L	--	--	--	--	--	0.05
	lbs/day	--	--	--	--	--	0.013
1,4-Dichlorobenzene	µg/L	--	--	--	--	--	3
	lbs/day	--	--	--	--	--	0.80
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
1,2-Dichloroethane	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
1,1-Dichloroethylene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Bromodichloromethane	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Dichloromethane**	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
1,3-Dichloropropene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Dieldrin	µg/L	--	--	--	--	--	0.05
	lbs/day	--	--	--	--	--	0.013
2,4-Dinitrotoluene	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
1,2-Diphenylhydrazine	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Halomethanes**	µg/L	--	--	--	--	--	4.4
	lbs/day	--	--	--	--	--	1.2

Parameter	Units	Effluent Limitations[3]					Performance Goals
		Average Monthly**	Average Weekly**	Maximum Daily**	Instan-taneous Minimum**	Instan-taneous Maximum**	Average Monthly
Human Health Toxicants –Carcinogens							
Heptachlor	µg/L	--	--	--	--	--	0.05
	lbs/day	--	--	--	--	--	0.013
Heptachlor epoxide[5]	µg/L	0.002	--	--	--	--	--
	lbs/day	0.00053	--	--	--	--	--
Hexachlorobenzene	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Hexachlorobutadiene	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Hexachloroethane	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
Isophorone	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
N-Nitrosodimethylamine	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	--	25
	lbs/day	--	--	--	--	--	6.6
N-Nitrosodiphenylamine	µg/L	--	--	--	--	--	5
	lbs/day	--	--	--	--	--	1.3
PAHs**	µg/L	--	--	--	--	--	0.097
	lbs/day	--	--	--	--	--	0.026
PCBs[5]	µg/L	0.0019	--	--	--	--	--
	lbs/day	0.0005	--	--	--	--	--
TCDD equivalents[5]	µg/L	0.00000039	--	--	--	--	--
	lbs/day	0.0000001	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Tetrachloroethylene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Toxaphene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
Trichloroethylene	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
1,1,2-Trichloroethane	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66
2,4,6-Trichlorophenol	µg/L	--	--	--	--	--	50
	lbs/day	--	--	--	--	--	13
Vinyl chloride	µg/L	--	--	--	--	--	2.5
	lbs/day	--	--	--	--	--	0.66

c. Percent Removal: The average monthly percent removal of BOD 5-day 20℃ and total suspended solids shall not be less than 85 percent.

d. The temperature of wastes discharged shall not exceed 100°F, which takes into account the very large dilution credit based upon Best Professional Judgment (BPJ).

2. Discharge Specifications

The discharge of effluent through the discharge point shall comply with the following:

a. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

b. Waste discharged to the ocean must be essentially free of:

i. Material that is floatable or will become floatable upon discharge.

ii. Settleable material or substances that may form sediments, which will degrade benthic communities or other aquatic life.

iii. Substances that will accumulate to toxic levels in marine waters, sediments or biota.

iv. Substances that significantly decrease the natural light to benthic communities and other marine life.

v. Materials that result in aesthetically undesirable discoloration of the ocean surface.

c. Waste effluents from the Facility shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

d. The locations of waste discharge from the Facility shall assure that:

i. Pathogenic organism and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports.

ii. Natural water quality conditions are not altered in areas designated as being areas of special biological significance or areas that existing marine laboratories use as a source of seawater.

iii. Maximum protection is provided to the marine environment.

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

V. RECEIVING WATER LIMITATIONS

Unless specifically excepted by this Order, the Discharger, shall not cause violation of the following water quality objectives. Compliance with these shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed. Receiving water limitations are based on water quality objectives contained in the Basin Plan and 2005 Ocean Plan and are a required part of this Order. The discharge shall not cause the following in Surface Receiving Water:

A. Bacterial Characteristics

1. Water Contact Standards

a. State/Regional Water Board Water Contact Standards

In marine water designated for water contact recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water outside the initial dilution zone**.

Geometric Mean Limits

i. Total coliform density shall not exceed 1,000/100 ml.

ii. Fecal coliform density shall not exceed 200/100 ml.

iii. Enterococcus density shall not exceed 35/100 ml.

Single Sample Maximum (SSM)

i. Total coliform density shall not exceed 10,000/100 ml.

ii. Fecal coliform density shall not exceed 400/100 ml.

iii. Enterococcus density shall not exceed 104/100 ml.

** See Attachment A for definition of terms.

iv. Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.

b. California Department of Public Health[6] (CDPH) Standards

CDPH has established minimum protective bacteriological standards for coast water adjacent to public beaches and for public water contact sports areas in ocean waters. These standards are found in the California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in subsection a. above. When a public beach or public water contact sports area fails to meet these standards, CDPH or the local public health officer may post with warning signs or otherwise restrict use of the public beach or public water contact sports area until the standards are met. The CDPH regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under AB 411 regulations (This incorporation by reference is prospective including future changes to the incorporated provisions as changes take effect), CDPH imposes the same standards as contained in title 17, California Code of Regulations, and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

2. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the waste discharged shall not cause the following bacterial standards to be exceeded:

The median total coliform density for any 6-month period shall not exceed 70 per 100 ml, and not more than 10 percent of the samples during any 6-month period shall exceed 230 per 100 ml.

3. Implementation Provisions for Bacterial Characteristics

a. If the Discharger is required to conduct receiving water monitoring for bacterial characteristics in the future, then, at a minimum, weekly samples shall be collected from each site. The geometric mean values should be calculated using the five most recent sample results. If sampling occurs more frequently than weekly, all samples taken during the previous 30-day period shall be used to calculate the geometric mean.

[6] Formerly, California Department of Health Services.

b. If a single sample exceeds any of the single sample maximum (SSM) standards, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued until the sample result is less than the SSM standard or until a sanitary survey is conducted to determine the source of the high bacterial densities.

When repeat sampling is required because of an exceedance of any one single sample density, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

c. It is state policy that the geometric mean bacterial objectives are strongly preferred for use in water body assessment decisions (for example, in developing the Clean Water Act section 303(d) list of impaired waters) because the geometric mean objectives are a more reliable measure of long-term water body conditions. In making assessment decisions on bacterial quality, SSM data must be considered together with any available geometric mean data. The use of only SSM bacterial data is generally inappropriate unless there is a limited data set, the water is subject to short-term spikes in bacterial concentrations, or other circumstances justify the use of only SSM data.

d. For monitoring stations outside of the defined water-contact recreation zone (REC-1)[**], samples will be analyzed for total coliform only.

B. Physical Characteristics

The waste discharged shall not:

1. Cause floating particulates and oil and grease to be visible;

2. Cause aesthetically undesirable discoloration of the ocean surface;

3. Significantly reduce the transmittance of natural light at any point outside the initial dilution zone[**]; and,

4. Change the rate of deposition of inert solids and the characteristics of inert solids in ocean sediments such that benthic communities are degraded.

C. Chemical Characteristics

The waste discharged shall not:

[**] See Attachment A for definition of terms.

i. Cause the dissolved oxygen concentration at any time to be depressed more than 10 percent from that which occurs naturally;

ii. Change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally;

iii. Cause the dissolved sulfide concentration of waters in and near sediments to be significantly increased above that present under natural conditions;

iv. Contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses;

v. Cause the concentration of substances set forth in Chapter II, Table B of the Ocean Plan (2005), in marine sediments to increase to levels that would degrade indigenous biota;

vi. Cause the concentration of organic materials in marine sediments to be increased to levels that would degrade[**] marine life;

vii. Contain nutrients at levels that will cause objectionable aquatic growths or degrade[**] indigenous biota; and,

viii. Cause the numeric water quality objectives established in Chapter II, Table B of the Ocean Plan (2005), to exceed outside of the zone of initial dilution as result of discharge from the Facility.

D. Biological Characteristics

The waste discharged shall not:

1. Degrade[**] marine communities, including vertebrate, invertebrate, and plant species;

2. Alter the natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption; and,

3. Cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health.

E. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

[**] See Attachment A for definition of terms.

VI. PROVISIONS

A. Standard Provisions

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

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

   a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the California Water Code.

   b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the Regional Water Board, are prohibited.

   c. All facilities used for collection, transport, treatment, or disposal of "wastes"[**] shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.

   d. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.

   e. Collected screenings, sludges[**], and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.

   f. The provisions of this order are severable. If any provision of this order is found invalid, the remainder of this Order shall not be affected.

   g. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the CWA.

   h. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties to which the discharger is or may be subject to under section 311 of the CWA.

[**] See Attachment A for definition of terms.

i. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

j. Discharge of wastes** to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.

k. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the Federal CWA and amendments thereto.

l. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

m. Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

n. A copy of these waste** discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

o. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

p. The Discharger shall file with the Regional Water Board a report of waste** discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.

q. In the event of any change in name, ownership, or control of these waste** disposal facilities, the discharger shall notify the Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board, 30 days prior to taking effect.

** See Attachment A for definition of terms.

r. The California Water Code section 13385 provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

s. The California Water Code section 13387 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order is subject to a fine of not less than $5,000 nor more than $50,000, imprisonment in the state prison , or both. For a subsequent conviction, such a person shall be punished by a fine of not more than $100,000 per day of violation, by imprisonment in the state prison for two, four or six years, or by both that fine and imprisonment.

t. The discharge of any waste[**] resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

u. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

   i. Name and general composition of the chemical,

   ii. Frequency of use,

   iii. Quantities to be used,

   iv. Proposed discharge concentrations, and

   v. USEPA registration number, if applicable.

v. In the event the Discharger does not comply or will be unable to comply for any reason with any prohibition, maximum daily effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone (213) 576-6616, or by Fax at (213) 576-6660 within 24 hours of

[**] See Attachment A for definition of terms.

having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional board within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance, and the measures to prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

w. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

a. This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above an Ocean Plan Table B water quality objective.

b. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:

1. Violation of any term or condition contained in this Order;

2. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or,

3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

c. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

d. This Order may be reopened and modified to incorporate new limits based on future reasonable potential analyses to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Water Board.

e. This Order may be reopened and modified, in accordance with the provisions set forth in 40 C.F.R. parts 122 and 124, to incorporate requirements for the implementation of the watershed management approach.

f. This Order may be modified, in accordance with the provisions set forth in 40 C.F.R. parts 122 and 124, to include new Minimum Levels (ML).

g. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments or the adoption of a TMDL for Ventura Coastal Stream Watershed Management Area.

h. The Regional Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.

i. This Order may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 C.F.R. parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption and issuance.

j. The waste discharged shall not cause a violation of any applicable water quality standard for receiving waters. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

k. This Order may be reopened and modified to revise the receiving water monitoring program as a result of future other ocean outfalls being constructed in proximity to the existing City of Oxnard Discharge Point 001.

l. This Order may be reopened and modified, to revise effluent limitations and performance goals as a result of the GREAT program.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal), or the most current version, as guidance. At a minimum, the initial investigation TRE workplan must contain the provisions in **Attachment G**. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

i. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;

ii. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,

iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

If the effluent toxicity test result exceeds the limitation, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, approximately every two weeks, over a 12-week period. Effluent sampling for the first test of the six additional tests shall commence within 5 days of receipt of the test results exceeding the toxicity limitation.

If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a Toxicity Reduction Evaluation (TRE).

If results of the implementation of the facility's initial investigation TRE workplan (as described above) indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE.

Detailed toxicity testing and reporting requirements are contained in Section V of the MRP (Attachment E).

b. Treatment Plant Capacity

The Discharger shall submit a written report to the Executive Officer of the Regional Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

i. The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;

ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities; and,

iii. 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.

This requirement is applicable to those facilities which have not reached 75 percent of capacity as of the effective date of this Order. For those facilities that have reached 75 percent of capacity by that date but for which no such report has been previously submitted, such report shall be filed within 90 days of the issuance of this Order.

3. Best Management Practices and Pollution Prevention

~~**a. Storm Water Pollution Prevention Plan (SWPPP)**~~

~~Within 90 days of the effective date of this Order the Discharger shall submit to the Regional Water Board an updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in *Storm Water Pollution Prevention Plan Requirements* (Attachment H). If all storm water is~~

~~captured and treated on-site and no storm water is discharged or allowed to run off-site from the Facility, the Discharger shall provide certification to that effect to the Regional Water Board. The above certification shall be included in the accompanying Annual Report.~~

~~b.~~a Spill Clean-Up Contingency Plan (SCP)

Within ninety days, the Discharger is required to submit a Spill Clean-up Contingency Plan, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Discharger's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the Plan shall include sections on spill clean-up and containment measures, public notification, and monitoring. The Discharger shall review and amend the Plan as appropriate after each spill from the facility or in the service area of the facility. The Discharger shall include a discussion in the annual summary report of any modifications to the Plan and the application of the Plan to all spills during the year.

~~c.~~b. Pollutant Minimization Program

Reporting protocols in the Monitoring and Reporting Program, Attachment E, Section X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a Reported Minimum Level (RML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP) as follows:

The Discharger shall develop a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or,

ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL.

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration

at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to California Water Code section 13263.3(d), shall fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

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

ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

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

iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and,

v. An annual status report that shall be sent to the Regional Water Board including:

- All PMP monitoring results for the previous year;
- A list of potential sources of the reportable priority pollutant(s);
- A summary of all actions undertaken pursuant to the control strategy; and,
- A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations, title 23, chapter 3, subchapter 14 (Section 13625 of the California Water Code).

b. The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to

moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Sludge Disposal Requirements**

i. All sludge generated at the wastewater treatment plant will be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 C.F.R. part 503. These requirements are enforceable by USEPA.

ii. The Discharger shall ensure compliance with the requirements in SWRCB Order No. 2004-10-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities" for those sites receiving the Discharger's biosolids which a Regional Water Quality Control Board has placed under this general order, and with the requirements in individual Waste Discharge Requirements (WDRs) issued by a Regional Water Board for sites receiving the Discharger's biosolids.

iii. The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.

iv. The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, State Board or other Regional Water Board, with respect to municipal sludge or biosolids.

b. **Pretreatment Requirements**

i. This Order includes the Discharger's Pretreatment Program as previously submitted to this Regional Water Board. Any change to the Program shall be reported to the Regional Water Board in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 C.F.R., part 403.18.

ii. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Federal Clean Water Act with timely, appropriate, and effective enforcement actions. The Discharger shall require industrial users to comply with Federal Categorical Standards and shall initiate enforcement actions against

those users who do not comply with the standards. The Discharger shall require industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

iii. The Discharger shall perform the pretreatment functions as required in 40 C.F.R., part 403 including, but not limited to:

- Implement the necessary legal authorities as provided in 40 C.F.R. 403.8(f)(1);
- Enforce the pretreatment requirements under 40 C.F.R. 403.5 and 403.6;
- Implement the programmatic functions as provided in 40 C.F.R. 403.8(f)(2); and,
- Provide the requisite funding of personnel to implement the Pretreatment Program as provided in 40 C.F.R. 403.8(f)(3).

iv. The Discharger shall submit semiannual and annual reports to the Regional Water Board, with copies to the State Board, and USEPA Region 9, describing the Discharger's pretreatment activities over the period. The annual and semiannual reports shall contain, but not be limited to, the information required in the attached *Pretreatment Reporting Requirements* (Attachment P), or an approved revised version thereof. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.

v. The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 C.F.R., part 403, including subsequent regulatory revisions thereof. Where part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Water Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Water Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as

provided in the Federal Clean Water Act and/or the California Water Code.

c. **Collection System Requirements**

The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 C.F.R. § 122.41(e)). The Discharger must report any non-compliance (40 C.F.R. § 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 C.F.R. § 122.41(d)). See the Order at Attachment D, subsections I.D, V.E, V.H, and I.C.

6. Spill Reporting Requirements

a. **Notification –** Although State and Regional Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the Discharger shall make notifications as required below:

i. For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but no later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Quality Control Board.

ii. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

b. **Monitoring –** For certain spills, overflows and bypasses, the Discharger shall monitor as required below:

i. To define the geographical extent of spill's impact the Discharger shall obtain grab samples for spills, overflows or bypasses of any volume that reach receiving waters. The Discharger shall analyze the samples for total and fecal coliforms or E. coli, and enterococcus, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible and safe). This

monitoring shall be done on a daily basis from time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the local health agency authorizes cessation of monitoring.

ii. The Discharger shall obtain a grab sample (if feasible, accessible and safe) for spills, overflows or bypasses of any volume that flowed to receiving waters or entered a shallow ground water aquifer, and all spills, overflows and bypasses of 1,000 gallons or more. The Discharger shall analyze the sample for total and fecal coliforms or E. coli, and enterococcus, and relevant pollutants of concern depending on the area and nature of spills or overflows (if feasible, accessible and safe).

c. **Reporting –** The Regional Water Board initial notification shall be followed by:

i. A written preliminary report five working days after disclosure of the incident. Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies, may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph D. below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer, for just cause, can grant an extension for submittal of the final written report.

ii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the Monitoring and Reporting Program) stating that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger's Preventative Maintenance Plan. Any deviations from or modifications to the Plan shall be discussed.

d. **Records –** The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report. The records shall contain:

i. the date and time of each spill, overflow or bypass;

ii. the location of each spill, overflow or bypass;

iii. the estimated volume of each spill, overflow or bypass including gross volume, amount recovered and amount not recovered, monitoring results;

iv. the cause of each spill, overflow or bypass;

v. whether each spill, overflow or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;

vi. mitigation measures implemented; and,

vii. corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

e. **Activities Coordination –** In addition, Regional Water Board expects that the municipal departments that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program, (ii) a MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSO WDR will coordinate their compliance activities for consistency and efficiency.

f. **Consistency with Sanitary Sewer Overflows WDRs –** The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under a NPDES permit. (33 U.S.C. §§1311, 1342). The State Board adopted General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, (WQ Order No. 2006-0003) on May 2, 2006, to provide a consistent, statewide regulatory approach to address Sanitary Sewer Overflows (SSO). The SSO WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

The requirements contained in this Order in Sections VI.C.3.b., VI.C.4., and VI.C.6. are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between the NPDES permit provisions and SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of WQ Order No. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b., VI.C.4., and VI.C.6., provided any more specific or stringent provisions enumerated in this Order, have also been addressed.

g. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

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 priority 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 priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data.

When determining compliance with an AMEL, for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single alleged violation, though the Discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a

single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger shall collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" Section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

D. Average Weekly Effluent Limitation (AWEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to the AWEL.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge (or when applicable, determined by subsection B above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day with respect to the MDEL.

F. Instantaneous Minimum Effluent Limitation.

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

G. Instantaneous Maximum Effluent Limitation.

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

H. Six-month Median Effluent Limitation.

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, the Discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median effluent limitation.

I. Percent Removal.

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

Percent Removal (%) = $[1-(C_{Effluent}/C_{Influent})] \times 100$ %

When preferred, the Discharger may substitute mass loadings and mass emissions for the concentrations.

J. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

K. Compliance with Single Constituent Effluent Limitations

Dischargers may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see Section B "Multiple Sample Data Reduction" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the Reporting Minimum Level (RML).

L. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Dischargers may be considered out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

M. Mass Emission Rate.

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.34}{N} \sum_{i=1}^{N} Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N} \sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'C_i' is the concentration measured in the composite sample and 'Q_i' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Qt' is the total flow rate of the combined waste streams.

N. Bacterial Standards and Analysis.

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

   Geometric Mean = $(C_1 \times C_2 \times \ldots \times C_n)1/n$

   where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 C.F.R. part 136 (revised March 12, 2007), unless alternate methods have been approved by USEPA pursuant to 40 C.F.R. part 136, or improved methods have been determined by the Executive Officer and/or USEPA.

4. Detection methods used for enterococcus shall be those presented in Table 1A of 40 C.F.R. part 136 (revised March 12, 2007) or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

O. Single Operational Upset

A single operational upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

1. A single operational upset is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2(b) of Attachment D – Standard Provisions.

3. For purposes outside of California Water Code sections 13385, subsections (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).

4. For purposes of California Water Code sections 13385, subsection (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with California Water Code section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

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

b. Lethal Concentration 50% (LC 50)

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

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

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

where:

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

Annual Average: is the arithmetic mean of daily concentrations, or of daily "mass emission rates", over the specified 365-day period.

$$\text{Average} = \frac{1}{N}\sum_{i=1}^{N} X_i$$

in which 'N' is the number of days samples were analyzed during the period and 'Xi' is either the constituent concentration (mg/L) or "mass emission rate" (kg/day or lb/day) for each day sampled.

Applicable Standards and Limitations: mean all State, interstate, and federal standards and limitations to which a discharge, a sewage sludge use or disposal practice, or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices,

pretreatment standards, and standards for sewage sludge use or disposal under sections 301, 302, 303, 304, 306, 307, 316, 403 and 405 of CWA.

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.

Best Management Practice (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs may include, but are not limited to, treatment requirements, operating procedures, or practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Best Professional Judgment (BPJ). The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

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

Bioassay. A test used to evaluate the relative potency of a chemical or a mixture of chemicals by comparing its effect on a living organism with the effect of a standard preparation on the same type of organism.

Biochemical Oxygen Demand (BOD). A measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days) in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

Biosolids. Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill.

Bypass means the intentional diversion of waste streams from any portion of a treatment (or pretreatment) facility whose operation is necessary to maintain compliance with the terms and conditions of this order and permit.

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

Chlorinated Phenolic Compounds shall mean the sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

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

a. Chronic Toxicity (TUc)

   Expressed as Toxic Units Chronic (TUc)

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

b. No Observed Effect Level (NOEL)

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

Clean Water Act (CWA). The Clean Water Act is an act passed by the U.S. Congress to control water pollution. It was formerly referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), 33 U.S.C. 1251 et seq., as amended by: Public Law 96-483; Public Law 97-117; Public Laws 95-217, 97-117, 97-440, and 100-04.

Code of Federal Regulation (C.F.R.**).** A codification of the final rules published daily in the *Federal Register.* Title 40 of the C.F.R. contains the environmental regulations.

Composite Sample means, for flow rate measurements, the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.

Composite sample means, for other than flow rate measurement,

a. A combination of at least eight individual portions obtained at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling; or,

b. A combination of at least eight individual portions of equal volume obtained over a 24-hour period. The time interval will vary such that the volume of wastewater discharged between sampling remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

For 24-hour composite samples, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted samples shall be obtained during the discharge period and composited. For discharge durations of less than eight hours, individual "grab samples" may be substituted. A grab sample is an individual sample collected in less than 15 minutes.

Conventional Pollutants. Pollutants typical of municipal sewage, and for which municipal secondary treatment plants are typically designed; defined at 40 C.F.R. 401.16 as BOD, TSS, fecal coliform bacteria, oil and grease, and pH.

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

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

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

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

DDT derivatives: At a minimum, 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

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.

Grab Sample is defined as any individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the maximum daily effluent limitations and the instantaneous maximum effluent limitations.

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

Hazardous Substance means any substance designated under 40 C.F.R. 116 pursuant to section 311 of the Clean Water Act and/or a hazardous waste, as defined in 40 C.F.R. 261.3.

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

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

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed

when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

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

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

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

Interference Discharge which, alone or in conjunction with discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal and is a cause of a violation of the POTW's NPDES permit or prevents lawful sludge use or disposal.

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.

Land Application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Local Limits. Conditional discharge limits imposed by municipalities upon industrial or commercial facilities that discharge to the municipal sewage treatment system.

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.

Migration of Aquatic Organisms (MIGR) and Spawn is that aquatic organisms utilize all bays, estuaries, lagoons and coastal wetlands, to a certain extent, for spawning and early development. This may include migration into areas, which are heavily influenced by freshwater inputs.

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.

Monthly Average is the arithmetic mean of daily concentrations, or of daily "mass emission rates", over the specified monthly period:

$$\text{Average} = \frac{1}{N}\sum_{i=1}^{N} X_i$$

in which 'N' is the number of days samples were analyzed during the period and 'X_i' is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

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.

Nearshore is defined as the zone bounded by the shoreline and a line 1,000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline.

Non-Chlorinated Phenolic Compounds shall mean the sum of 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol, and phenol.

Nonconventional Pollutants. All pollutants that are not included in the list of conventional or toxic pollutants in 40 C.F.R. 401. Includes pollutants such as chemical oxygen demand (COD), total organic carbon (TOC), nitrogen, and phosphorus.

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.

Overflow means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

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

PAH derivatives: At a minimum, PCB congeners whose analytical characteristics resemble those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified.

Pass Through is defined as the discharge through the POTW to navigable waters which, alone or in conjunction with discharges from other sources, is a cause of a violation of POTW's NPDES permit.

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.

PCB derivatives: At a minimum, PCB congeners whose analytical characteristics resemble those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified.

Pesticides are, for purposes of this order, those six constituents referred to in 40 C.F.R., part 125.58 (p) (methoxychlor, demeton, guthion, malathion, mirex, and parathion).

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

Preservation of Biological Habitats (BIOL): means that Areas of Special Biological Significance (along coast from Latigo Point to Laguna Point) and Big Sycamore Canyon and Abalone Cove Ecological Reserves and Point Femin Marine Life Refuge.

Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a publicly owned treatment works [40 C.F.R. 403.3(q)].

Priority Pollutants are those constituents referred to in 40 C.F.R. 401.15; a list of these pollutants is provided as Appendix A to 40 C.F.R. 423.

Publicly Owned Treatment Works (POTW). A treatment works, as defined by section 212 of the CWA, that is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant [40 C.F.R. 403.3].
Rare, Threatened or Endangered Species (RARE) means that one or more rare species utilize all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.

Reported Minimum Level is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional 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.

Sanitary Sewer. A pipe or conduit (sewer) intended to carry wastewater or water-borne wastes from homes, businesses, and industries to the POTW.

Sanitary Sewer Overflows (SSO). Untreated or partially treated sewage overflows from a sanitary sewer collection system.

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

Secondary Treatment Standards. Technology-based requirements for direct discharging municipal sewage treatment facilities. Standards are based on a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are expressed as a minimum level of effluent quality in terms of: BOD_5, total suspended solids (TSS), and pH (except as provided for special considerations and treatment equivalent to secondary treatment).

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 which can reasonably be expected to occur in the absence of a "bypass" or "overflow." It does not mean economic loss caused by delays in production.

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

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

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

Sludge means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system. It also includes, but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.

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.

Statistical analyses that are useful in determining temporal and spatial trends in the marine environment include, but are not limited to, the following:

a. Mean and standard deviation ($x \pm s.d.$)

b. Regression analyses (univariate and multivariate)
[e.g., correlation coefficients (r)]

c. Parametric statistics
[e.g., Student's t-test, analysis of variance (ANOVA), Student-Newman-Keuls test (SNK), t-test for paired comparisons]

d. Nonparametric statistics
[e.g., Mann-Whitney U-test, Kruskal-Wallis one-way ANOVA, Friedman two-way ANOVA, chi-square test (or G-test)]

e. Multivariate techniques
[e.g., discriminant analysis, classification analyses (cladistic/parsimony analysis of endemicity, or phenetic clustering), non-metric multidimensional scaling (NMDS), principal component analysis (PCA), principal coordinate analysis (PCOA), and/or multivariate ANOVA (MANOVA)]

f. Biological indices
[e.g., species richness (S), Margalef (d), Shannon-Wiener (H'), Brillouin (H), Simpson (SI), Gleason, Infaunal Trophic Index (ITI), evenness, Benthic Response Index (BRI), phylogenetic diversity, and taxonomic distinctiveness]

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

Technology-Based Effluent Limit. A permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

Total Maximum Daily Load (TMDL). The amount of pollutant, or property of a pollutant, from point, nonpoint, and natural background sources, that may be discharged to a water quality-limited receiving water. Any pollutant loading above the TMDL results in violation of applicable water quality standards.

Toxic Pollutant. Pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly - from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator of USEPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. Toxic pollutants also include those pollutants listed by the Administrator under CWA section 307(a)(l) or any pollutant listed under section 405 (d) which relates to sludge management.

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.)

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with the permit because of factors beyond the reasonable control of the permittee. It does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation, or those problems the discharger should have foreseen.

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

Weekly Average is the arithmetic mean of daily concentrations, or of daily mass emission rates, over the specified weekly period:

$$\text{Average} = \frac{1}{N}\sum_{i=1}^{N} X_i$$

in which "N" is the number of days samples were analyzed during the period and "X_i" is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

Wasteload Allocation (WLA). The proportion of a receiving water's total maximum daily load that is allocated to one of its existing or future point sources of pollution.

Water Quality-Based Effluent Limit (WQBEL). A value determined by selecting the most stringent of the effluent limits calculated using all applicable water quality criteria (e.g., aquatic life, human health, and wildlife) for a specific point source to a specific receiving water for a given pollutant.

Water Quality Criteria. Comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by USEPA or States for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal.

Water Quality Standard. A law or regulation that consists of the beneficial use or uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular waterbody, and an antidegradation statement.

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.

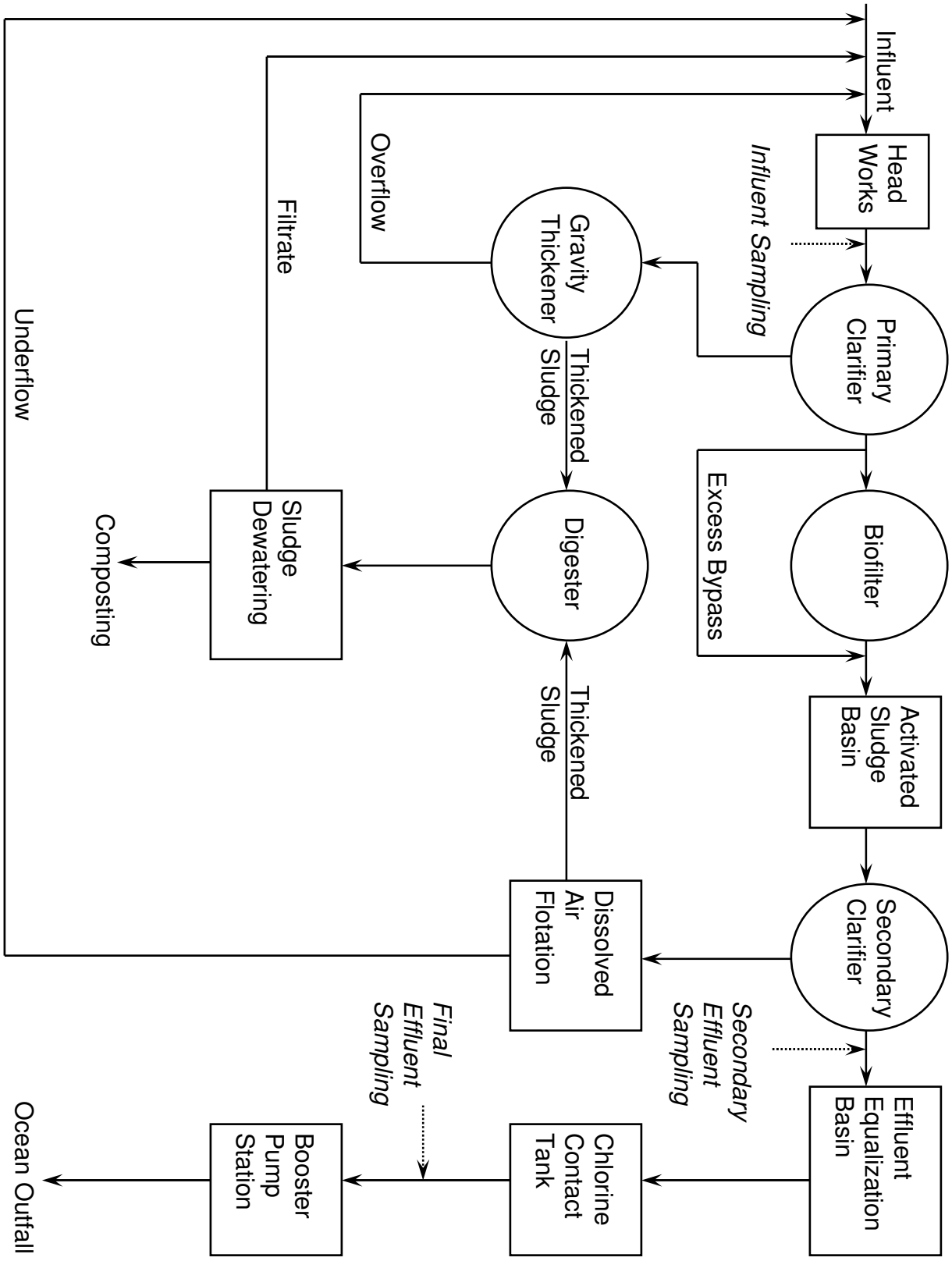
Whole Effluent Toxicity (WET): The total toxic effect of an effluent measured directly with a toxicity test.

Zone of Initial Dilution (ZID) means, for purposes of designating monitoring stations, the region within a horizontal distance equal to a specified water depth (usually depth of outfall or average depth of diffuser) from any point of the diffuser or end of the outfall and the water column above and below that region, including the underlying seabed.

ATTACHMENT B – MAP

Oxnard Wastewater Treatment Plant

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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(e))

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 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 C.F.R. § 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 California Water Code. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv))

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2))

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi))

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(l)(4))

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i))

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 to the Regional Board 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 C.F.R. § 122.41(l)(6)(i))

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

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

   b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 part 122.29(b) (40 C.F.R. § 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 subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions — Notification Levels VII.A.1). (40 C.F.R. § 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 C.F.R. § 122.41(l)(1)(iii))

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 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 C.F.R. § 122.41(l)(7))

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.42(b)(3))

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations, title 40, part 122.48 requires that all NPDES permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Principles, Framework, and Design of Monitoring Program

1. NPDES compliance monitoring focuses on the effects of a specific point source discharge. Generally, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) or to evaluate the current status of important ecological resources in the waterbody. The scale of existing compliance monitoring programs does not match the spatial and, to some extent, temporal boundaries of the important physical and biological processes in the ocean. In addition, the spatial coverage provided by compliance monitoring programs is less than ten percent of the nearshore ocean environment. Better technical information is needed about status and trends in ocean waters to guide management and regulatory decisions, to verify the effectiveness of existing programs, and to shape policy on marine environmental protection.

2. The Regional Water Board and USEPA, working with other groups, have developed a comprehensive basis for effluent and receiving water monitoring appropriate to large publicly owned treatment works (POTWs) discharging to waters of the Southern California Bight. This effort has culminated in the publication by the Southern California Coastal Water Research Project (SCCWRP) of the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep #357. Southern California Coastal Water Research Project, Westminster, CA. 101 pp.). This guidance provides the principles, framework and recommended design for effluent and receiving water monitoring elements that have guided development of the monitoring program described below.

3. The conceptual framework for the Model Monitoring Program has three components that comprise a range of spatial and temporal scales: (1) core monitoring; (2) regional monitoring; and (3) special studies.

   a. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below these core components are typically referred to as local monitoring.

b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations, and is not specified in this permit. Instead, for each regional component, the degree and nature of participation of the Discharger is specified. For this permit, these levels of effort are based upon past participation of the Los Angeles County Sanitation Districts (Discharger or Districts) in regional monitoring programs.

   The Discharger shall participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board. The procedures and time lines for the Regional Water Board approval shall be the same as detailed for special studies, below.

c. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.

   The Discharger and the Regional Water Board shall consult annually to determine the need for special studies. Each year, the Discharger shall submit proposals for any proposed special studies to the Regional Water Board by December 15, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board, the Discharger shall implement its special study or studies.

4. In an attempt to bridge the foregoing gap in information, this monitoring program for the City of Oxnard is comprised of requirements to demonstrate compliance with the conditions of the NPDES permit, ensure compliance with State water quality standards, and mandate participation in regional monitoring and/or area-wide studies.

5. Discharger participation in regional monitoring programs is required as a condition of this permit. The Discharger shall complete collection and analysis of samples in accordance with the schedule established by the Steering Committee directing the Bight-wide regional monitoring surveys. The level of participation shall be similar to that provided by the Discharger in previous regional surveys conducted in 1994, 1998 and 2003. The regional programs which must be conducted under this permit include:

   a. Future Southern California Bight regional surveys, including benthic infauna, sediment chemistry, fish communities and fish predator risk;

   b. Central Region Kelp Monitoring Program – coordinated by the Regional Water Board; and,

   c. Central Bight Water Quality Cooperative Program – coordinated monitoring conducted by Orange County Sanitation District, County Sanitation Districts of Los Angeles County, City of Los Angeles and City of Oxnard through appropriate agencies for water quality monitoring.

6. Regular regional monitoring for the Southern California Bight has been established, occurring at four- to five-year intervals, and coordinated through SCCWRP with discharger agencies and numerous other entities. The third regional monitoring program (Bight'03) occurred during summer 2003 and winter 2003-4. The fourth regional monitoring program (Bight'08) is expected to take place during 2008. While participation in regional programs is required under this permit, revisions to the Discharger's monitoring program at the direction of the Regional Water Board may be necessary to accomplish the goals of regional monitoring or to allow the performance of special studies to investigate regional or site-specific water issues of concern. These revisions may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples to be collected. Such changes may be authorized by the Executive Officer upon written notification to the Discharger.

7. The Regional Water Board has helped to establish the Central Region Kelp Survey Consortium to conduct regional kelp bed monitoring. This program is designed to require ocean dischargers in the Regional Water Board's jurisdiction to undertake a collaborative program (which may include participation by Orange County ocean dischargers) to monitor kelp beds in the Southern California Bight, patterned after the successful program implemented by the San Diego Regional Water Board since 1985. Data collected in this regional survey will be used to assess status and trends in kelp bed health and spatial extent. The regional nature of the survey will allow the status of beds local to specific dischargers to be compared to regional trends. The regional kelp monitoring survey was initiated during 2003.

The regional survey will consist primarily of quarterly aerial overflights to assess the size and health of existing kelp beds. The Discharger shall participate in the management and technical committee's responsibility for the final survey design and shall provide appropriate financial support to help fund the survey (share base) on the number of participates in the study, but not to exceed a maximum of $10,000 per year.

8. Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

B. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report following the analysis.

C. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. parts 136.3, 136.4, 136.5 (revised March 12, 2007); or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

D. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 C.F.R. part 136.3 (revised March 12, 2007). All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the monthly report.

E. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

F. For any analyses performed for which no procedure is specified in the USEPA guidelines, or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

G. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."

H. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Board in the 2005 Ocean Plan, Appendix II. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.

I. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 C.F.R. part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in section K. below. If the effluent limitation is lower than all the MLs in Appendix II of the 2005 Ocean Plan, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.

J. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (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. In accordance with section K. below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix II of the 2005 Ocean Plan.

K. In accordance with Section III.C.5.b of the 2005 Ocean Plan, the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix II of the 2005 Ocean Plan to be included in the discharger's permit in any of the following situations:

1. When a pollutant under consideration is not listed in Appendix II;

2. When the discharger and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 C.F.R., part 136 (revised as of March 12, 2007);

3. When the discharger agrees to use an ML that is lower than those listed in Appendix II;

4. When the discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II and proposes an appropriate ML for the matrix; or,

5. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Water Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

L. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

M. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.

N. For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

1. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 C.F.R., part 136 (revised March 12, 2007), unless alternate methods have been approved in advance by the United State Environmental Protection Agency (USEPA) pursuant to 40 C.F.R. part 136.

2. Detection methods used for enterococcus shall be those presented in Table 1A of 40 C.F.R., part 136 (revised March 12, 2007) or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water*

By Membrane Filter Procedure, or any improved method determined by the Regional Water Board to be appropriate.

II. MONITORING LOCATIONS

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

Table 1. Monitoring Station Locations

Influent and Effluent Monitoring Stations		
Discharge Point Name	**Monitoring Location Name**	**Monitoring Location Description (include Latitude and Longitude when available)**
--	**INF-001**	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained.
001	**EFF-001**	The effluent sampling station shall be located downstream of any in-plant return flows but before entering discharge tunnel where representative samples of the effluent can be obtained

Receiving Water Column Monitoring Stations								
Station	RWC-4101 RWC-4102 RWC-4102 RWC-4104 RWC-4105 RWC-4106	RWC-4201 RWC-4202 RWC-4203 RWC-4204 RWC-4205 RWC-4206	RWC-4301 RWC-4302 RWC-4303 RWC-4304 RWC-4305 RWC-4306	RWC-4391 RWC-4392 RWC-4393 RWC-4394 RWC-4395 RWC-4396	RWC-4401 RWC-4402 RWC-4403 RWC-4404 RWC-4405 RWC-4406	RWC-4501 RWC-4502 RWC-4503 RWC-4504 RWC-4505 RWC-4506	RWC-4601 RWC-4602 RWC-4603 RWC-4604 RWC-4605 RWC-4606	RWC-4701 RWC-4702 RWC-4703 RWC-4704 RWC-4705 RWC-4706
Latitude	34°03'54.42" 34°02'57.11" 34°01'68.768" 33°99'22.22" 33°97'15.394" 33°94'65.182"	34°06'18.40" 34°05'43.829" 34°04'70.283" 34°02'75.61" 34°00'42.31" 33°97'66.697"	34°09'35.82" 34°08'61.24" 34°06'62.84" 34°04'71.889" 34°03'02.091" 34°00'90.45"	34°07'57.5" 34°07'29.8" 34°06'59.7" 34°06'02.8" 34°04'17.2" 34°03'10.2"	34°13'50. 56" 34°12'22.53" 34°10'87.11" 34°09'25.263" 34°07'94.071" 34°06'68.687"	34°15'65.90" 34°15'16.697" 34°14'80.71" 34°13'99.23" 34°12'87.61" 34°11'83.93"	34°23'06.52" 34°22'73.182" 34°22'16.576" 34°21'45.162" 34°20'63.687" 34°19'53.13"	34°27'12.253" 34°26'35.04" 34°25'55.667" 34°24'85.31" 34°24'05.43" 34°23'30.32"
Longitude	118°90'77.3" 118°91'23.5" 118°91'68.5" 118°92'71.3" 118°93'64.5" 118°94'70.6"	119°00'71.6" 119°01'03.5" 119°01'41.3" 119°02'27.3" 119°03'31.4" 119°04'53.2"	119°09'77.4" 119°10'06.0" 119°11'03.1" 119°11'95.5" 119°12'65.9" 119°13'77.9"	119°11'25.6" 119°11'53.6" 119°12'10.0" 119°12'44.9" 119°13'40.6" 119°14'10.3"	119°19'02.0" 119°20'38.1" 119°21'82.7" 119°23'64.3" 119°25'04.3" 119°26'41.1"	119°22'99.3" 119°24'17.8" 119°25'16.1" 119°27'19.9" 119°30'29.9" 119°32'96.8"	119°26'73.0" 119°27'85.0" 119°29'41.3" 119°31'48.3" 119°33'99.7" 119°37'20.7"	119°31'04.1" 119°32'90.9" 119°35'09.1" 119°37'05.8" 119°39'23.9" 119°41'25.7"
Station Depth (m)	10 3049 5560 95100 211450 230788	12 2830 5860 88100 95100 149782	3128 2060 149 97100 120325 353525	11 30 30 60 134 333	1012 1830 2160 38100 100205 100282	810 1620 1820 20 30 5581	610 11 1630 1830 2330 30	910 1820 20 2323 2630 2930
Dist. From Outfall Transect (km)	24.3	16.0	8.3	0.1	0.1	4.9	10.0	15.4

Receiving Water Sediment Monitoring Stations							
Station	RWS-001	RWS-002	RWS-003	RWS-004	RWS-005	RWS-006	RWS-007
Latitude	34^{0}07'65.01"	34^{0}07'39.59"	34^{0}07'37.21	34^{0}07'36.52	34^{0}07'34.20	34^{0}07'28.00	34^{0}05'34.15
Longitude	119^{0}02'84.87"	119^{0}11'45.75"	119^{0}11'42.33"	119^{0}11'41.34"	119^{0}11'36.24"	119^{0}11'25.20"	119^{0}11'32.25"
Station Depth (m)	15.0	15.0	15.3	15.0	15.3	15.3	15.3
Dist. From Outfall Transect (m)	1000	150	18	18	150	500	4000

Receiving Water Trawl Stations			
Station	RWT-001	RWT-002	RWT-003
Latitude	34^{0}07'56.79"	34^{0}07'26.96"	34^{0}05'31.73"
Longitude	119^{0}11'40.42"	119^{0}11'33.32"	119^{0}09'35.22"
Station Depth (m)	15.6	15.6	15.6
Dist. From Outfall Transect (m)	380	380	4000

Ventura County Shoreline Bacteriological Monitoring Stations			
Ventura County ID	**Location**	**Latitude**	**Longitude**
35000	Hollywood Beach, Los Robles St	34^{0}09'45"	119^{0}13'48"
37000	Channel Islands Harbor Beach	34^{0}09'34"	119^{0}13'19"
38000	Silverstrand Beach, San Nicholas Ave	34^{0}09'26"	119^{0}13'31"
39000	Silverstrand Beach, Santa Paula Ave	34^{0}09'09"	119^{0}13'11"
40000	Silverstrand Beach, Sawtell, Ave	34^{0}08'51"	119^{0}12'59"
41000	Port Hueneme Beach Park	34^0 08'30"	119^{0}11'40"
42000	Ormand Beach, J Street Drain	34^0 08'20"	119^{0}11'20"
43000	Ormand Beach, Industrial Drain	34^{0}08'09"	119^{0}11'03"
44000	Ormand Beach, Arnold Rd	34^{0}07'11"	119^{0}09'36"

CORE MONITORING

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the Facility at INF-001 as follows:

Table 2. Influent Monitoring

Parameter	Units	Sample Type**	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/totalizer	Continuous[1]	[2]
pH	pH units	Grab	Daily	[2]
Suspended solids	mg/L	24-hr composite	Daily	[2]
$BOD_5 20^0C$	mg/L	24-hr composite	Daily	[2]
Oil and grease	mg/L	Grab[3]	Weekly	[2]
Benzidine[4]	µg/L	24-hr composite	Quarterly	[2]
Heptachlor epoxide[4]	µg/L	24-hr composite	Quarterly	[2]
PCBs[4]	µg/L	24-hr composite	Quarterly	[2]
TCDD equivalents[4]	ng/L	24-hr composite	Quarterly	[2]
Remaining pollutants in Table B of the 2005 Ocean Plan (excluding residual chlorine, acute and chronic toxicity, and ammonia)[5]	µg/L	24-hr composite, or grab, as applicable according to 40 C.F.R. part 136	Semiannually	[2]
Pesticides	µg/L	24-hr composite	Semiannually	[2]

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess plant performance, identify operational problems and improve plant performance.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.

** See Attachment A for definition of terms.

1 When continuous monitoring of flow is required, total daily flow and peak daily flow (24-hr basis) should be reported.

2 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix II of the Ocean Plan, the analytical method with the lowest ML must be selected.

3 Oil and grease monitoring in the influent and effluent shall consist of a single grab sample at peak flow over a 24-hour period.

4 Reasonable potential analysis showed inconclusive. Therefore, the minimum frequency of the influent analysis remains "quarterly".

5 This constituent did not show the reasonable potential. The minimum frequency of influent analysis remains as "semiannually" or is reduced from "quarterly" to "semiannually".

A. Monitoring Location EFF-001

1. The Discharger shall monitor effluent at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type**	Minimum Sampling Frequency	Required Analytical Test Method
Total waste flow	MGD	Continuous[1]	--	
Total residual chlorine	mg/L	Continuous[1]	---	[2]
Turbidity	NTU	Continuous[1]	---	[2]
Temperature	^{0}C	Grab	---	[2]
pH	pH unit	Grab	Daily	[2]
Settleable solids	mL/L	Grab	Daily	[2]
Suspended solids	mg/L	24-hr composite	Daily	[2]
Oil and grease	mg/L	Grab[3]	Daily	[2]
$BOD_5 20^0C$	mg/L	24-hr composite	Daily	[2]
Total coliforms	MPN/100 mL	Grab	Daily	[6]
Fecal coliforms	MPN/100 mL	Grab	5 times/month	[6]
Enterococcus	MPN/100 mL	Grab	5 times/month	[6]
Ammonia nitrogen[7]	mg/L	24-hr composite	Monthly	[2]
Nitrate nitrogen	mg/L	24-hr composite	Monthly	[2]
Nitrite nitrogen	mg/L	24-hr composite	Monthly	[2]
Organic nitrogen	mg/L	24-hr composite	Monthly	[2]
Chronic toxicity[8]	TUc	24-hr composite	Monthly	[9]
Benzidine[10]	ng/L	24-hr composite	Quarterly	[2]
Heptachlor epoxide[10]	ng/L	24-hr composite	Quarterly	[2]
PCBs[**, 10]	µg/L	24-hr composite	Quarterly	[2]
TCDD equivalents[**, 10]	pg/L	24-hr composite	Quarterly	[2]
Remaining pollutants in Table	µg/L	24-hr composite, or	Semiannually	[2]

[6] Analytical methods used for total coliform, fecal coliform and enterococcus shall be those presented in Table 1A of 40 C.F.R. 136 (revised March 12, 2007) or any method approved in advance by USEPA, State Water Board, or Regional Water Board.

[7] This constituent did not show the reasonable potential. The minimum frequency of effluent analysis is reduced from "weekly" to "monthly".

[8] This constituent did not show reasonable potential. However, the minimum frequency of effluent analysis remains at "monthly", because the chronic toxicity tests will detect any constituent, or combination of constituents, that may be present and adversely effect marine biota, not detected by routine laboratory testing.

[9] Analytical method and requirements for chronic toxicity testing are described in Section V. Whole Effluent Toxicity Testing Requirements.

[10] Reasonable potential analysis showed inconclusive. Therefore, the minimum frequency of the influent analysis remains "quarterly".

Parameter	Units	Sample Type**	Minimum Sampling Frequency	Required Analytical Test Method
B of the 2005 Ocean Plan (excluding acute toxicity)[11]		grab, as applicable according to 40 C.F.R. part 136		
Radioactivity[12]	pCi/L	24-hr composite	Semiannually	[2]
Pesticides[13]	µg/L	24-hr composite	Semiannually	[2]

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. **Methods and test species**. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite, 100 percent effluent samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, 1995, (EPA/600/R-95/136). Pursuant to the 2005 California Ocean Plan, upon the approval of the Executive Officer of the Regional Water Board, the Discharger may use a second tier organism (e.g., silverside) if first tier organisms (e.g., topsmelt) are not available. However, the Discharger is required to immediately resume the chronic toxicity test using the original testing organism as soon as this organism becomes available.

2. **Frequency**

   a. Screening - The Discharger shall conduct the first chronic toxicity test screening for three consecutive months in 2008. Re-screening is required every 24 months. The Discharger shall re-screen with a marine vertebrate species, a marine invertebrate species, and a marine alga species and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrate that the same species is the most sensitive, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five, suites.

   b. Regular toxicity tests - After the screening period, monitoring shall be conducted monthly using the most sensitive species.

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[11] This constituent did not show the reasonable potential. The minimum frequency of effluent analysis remains as "semiannually" or is reduced from "quarterly" to "semiannually".

[12] Analysis for combined Radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and uranium.

[13] Pesticides are, for purposes of this order, those six constituents referred to in 40 C.F.R., Part 125.58 (p) (methoxychlor, demeton, guthion, malathion, mirex, and parathion).

3. **Toxicity Units.** The chronic toxicity of the effluent shall be expressed and reported in Chronic Toxic Units, TUc, where,

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

B. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA-821-R-02-012 and/or EPA/600/R-95/136), then the Discharger must re-sample and re-test within 14 days.

3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

4. A series of at least five dilutions and a control shall be tested. The dilution series shall include the instream waste concentration (IWC), and two dilutions above and two below the IWC. The chronic IWC for Discharge Serial No. 001 is 0.01%[14] effluent.

5. Because this permit requires sublethal hypothesis testing endpoints from the 1995 West Coast marine and estuarine WET test methods manual and the 2002 East Coast marine and estuarine WET test methods manual, with-in test variability must be reviewed and variability criteria [e.g., Minimum Significance Difference (MSD) bound, Percent, Minimum Significance Difference (PMSD) bounds] must be applied, as specified in the test methods manuals. The calculated MSD (or PMSDs) for both reference toxicant test and effluent toxicity test results must meet the MDS bound (or PMSD bounds) variability criteria specified in the test methods manuals.

C. Accelerated Monitoring

If the effluent toxicity test result exceeds the limitation, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, approximately every two weeks, over a 12-week period. Effluent sampling for the first

[14] 0.01% is the result of 1 divided by 99, which is sum of dilution credit 98 plus 1.

test of the six additional tests shall commence within 5 working days of receipt of the test results exceeding the toxicity limitation.

1. If all the results of the six additional tests are in compliance with the toxicity limitation, the Discharger may resume regular monthly testing.

2. If the result of any of the six additional tests exceeds the limitation, then the Discharger shall continue to monitor once every two weeks until six consecutive biweekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.

3. If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) and implement the initial investigation Toxicity Reduction Evaluation (TRE) Workplan.

4. If implementation of the initial investigation TRE workplan (see item E below) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

2. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,

3. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.F.3 for guidance manuals.

E. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:

   a. Further actions to investigate and identify the cause of toxicity;

   b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and,

   c. A schedule for these actions.

2. The following section summarizes the stepwise approach used in conducting the TRE:

   a. Step 1 includes basic data collection.

   b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals.

   c. If Steps 1 and 2 are unsuccessful, Step 3 implements a Toxicity Identification Evaluation (TIE) and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.

   d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.

   e. Step 5 evaluates in-plant treatment options.

   f. Step 6 consists of confirmation once a toxicity control method has been implemented.

   Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic

manual, EPA/600/R-96-054 (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in Section V.D. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer .

5. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

F. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia *because of increasing test pH* when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

   a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

   b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

   c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

   d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board , and receiving written permission expressing approval from the Executive Officer of the Regional Water Board .

G. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month, as required by this permit. Test results shall be reported in Chronic Toxicity Units (TUc), as required, with the self-monitoring report (SMR) for the month in which the test is conducted.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section V.D.4, then those results also shall be submitted with the SMR for the period in which the Investigation occurred.

1. The full report shall be received by the Regional Water Board by the 15th day of the second month following sampling.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit.

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test, as appropriate:

   a. sample date(s)

   b. test initiation date

   c. test species

   d. end point values for each dilution (e.g. number of young, growth rate, percent survival)

   e. LC_{50} value(s) in percent effluent

   f. TUa value(s) $\left(TU_a = \frac{100}{LC50} \right)$

   g. NOEC value(s) in percent effluent

   h. TUc values $\left(TU_c = \frac{100}{NOEC} \right)$

   i. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)

   j. IC/EC_{25} values(s) in percent effluent

Inhibition Concentration (IC_P) is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological endpoint (e.g., reproduction, growth) calculated from a continuous model (e.g., EPA Interpolation Model).

Effective Concentration (EC_P) is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a quantal biological measurement (e.g., development, survival) calculated from a continuous model (e.g., Probit).

k. NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)

l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent samples.

5. The Discharger shall notify this Regional Water Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of an effluent limit. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring for Receiving Water Quality

This survey addresses the compliance questions: “Are Ocean Plan and Basin Plan objectives for parameters listed in Tables 7a and 7b being met?” Data collected provide the information necessary to demonstrate compliance with the standards for local monitoring. In addition, data collected by the Discharger contribute to the Central Bight Cooperative Water Quality Survey. This regionally coordinated survey provides integrated water quality surveys on a quarterly basis. These surveys cover 200 kilometers of coast in Ventura, Los Angeles, and Orange Counties, from the nearshore to approximately 10 kilometers offshore. This cooperative program contributes to a regional understanding of seasonal patterns in nearshore water column structure. The regional view provides context for determining the significance and causes of locally observed patterns in the area of wastewater outfalls.

1. The Discharger shall monitor receiving water quality at Receiving Water Column Monitoring Stations from RWC-4101 to RWC-4706 (See Table 1) as follows:

Table 4a. Receiving Water Monitoring Requirements – 1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved oxygen	mg/L	continuous profile	quarterly	
Water temperature	°C	continuous profile	quarterly	
Light transmittance	% transmittance	continuous profile	quarterly	[15]
Salinity	ppt	continuous profile	quarterly	
pH	pH units	continuous profile	quarterly	
Chlorophyll a	µg/L	continuous profile	quarterly	
Visual observations	---	---	quarterly	[16]

Sampling techniques shall follow protocols described in the most current edition of the Field Operations Manual for Marine Water-Column, Benthic, and Trawl Monitoring in Southern California, SCCWRP. Data shall be analyzed to approximate the typical wastewater plume movement and data from 1998 and forward shall be analyzed to determine and map out the wastewater plume movement under different seasonal and weather conditions.

2. The Discharger shall monitor bacteria and ammonia at 18 receiving water column monitoring stations of RWC-~~4101~~ 4401 to RWC-~~4106~~4406, RWC-4301 to RWC-4306, and RWC-~~4701~~ 4391 to RWC-~~4706~~ 4396 as follows:

Table 4b. Receiving Water Monitoring Requirements – 2

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom[17]	quarterly	[6]
Fecal coliform	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom[17]	quarterly	[6]
Enterococcus	MPN or CFU/100 mL	grab, surface and mid-depth and near bottom[17]	quarterly	[6]
Ammonia nitrogen	mg/L	grab, surface and mid-depth and near bottom[17]	quarterly	[2]

[15] Light transmittance (transmissivity) shall be measured with a transmissometer, using equipment and procedure similar to that described by L.V. Whitney ['Transmission of Solar Energy and the Scattering Produced by Suspensoids in Lake Waters," Transactions of the Wisconsin Academy of Sciences, Arts, and Letters, Vol. 31 (1938)]. Results shall be expressed as the percent of light transmittance. Path length of transmissometer should be noted.

[16] Observations of wind (direction and speed) , weather (e.g., cloudy, sunny, or rainy) , current (e.g., direction) , and tidal conditions (e.g., high or low tide) shall be made and recorded (every four hours during offshore sampling) at the time samples of the waters of the Pacific Ocean (shore, nearshore, and all offshore stations) are collected.
Observations of water color, discoloration, oil and grease, turbidity, odor, materials of sewage origin in the water or on the beach, and unusual or abnormal amounts of floating or suspended matter in the water or on the beach, rocks and jetties, or beach structures shall also be made and recorded at stations or while in transit. The character and extent of such matter shall be described. The dates, times and depths of sampling and these observations shall also be reported.

[17] Bottom sampling shall be done 2.0 m (6.6 ft) above the seabed.

B. Monitoring for Benthic Sediments

This survey addresses the question: "Are benthic conditions under the influence of the discharge changing over time?" The data collected are used for regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence of the discharge.

1. The Discharger shall monitor sediment at 7 receiving water sediment monitoring stations of RWS-001 to RWS-007 as follows:

   a. **Sediment Chemistry Monitoring Program**

      All benthic sediment samples shall be taken at each station by means of a 0.1 m^2 (1.1 ft^2) modified Van Veen sediment grab sampler.

      Sub-samples (upper two centimeters) of sediment from each sample shall be collected and analyzed separately for the following parameters at each station:

      i. Total organic carbon (TOC) (mg/kg dry wt);

      ii. Dissolved sulfides (water soluble) (mg/kg dry wt);

      iii. Total Kjeldahl nitrogen (mg/kg dry wt);

      iv. Grain size (sufficiently detailed to calculate percent weight in relation to phi size); and,

      v. Arsenic; Cadmium; Chromium (total); Copper; Lead; Mercury; Nickel; Silver; Zinc; Cyanide; Phenolic compounds (non-chlorinated); Phenolic compounds (chlorinated); Total halogenated organic compounds; Aldrin and Dieldrin; Endrin; HCH; Chlordane and related compounds; Total DDT; DDT derivatives**; Total PCB; PCB derivatives**; Toxaphene; Total PAH; PAH derivatives**. The data for these parameters shall be expressed in µg/kg dry weight.

      Annual testing shall be required for these parameters during late summer (August/ September). Bottom samples for sediment chemistry analyses shall be taken at each benthic station prior to trawl sampling.

      In August/September of the third year of the permit, full priority pollutant scans shall be performed on sediment samples from all stations.

** See Attachment A for definition of terms.

b. **Benthic Infaunal Monitoring Program**

The benthic stations shall be conducted annually for benthic infaunal sampling[18]. These stations shall be sampled during late summer (August/ September). Bottom samples for benthic infaunal analyses shall be taken at each benthic station prior to trawl sampling.

The following determinations shall be made at each station, where appropriate:

i. Identification of all organisms to lowest possible taxon (usually species); and,

ii. Total biomass of:

- Mollusks;
- Echinoderms;
- Annelids/polychaetes;
- Ccrustaceans; and,
- All other macroinvertebrates.

iii. Community structure analysis for benthic infaunal[19] for each station and each replicate;

Mean, median, range, standard deviation, and 95% confidence limits, if appropriate, for values determined above in iii. The Discharger may be required to conduct additional "statistical analyses" to determine temporal and spatial trends in the marine environment.

[18] These bottom samples shall be taken by means of a 0.1 m^2 (1.1 ft^2) modified Van Veen sediment grab sampler. The entire contents of each sample shall be passed through a 1.0 mm (0.039 in.) mesh screen to retrieve the benthic organisms. These organisms shall be fixed in l0% buffered formalin and transferred to 70% ethanol within two to seven days for storage. Organisms can be strained with Rose Bengalto to facilitate sorting. All specimens retrieved shall be archived.

[19] Community structure analysis of benthic infauna shall include ~~wet weight of each taxonomic group (mollusks, echinoderms, annelids/polychaetes, crustaceans, and all other macroinvertebrates),~~ number of species, number of individuals per species, total numerical abundance, species abundance per grab, species richness, species diversity (e.g., Shannon-Wiener), species evenness and dominance per station and replicate, similarity analyses (e.g., Bray-Curtis, Jaccard or Sorensen), cluster analyses (using unweighted pair-group method) or other appropriate multivariate statistical techniques approved by the Executive Officer of this Regional Board and USEPA Region IX, and the Infaunal Index.

c. **Sediment Toxicity Monitoring Program**

Sediment toxicity testing shall be conducted annually (August/September) at **two** receiving water sediment monitoring stations of RWS-003 and RWS-007. Three replicate samples shall be collected for testing at each station. Sub-samples (upper two centimeters) shall be taken from each sediment sample and tested with ~~two different test organisms (~~amphipod ~~Rhepoxynius abronius~~Eohaustorius - survival end point; ~~polychaete Neanthes arenaceodentata - growth and survival end points)~~ using standard protocols approved by the Executive Officer of this Regional Board.

d. **Regional Sediment Monitoring Program**

A regional survey of benthic conditions within the Southern California Bight will take place in 2008 (Bight'08). The final survey design will be determined cooperatively by the participants as represented on the Regional Steering Committee. The City of Oxnard shall provide support to the Bight'08 benthic survey by participating in or performing, but not limited to, the following activities:

Participation on the Steering Committee
Participation on the relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, Benthos, and Chemistry)
Field sampling at sea
Infaunal sample analysis
Sediment chemistry analysis
Data management

The level of participation shall be consistent with that provided by the City of Oxnard to the 2003 Regional Benthic Survey.

C. Monitoring for Fish and Macroinvertebrate

This survey addresses two questions: "Are 1) the health of demersal fish and epibenthic invertebrate communities and 2) fish tissue contamination levels in the vicinity of the discharge changing over time?" The data collected are used for regular assessment of temporal trends in community structure and bioaccumulation along an array of sites within the influence of the discharge. Data will also be collected on trash and debris to contribute to the SMBRP's Sources and Loadings program.

1. The Discharger shall monitor fish and macroinvertebrate at 3 receiving water trawling stations of RWT-001 to RWT-003 as follows:

a. **Population Monitoring Program**

The offshore trawling stations shall be sampled annually

(August/September) for demersal fish and epibenthic macroinvertebrates. Trawling methods shall follow the protocols described in the most current edition of the Field Operations Manual for Marine Water-Column, Benthic, and Trawl Monitoring in Southern California, SCCWRP.

Fish and macroinvertebrates collected by trawls shall be identified to the lowest taxon possible. At all stations and for each replicate, community structure analysis for fish and macroinvertebrates[20] shall be conducted for fish and macroinvertebrates for each station.

Mean, range, standard deviation, and 95% confidence limits, if appropriate, shall be reported for the values determined in the community analysis. The Discharger may be required to conduct additional "statistical analyses" to determine temporal and spatial trends in the marine environment.

Abnormalities and disease symptoms shall be described and recorded (e.g., fin erosion, external lesions, tumors, ectoparasites, and color anomalies). The frequency of abnormalities and incidence of disease shall be compared between the ZID boundary and the reference station, and trends in these values shall be measured over time. The results of this inspection shall be included in the monitoring report.

b. **Fish and Invertebrate Tissue Monitoring Program**

Fish and macroinvertebrate tissues shall be obtained from fish collected by trawls and from invertebrates collected by trawls or SCUBA at the trawling stations.

Annually, tissues of two species (one demersal fish and one macroinvertebrate) of importance to commercial and/or sport fishers or of obvious ecological significance shall be analyzed for priority pollutants (i.e., for bioaccumulation of toxic pollutants). If possible, for the duration of this permits and order, the same species shall be used at all stations.

i. Fish Tissues

[20] Community structure analysis of fish and macroinvertebrates shall include wet weight of fish and macroinvertebrate species (when combined weight of individuals of one species exceeds 0.2 kg), standard length of each individual, number of species, number of individuals per species, total numerical abundance per station, number of individuals in each 1-cm size class for each species of fish, species abundance per trawl and per station, species richness, species diversity (e.g., Shannon-Wiener), species evenness, similarity analyses (e.g., Bray-Curtis, Jaccard or Sorensen), cluster analyses (using unweighted pair-group method) or other appropriate multivariate statistical techniques approved by the Executive Officer of the LA Regional Board and USEPA Region IX.

Tissue, as applied to the analysis of priority pollutants, signifies separate analyses for muscle and liver. All tissue samples shall be analyzed for **wet weight and percent lipid.**
Annual testing shall be required in late summer (August/September) and shall include analysis for:

Arsenic; Cadmium; Chromium (total); Copper; Lead; Mercury; Nickel; Silver; Zinc; Cyanide; Phenolic compounds (non-chlorinated); Phenolic compounds (chlorinated); Total halogenated organic compounds; Aldrin and Dieldrin; Endrin; HCH; Chlordane and related compounds; Total DDT; DDT derivatives**; Total PCB; PCB derivatives**; Toxaphene; Total PAH; PAH derivatives**.

The data for these parameters shall be expressed in µg/kg dry weight.

In August/September of the third year of the permit, full priority pollutant scans shall be performed on fish tissue samples from all offshore trawling stations.

For fish tissue analysis**,** individuals of the species of interest shall be combined from the trawls to form a single pooled sample at a station[21]. Three composite samples shall be analyzed for each of the tissue types. Each composite sample shall consist of tissues[22] taken from fish of one species and include at least six individuals. In order to obtain the required number of individuals, additional trawls may be necessary.

Reference specimens for tissue analysis may be collected at a different depth or area beyond the reference station (RWT-003), if necessary. If areas other than RWT-003 are sampled for reference material, data on the location and depth of the sampling point(s) shall be provided to this Regional Board and the USEPA Region IX.

The following fish species are recommended for the tissue analysis of priority pollutants: White Croaker (Genyonemus lineatus) and Speckled sanddab (Citharichthys stigmaeus)

ii. Macroinvertebrate Tissues

Tissue, as applied to the analysis of priority pollutants in

** See Attachment A for definition of terms.

21 Where appropriate, individuals (from trawls) comprising the smallest 10 percent by weight shall not be used as part of the composite sample. Individuals for tissue analysis shall be randomly selected from the remaining organisms.

22 Tissue samples removed from individuals shall be of uniform weight. To the extent feasible, individual fish selected for analysis should be of the same sex.

macroinvertebrates, signifies analyses for muscle or other tissue, if muscle is impractical. All tissue samples shall be analyzed for **wet weight and percent lipid**.
Annual testing shall be required in late summer (August/September) and shall include analysis for:

Arsenic; Cadmium; Chromium (total); Copper; Lead; Mercury; Nickel; Silver; Zinc; Cyanide; Phenolic compounds (non-chlorinated); Phenolic compounds (chlorinated); Total halogenated organic compounds; Aldrin and Dieldrin; Endrin; HCH; Chlordane and related compounds; Total DDT; DDT derivatives**; Total PCB; PCB derivatives**; Toxaphene; Total PAH; PAH derivatives**.

The data for these parameters shall be expressed in µg/kg dry weight.

In August/September of the third year of the permit, full priority pollutant scans shall be performed on macroinvertebrate tissue samples from all offshore trawling stations.

For macroinvertebrate tissue analysis**,** individuals of the species of interest shall be combined from the trawls to form a single pooled sample at a station[17]. Three composite samples shall be analyzed for each of the tissue types. Each composite sample shall consist of sufficient tissue[18] taken from at least three individual organisms of one species. In order to obtain the required number of individuals, additional trawls may be necessary. When feasible, tissues from organisms of the same species should be analyzed from year to year to facilitate comparability.

Reference specimens for tissue analysis may be collected at a different depth or area beyond the reference station (RWT-003), if necessary. If areas other than RWT-003 are sampled for reference material, data on the location and depth of the sampling point(s) shall be provided to the LA Regional Board and USEPA Region IX.

The following macroinvertebrate species are recommended for the tissue analysis of priority pollutants:

Sandstar (Astropecten spp)
Shrimp (Crangon spp)
Crab (Cancer spp)

c. **Regional Demersal Fish and Invertebrate Monitoring Program**

** See Attachment A for definition of terms.

A regional survey of trawl-caught demersal fish and epibenthic invertebrates within the Southern California Bight will take place in 2008 (Bight'08). The final survey design will be determined cooperatively by the participants as represented on the Regional Steering Committee. The City of Oxnard will provide support to the Bight'08 benthic survey by participating in or performing the following activities:

Participation on the Steering Committee
Participation on the relevant Technical Committees (e.g., Information Management, Field Methods & Logistics, Fish and Invertebrates)
Field sampling at sea
Tissue chemical analysis
Data management

The level of participation shall be consistent with that provided by the City of Oxnard to the 2003 Regional Survey.

D. Sampling, Analysis, and Reporting Notes for Receiving Water Monitoring:

1. Receiving water monitoring shall be performed during daylight hours.

2. In addition to reporting the actual concentration of bacterial organisms obtained in each sample collected from shoreline, nearshore, and offshore stations, the running median of the latest 6-month period shall also be determined and reported each month. Bacterial data obtained at shoreline stations during or within 48 hours following a major storm event shall not be used in determining medians.

3. Reports regarding receiving water monitoring shall be transmitted with the corresponding effluent monitoring reports. Ocean water quality monitoring (shoreline, nearshore, and offshore components) reports shall be submitted with the effluent reports by the fifteenth day of the second month following the sampling period. The offshore sediment and biological monitoring data shall be submitted with the annual report.

4. Currently, Ventura County monitors nine shoreline stations for bacteriological indicators in the area of Oxnard's previous shoreline monitoring program (see Table 1 in Section II).

5. Ventura County shoreline bacteriological monitoring data from these stations shall be included with the bacteriological data from Oxnard's water quality sampling in monthly reports and the annual assessment report.

6. If Ventura County reduces the shoreline bacteriological monitoring program in frequency (less often then weekly) or seasonally, or reduces the number of stations in the area defined by these stations, then the Discharger shall initiate a weekly shoreline bacteriological monitoring program to replace the Ventura

County's effort. This program shall be submitted to this Regional Board for approval by the Executive Officer.

7. If Ventura County restores the shoreline bacteriological monitoring program, the Discharger shall inform this Regional Board for authorization to rescind the shoreline bacteriological monitoring program conducted by the Discharger.

VII. OTHER MONITORING REQUIREMENTS

A. Outfall and Diffuser Inspection

An annual survey shall be made in October or November. This shall consist of:

1. An examination of the outfall and diffuser port system for plugs, leaks, rotation, and flow distribution. A detailed structural analysis of the pipes every five years submitted with the ROWD shall be conducted using underwater television/videotape and submarine visual inspection, where appropriate, to provide a comprehensive report on the discharge pipe systems from shallow water to their respective termini. The annual visual inspection shall be conducted on the external condition of the outfall, diffuser, and ballast systems. A written report documenting conditions shall be prepared and submitted with the Annual Summary Report to this Regional Board.

2. A visual inspection at and in the vicinity of the outfall and diffuser port system to determine thickness of any "cloud" of unsettled solids, bottom flora and fauna, and any other biological and physical conditions. Inspections shall include general observations and photographic records of the outfall pipe and the surrounding ocean bottom. A report (including photographs) discussing the above information shall be submitted with the Annual Summary Report to this Regional Board.

B. Sludge Monitoring and Reporting

1. The Discharger must comply with all requirements of 40 C.F.R. parts 257, 258, 501, and 503, including all applicable monitoring, record keeping, and reporting requirements.

2. The Discharger must comply with the monitoring and reporting requirements outlined in Attachment I in this Order, [*Biosolids/Sludge Management].*

3. A monthly report shall be provided, noting the moisture content, weight, and volume of screenings, sludges, grit, and other solids removed from the wastewater. The point(s) from which these wastes were obtained and the disposal sites to which waste solids are transported shall be specified in the monthly reports.

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

2. Weekly effluent analyses shall be performed on different weekdays during each month. Quarterly influent and effluent analyses shall be performed during the months of February, May, August, and November. Semiannual influent and effluent analyses shall be performed during the months of May and November. Annual influent and effluent analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board , state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report following the analysis.

3. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this monitoring program using approved analytical methods, the results of those analyses shall be reported. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

4. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

   a. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 C.F.R. 136 (revised May 14, 1999), unless alternate methods have been approved by USEPA pursuant to 40 C.F.R. 136, or improved methods have been determined by the Executive Officer and/or USEPA.

   b. Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

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

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

Table 5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with monthly SMR
Hourly	Permit effective date	Hourly	Submit with monthly SMR
Daily	Permit effective date	(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	1st day of calendar month through last day of calendar month	By the 15th day of the second month after 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	May 15 August 15 November 15 February 15
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 15 February 15
Annually	January 1 following (or on) permit effective date	January 1 through December 31	April 1

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

   For each numeric effluent limitation identified in Table B of the 2005 Ocean Plan, the Discharger shall select one or more Minimum Levels (ML) and their associated analytical methods from Appendix II of the 2005 Ocean Plan (Appendix II). Any deviation from MLs in Appendix II must be approved by the Regional Water Board and/or the State Water Board. The "reported" ML is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from Appendix II.

   The Discharger must select all MLs from Appendix II that are below the effluent limitation. If the effluent limitation is lower than all the MLs in Appendix II, the Discharger must select the lowest ML from Appendix II.

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

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

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

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

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

   d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

5. 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:

      California Regional Water Quality Control Board
      Los Angeles Region
      320 West 4th Street, Suite 200
      Los Angeles, CA 90013
      Attention: Information Technology Unit

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 Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

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

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan, etc. required by Special Provisions – VI.C.2. of this Order. The Discharger shall submit reports in compliance with reporting schedules described in each section.

2. **Annual Summary Report**

   By April 15 of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's influent/effluent analytical results, as well as graphical and tabular summaries of the monitoring analytical data. The data shall be submitted to the Regional Board on hard copy and a CD-Rom disk or other appropriate electronic medium. The submitted data must be IBM compatible, preferably using Microsoft Excel software. In addition, the Discharger shall discuss the compliance record and any corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge and permit requirements.

3. **Receiving Water Monitoring Report**

   An annual summary of the receiving water monitoring data collected during each sampling year (January-December) shall be prepared and submitted so that it is received by the Regional Board by August 1 of the following year.

   A detailed receiving water monitoring biennial assessment report of the data collected during the two previous calendar sampling years (January-December) shall be prepared and submitted so that it is received by the Regional Board by August 1 of every other year. This report shall include an annual data summary and shall also include an in-depth analysis of the biological and chemical data following recommendations in the Model Monitoring Program guidance document (Schiff, K.C., J.S. Brown and S.B. Weisberg. 2001. *Model Monitoring Program for Large Ocean Dischargers in Southern California*. SCCWRP Tech. Rep #357. SCCWRP, Westminster, CA. 101 pp.). Data shall be tabulated, summarized, and graphed where appropriate, analyzed, interpreted, and

generally presented in such a way as to facilitate ready understanding of its significance. Spatial and temporal trends shall be examined and compared. The relation of physical and chemical parameters to biological parameters shall be evaluated. See, also, Section IV.H. of this Monitoring and Reporting Program. All receiving water monitoring data shall be submitted in accordance with the data submittal formats developed for the Southern California Bight Regional Monitoring Surveys.

The first assessment report shall be due August 1, 2007, and cover the sampling periods of January-December 2005 and January-December 2006. Subsequent reports shall be due August 1, 2009, and August 1, 2011, to cover sampling periods of January 2007-December 2008 and January 2009-December 2010, respectively.

4. **Outfall Inspection Report**

A summary report of the Outfall Inspection findings shall be provided annually. This written report, augmented with videographic and/or photographic images, shall provide a description of the observed external condition of the discharge pipes from shallow water to their respective termini. This report shall be submitted so that it is received by August 1 of the following year.

5. All monthly monitoring reports, annual summary reports, and biennial assessment reports shall be delivered to the Regional Board as follows. Reference the reports to Compliance File No. CI-2022 to facilitate routing to the appropriate staff and file.

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Attention: Information Technology Unit

6. Database Management System: The Regional Board and State Water Resources Control Board (State Board) are developing a database compliance monitoring management system. The Discharger may be required to submit all monitoring and annual summary reports electronically in a specified format when this system becomes fully operational.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	
Discharger	City of Oxnard
Name of Facility	Oxnard Wastewater Treatment Plant
Facility Address	6001 South Perkins Road
	Oxnard, CA 93033-9047
	Ventura County
Facility Contact, Title and Phone	Mark S. Norris, Assistant Public Works Director, (805) 271-2205
Authorized Person to Sign and Submit Reports	Mark S. Norris, Assistant Public Works Director, (805) 271-2205
Mailing Address	same
Billing Address	same
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Yes
Reclamation Requirements	None
Facility Permitted Flow	31.7 (in million gallons per day)
Facility Design Flow	31.7 (in million gallons per day)
Watershed	Ventura Coastal Stream Watershed Management Area
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

A. The City of Oxnard (hereinafter Discharger) is the owner and operator of Oxnard Wastewater Treatment Plant (hereinafter Facility), a publicly owned treatment works.

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

B. The Facility discharges wastewater to the Pacific Ocean, a water of the United States, and is currently regulated by Order R4-2002-0129, which was adopted on July 11, 2002 and expired on June 10, 2007. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

C. The Discharger submitted Report of Waste Discharge, dated January 9, 2007, and applied for an NPDES permit renewal to discharge up to 31.7 MGD of secondary-treated wastewater from the Oxnard Wastewater Treatment Plant, hereinafter Facility.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

1. The Discharger owns and operates the Facility. The treatment system consists of bar screening, aerated grit removal, primary clarification, bio-filtration, activated sludge, secondary clarification, flow equalization, chlorine disinfection, and dechlorination. Solid fractions recovered from wastewater treatment processes include screenings, grit, primary sludge and skimmings, thickened waste activated sludge. The fine solids (screenings and grit) which are primarily inorganic materials are hauled away to a landfill. The remaining solid fractions (primary sludge, skimmings, and thickened waste activated sludge) are anaerobically digested at the treatment plant. In addition, the Discharger operates the oil and grease program through which it cleans interceptors for food establishments and uses the oil and grease in its digesters to increase methane production. The methane is then used to generate electricity, which occupies approximately 60% of total electricity uses, for the Facility. The digested solids are dewatered using belt filter presses. The dewatered cake contains approximately 20% solids (Class B biosolids). Oxnard generates approximately 500 wet tons of Class B biosolids per week. The biosolids are managed by composting operations in Kern County. Wastewater is discharged from Discharge Point No. 001 (see Table on cover page) to the Pacific Ocean off Ormond Beach, a water of the United States. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the Facility.

2. The Facility serves a population of approximately 220,000 in the City of Oxnard, the City of Port Hueneme, and the US Naval Base, Ventura County, and some unincorporated areas of Ventura County. Flow to the plant consists of domestic, commercial and industrial wastewater. For Fiscal Year 2007,

Industrial wastewater represented about 21% (high peak) and 11% (low peak) of the total flow to the plant.

~~All of the storm water runoff traversing the treatment areas of the Facility premises is captured and treated in the plant.~~ Under previous permits, all of the storm water runoff traversing the treatment areas of the Facility premises was captured and treated in the plant. With the 2008 expansion of the treatment plant, including the new headworks facility, this is no longer the case. Runoff from the facility is now regulated under the Municipal Stormwater Permit for Ventura County as a public agency activity subject to development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Future expansions (see GREAT Program discussion under Section II.E. of the Fact Sheet) will be added to the SWPPP as appropriate.

B. Discharge Points and Receiving Waters

1. The treated-secondary wastewater is discharged through an ocean outfall (Discharge Serial No. 001) off Ormond Beach into the Pacific Ocean, a water of the United State. The description of the outfall is as follows:

Table 2. The Description of the Outfall

Discharge Serial Number	001
Diameter of Pipe at Discharge Terminus (feet)	4
Outfall Distance Offshore (feet)	5,950 (including a 1,016-foot diffuser section)
Discharge Depth Below Surface Water (feet)	60
Latitude	34° 07' 34" North
Longitude	119° 11' 26" West

2. The receiving water (Pacific Ocean) off Ormond Beach for the Oxnard WTP discharge is part of the open coastline of the Regional Board-designated Ventura Coastal Watershed Management Area (WMA). In addition to the Oxnard WTP, there are two other major dischargers to the Ventura Coastal WMA – Ormond Beach and Mandalay Generating Stations, now owned by Reliant Energy, Inc. (formerly owned by Southern California Edison).

3. The ocean water in this area is not listed as impaired under the 2006 Clean Water Act (CWA) Section 303(d) List.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point EFF-001 and representative monitoring data from the term of the previous Order are as follows:

Table 3. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From August 2002 –December 2007)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Conventional/NonConventional							
BOD		30	45	--	35	45	74
Total Suspended Solids		30	45	--	12	15	24
Oil & Grease		25	40	--	13	22	38
Settleable Solids		1.0	1.5	3.0	<0.1	0.3	1.5
Total Coliform		--	--	--	119323	160000	160000
Fecal Coliform		--	--	--	60940	160000	160000
Enterococcus		--	--	--	3746	16000	16000
Nitrate-N		--	--	--	3.85	--	--
Nitrite-N		--	--	--	1.92	--	--
Organic-N		--	--	--	7.8	--	--
pH		6.0 – 9.0			7.4	7.5	7.6
Temp36					26	26	27
Turbidity		75	100	225	11.7	13.6	18.8
Marine Aquatic Life							
Arsenic (As)		--	--	--	9.7	--	--
Cadmium (Cd)		--	--	--	<5.0	--	--
Chromium ~~VI~~ Total (Cr)		--	--	--	8	--	--
Copper (Cu)		--	--	--	32	--	--
Lead (Pb)		--	--	--	33.2	--	--
Mercury (Hg)		--	--	--	0.3	--	--
Nickel (Ni)		--	--	--	20	--	--
Selenium (Se)		--	--	--	4.9	--	--
Silver (Ag)		--	--	--	<10	--	--
Zinc (Zn)		--	--	--	120	--	--
Cyanide		--	--	--	7	--	--
Residual Chlorine		--	--	--	0.1	--	--
Ammonia-N		--	--	--	25.5	--	--
Acute Toxicity		--	--	--	--	--	--
Chronic Toxicity (Survival)	TUc	--	--	--	100	--	--
Chronic Toxicity (Growth)	TUc	--	--	--	17.86	--	--
Non-Chlorinated Phenolic Compouds		--	--	--	5	--	--
Chlorinated Phenolic Compouds		--	--	--	0.376	--	--
Endosulfan		--	--	--	<0.003	--	--
Endrin		--	--	--	<0.001	--	--

Parameter	Units	Effluent Limitation			Monitoring Data (From August 2002 –December 2007)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Human Health - Noncarcinogens							
HCH		--	--	--	0.03	--	--
Acrolein		--	--	--	<100	--	--
Antimony		--	--	--	1.6	--	--
Bis (2-Chloroethoxy) methane		--	--	--	<10	--	--
Bis (2-Chloroisopropyl) ether		--	--	--	<10	--	--
Chlorobenzene		--	--	--	<0.5	--	--
Chromium III (Cr)		--	--	--	--	--	--
Di-n-Butyl Phthalate		--	--	--	0.326	--	--
Dichlorobenzene		--	--	--	0.241	--	--
Diethyl phthalate		--	--	--	0.246	--	--
Dimethyl phthalate		--	--	--	0.142	--	--
4,6-dinitro-2-methylphenol		--	--	--	<50	--	--
2,4-dinitrophenol		--	--	--	<50	--	--
Ethylbenzene		--	--	--	<0.5	--	--
Fluoranthene		--	--	--	0.036	--	--
Hexachlorocyclopentadiene		--	--	--	<10	--	--
Nitrobenzene		--	--	--	0.0252	--	--
Thallium		--	--	--	20	--	--
Toluene		--	--	--	0.6	--	--
Tributyltin		--	--	--	0.00263	--	--
1,1,1-trichloroethane		--	--	--	<0.5	--	--
Human Health - Carcinogens							
Acrylonitrile		9.9	--	--	<100	--	--
Aldrin		2.2	--	--	<0.001	--	--
Benzene		--	--	--	<0.5	--	--
Benzidine		6.8	--	--	<50	--	--
Berylium (Be)		--	--	--	<5	--	--
Bis (2-Chloroethyl) ether		4.5	--	--	<10	--	--
Bis(2-ethylhexyl)-phthalate		--	--	--	1.994	--	--
Carbon tetrachloride		--	--	--	<0.5	--	--
Chlordane		2.3	--	--	<0.001	--	--
Chlorodibromomethane		--	--	--	1.25	--	--
Chloroform		--	--	--	1.4	--	--
DDT		17	--	--	<1	--	--
1,4-Dichlorobenzene		--	--	--	3	--	--
3,3'-Dichlorobenzidine		0.80	--	--	<20	--	--

Parameter	Units	Effluent Limitation			Monitoring Data (From August 2002 –December 2007)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Human Health - Carcinogens							
1,2-dichloroethane		--	--	--	<0.5	--	--
1,1-dichloroethylene		--	--	--	<0.5	--	--
Dichlorobromomethane		--	--	--	0.181	--	--
Dichloromethane		--	--	--	0.81	--	--
1,3-dichloropropene		--	--	--	<0.5	--	--
Dieldrin		4.0	--	--	<0.001	--	--
2,4-Dinitrotolulene		--	--	--	<10	--	--
1,2-Diphenylhydrazine		16	--	--	0.123	--	--
Halomethanes		--	--	--	4.38	--	--
Heptachlor		5.0	--	--	<0.001	--	--
Heptachlor epoxide		2.0	--	--	<1	--	--
Hexachlorobenzene		21	--	--	<10	--	--
Hexachlorobutadiene		--	--	--	<10	--	--
Hexachloroethane		--	--	--	<10	--	--
Isophorone		--	--	--	<10	--	--
N-Nitrosodimethylamine		--	--	--	<10	--	--
N-Nitrosodi-N-propylamine		38	--	--	<20	--	--
N-Nitrosodiphenylamine		--	--	--	<10	--	--
PAH		0.87	--	--	0.097	--	--
PCBs		1.9	--	--	<0.1	--	--
TCDD		0.39	--	--	1.1E-08	--	--
1,1,2,2-tetrachloroethane		--	--	--	<0.5	--	--
Tetrachloroethylene		--	--	--	<0.5	--	--
Toxaphene		21	--	--	<0.01	--	--
Trichloroethylene		--	--	--	<0.5	--	--
1,1,2-trichloroethane		--	--	--	<0.5	--	--
2,4,6-Trichlorophenol		--	--	--	0.192	--	--
Vinyl chloride		--	--	--	<0.5	--	--

D. Compliance Summary

Data submitted revealed that there were no violations during the last permit cycle.

E. Planned Changes

The Discharger is constructing the site and installing the devices at this site to deliver 6.25 MGD of high quality recycled water to users for the Groundwater

Recovery Enhancement and Treatment (GREAT) Program. This recycled water is product of secondary-treated wastewater further processed through microfiltration, ultrafiltration, reverse osmosis, ultraviolet-light-based advanced oxidation. These new facilities ~~won't affect~~ may have a marginal impact on the quality of the ~~secondary-treated~~ wastewater being discharged into the Pacific Ocean.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities.

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a 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).

B. California Environmental Quality Act (CEQA)

Under California 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 Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (MUN) designated water bodies, which is not applicable to this discharge. Beneficial uses applicable to the Pacific Ocean are as follows:

Table 4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Ormond Beach	Existing: Industrial water supply (IND), navigation (NAV), hydropower generation (POW), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), marine habitat (MAR), wildlife habitat (WILD), rare, threatened or endangered species** (RARE), shellfish harvesting (SHELL). Potential: Spawning, reproduction, and/or early development (SPWN).
	Pacific Ocean Nearshore**	Existing: IND, NAV, REC-1, REC-2, COMM, MAR, WILD, preservation of biological habitats** (BIOL), RARE**, migration of aquatic organisms** (MIGR), SPWN**, and SHELL. Potential: None.
	Pacific Ocean Offshore	Existing: NAV, REC-1, REC-2, COMM, MAR, WILD, RARE**, MIGR**, SPWN**, and SHELL. Potential: None.

Requirements of this Order implement the Basin Plan.

The State Water Resources Control Board compiled the draft 2006 303(d) list following recommendations from the Regional Boards and information solicited from the public and other interested parties. The draft list was then revised based upon public comments. On October 25, 2006, the State Board adopted the California 2006 Revised 303(d) List. On November 30, 2006 US EPA gave partial approval to California's 2006 Section 303(d) List of Water Quality Limited Segments, with full approval pending further review of supporting information regarding Walnut Creek Wash (Los Angeles Region). There are no pollutants or stressors in the 2006 303(d) list for the Ormond Beach.

2. **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 ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

** See Attachment A for definition of terms.

Table 5. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture**; preservation and enhancement of designated Area**[1] of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish** harvesting.

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

3. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

4. **Antidegradation Policy.** Part 131.12 requires that the 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. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality 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 is consistent with the antidegradation provision of Part 131.12 and State Water Board Resolution No. 68-16.

5. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[2], Part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

** See Attachment A for definition of terms.
1 There are no ASBS in the vicinity of this discharge.
2 All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated and will be abbreviated as "40 C.F.R. part number." Also see Attachment A for definition of terms.

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

The 2006 303(d) list of impaired waters classifies the Ormond Beach as impaired by Indicator Bacteria (unknown source). A TMDL for this listing is not under development or scheduled for development at this time. The ocean water in this area is not listed as impaired under the 2006 Clean Water Act (CWA) Section 303(d) List.

E. Other Plans, Polices and Regulations

1. **Secondary Treatment Regulations.** Part 133 of 40 C.F.R. establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations.

2. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 C.F.R., part 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 in State Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

   The Discharger developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Water Board's (Order No. 97-03-DWQ).

3. **Sanitary Sewer Overflows.** The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 U.S.C. §§1311, 1342). The State Board adopted Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 on May 2, 2006, to provide a consistent, statewide regulatory framework to address Sanitary Sewer Overflows (SSOs). The WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

   The requirements contained in this Order in Sections VI.C.3.b, VI.C.4, and VI.C.6. are intended to be consistent with the requirements in the SSO WDR. The Regional Water Board recognizes that there are areas of overlapping interest between the NPDES permit conditions and the SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of WQ Order N0. 2006-0003). The Regional Water

Board will accept the documentation prepared by the Permittee under the SSO WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b, VI.C.4, and VI.C.6, provided for any more specific or stringent provisions enumerated in this Order, have also been addressed.

4. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in Los Angeles and Ventura Counties. The approach is in accordance with USEPA guidance on *Watershed Protection: A Project Focus* (EPA841-R-95-003, August 1995). The objective is to provide a comprehensive and integrated strategy resulting in water resource protection, enhancement and restoration, while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. The Management Approach emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. This Order and the accompanying *Monitoring and Reporting Program* (Attachment E) fosters implementation of this approach. The *Monitoring and Reporting Program* requires the Discharger to participate in regional water quality and kelp bed monitoring programs in the Southern California Bight. Information about the Ventura Coastal Stream Watershed Management Area and other watersheds in the region can be obtained from the Regional Water Board's web site at http://www.waterboards.ca.gov/losangeles and clicking on the word "Watersheds".

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. There are two principal bases for effluent limitations in the Code of Federal Regulations: part 122.44(a) requires that permits include applicable technology-based limitations and standards; and part 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

The Order authorizes the discharge of secondary treated wastewater through Discharge Serial No. 001. Discharge prohibitions in this Order are based on the requirements in Section III.H of the Ocean Plan (2005).

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations[3] require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133.

2. Applicable Technology-Based Effluent Limitations

Pursuant to Section 301 (b)(1)(B) and 304 (d)(1) of the CWA, USEPA has established standards of performance for secondary treatment at 40 C.F.R. 133. Secondary treatment is defined in terms of three parameters – 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. The following summarizes the technology-based requirements for secondary treatment, which are applicable to the Plant:

Table 6. Summary of Technology-based Effluent Limitations for Secondary Treatment Facility by USEPA at 40 C.F.R. part 133.102

Constituent	Average Monthly**	Average Weekly**	Percent Removal**
BOD_5	30 mg/L	45 mg/L	85%
TSS	30 mg/L	45 mg/L	85%
pH	6.0 to 9.0		

Table A of the Ocean Plan (2005) also establishes the following technology-based effluent limitations for POTWs, which are applicable to the Plant:

Table 7. Summary of Technology-based Effluent Limitations for POTWs established by the Ocean Plan (2005)

Constituent	Average Monthly**	Average Weekly**	Instantaneous Maximum**	Percent Removal**
Oil & Grease	25 mg/L	40 mg/L	75 mg/L	--
TSS	--	--	--	75%[4]
Settleable Solids	1.0 ml/L	1.5 ml/L	3.0 ml/L	--
Turbidity	75 NTU	100 NTU	225 NTU	--
pH	6.0 to 9.0			

All technology-based effluent limitations from Order No. R4-2002-0129 for BOD_5, TSS, oil and grease, settleable solids, pH, and turbidity are retained by this Order with minor changes for oil and grease, settleable solids and turbidity as described below. Limitations for TSS, and pH are based on secondary treatment standards established by the USEPA at 40 C.F.R. 133. Since the

[3] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.
** Also see Attachment A for definition of terms.
[4] Dischargers shall, as a monthly average, remove 75% of TSS from the influent stream before discharging to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L.

limitations for BOD_5 in Order No. R4-2002-0129 are more stringent than those established by secondary treatment standards, the existing BOD limitations are carried over to avoid backsliding. Limitations for oil and grease, settleable solids and turbidity are based on the requirements in the 2005 Ocean Plan. To be consistent with the Ocean Plan, daily maximum limitations for these three constituents in the existing permit have been prescribed as instantaneous maximum limitations in this Order. All technology-based effluent limitations are not dependent upon the dilution ratio for the discharge outfall. In addition to the concentration-based effluent limitations, mass-based effluent limitations based on a design flow rate of 31.7 million gallons per day are also included. The following table summarizes the technology-based effluent limitations for the discharge from the Plant:

Table 8. Summary of Technology-based Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly**	Average Weekly**	Maximum Daily**	Instantaneous Minimum**	Instantaneous Maximum**
$BOD_5 20^0C$	mg/L	30	45	--	--	--
	lbs/day[5]	7,960	11,900	--	--	--
	% removal	85	--	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--
	lbs/day[5]	7,960	11,900	--	--	--
	% removal	85	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75
	lbs/day[5]	6,630	10,600	--	--	19,900
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225
pH	pH unit	--	--	--	6.0	9.0

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and part 122.44(d) of tilte 40 of the C.F.R. require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no

** Also see Attachment A for definition of terms.

5 The mass emission rates are based on the plant design flow rate of 31.7 mgd, and are calculated as follows: Flow(MGD) x Concentration (mg/L) x 8.37 (L·lbs/MG·mg) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

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 in part 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and the Ocean Plan establish the beneficial uses for ocean waters of the State. The beneficial uses of the receiving waters affected by the discharge have been described previously in this Fact Sheet. The Ocean Plan also contains water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The Basin Plan also contains the bacteria objectives for water bodies designated for water contact recreation that was amended by Resolution No. 01-018. These water quality objective from the Ocean Plan with consideration of the bacteria objective in the Basin Plan were included as receiving water limitations in this Order.

Table B of the Ocean Plan includes the numerical water quality objectives for toxic pollutants.

a. 6-month median, daily maximum, and instantaneous maximum objectives for 21 chemicals and chemical characteristics, including total residual chlorine, acute and chronic toxicity, for the protection of marine aquatic life.

b. 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health.

c. 30-day average objectives for 42 carcinogenic chemicals for the protection of human health.

3. Expression of WQBELs

Pursuant to 40 C.F.R. part 122.45(d)(2), for POTW continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations (AMEL and AWEL). It is impracticable to include only average weekly and average monthly effluent

limitations in the permit, because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 C.F.R. part 122.45(d)(1), are included in the permit for certain constituents.

The WQBELs for marine aquatic life toxicants contained in this Order are based on water quality objectives contained in the 2005 Ocean Plan that are expressed as six-month median, daily maximum, and instantaneous maximum water quality objectives. However, in the existing permit (Order No. R4-2002-0129), the calculated effluent limitations based on 6-month median objectives for the marine aquatic life toxicants in the 2001 Ocean Plan were prescribed as monthly average limitations. Applying the antibacksliding policy, this Order retains the same approach to set effluent limitations derived from six-month median water quality objectives for marine aquatic life toxicants in Table B of the 2005 Ocean Plan as monthly average limitations.

4. Determining the Need for WQBELs

Order No. R4-2002-0129 contains effluent limitations for non-conventional and toxic pollutant parameters in Table B of the Ocean Plan. For this Order, the need for effluent limitations based on water quality objectives in Table B of the 2005 Ocean Plan was reevaluated in accordance with the Reasonable Potential Analysis (RPA) procedures contained in Appendix VI of the 2005 Ocean Plan. This statistical RPA method (Reasonable Potential RPcalc version 2.0) accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and assumes a lognormal distribution of the facility-specific effluent data. The program calculates the upper confidence bound (UCB) of an effluent population percentile after complete mixing. In the evaluation employed in this Order, the UCB is calculated as the one-sided, upper 95 percent confidence bound for the 95^{th} percentile of the effluent distribution after complete mixing. The calculated $UCB_{95/95}$ is then compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. For constituents that have insufficient number of monitoring data or have substantial number of non-detected data with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive. As suggested by the Ocean Plan, existing effluent limitations for these constituents are retained in the new permit. In addition, the MRP (Attachment E) of this Order also requires the Discharger to continue to monitor for these constituents for the determination of reasonable potential for these constituents in future permit renewals and/or updates.

Using this statistical procedure in combination with effluent data provided by the Discharger from August 2002 to December 2007 and a minimum initial dilution ratios of 98:1 for Discharger Point 001, Regional Water Board staff has determined that all constituents, when discharged through Discharge Point 001 do not have reasonable potential to exceed Ocean Plan objectives, and, therefore, there are not effluent limitations. However, the results of reasonable potential analysis for benzidine, heptachlor epoxide, PCBs, and TCDD are inconclusive, and, therefore, effluent limitations for these constituents are carried over from the existing Order No. R4-2002-0129.

5. WQBEL Calculations

From the Table B water quality objectives of the Ocean Plan, effluent limitations are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable) and radioactivity:

Ce=Co+Dm(Co-Cs)

where
Ce = the effluent limitation (µg/L)
Co = the water quality objective to be met at the completion of initial dilution (µg/L)
Cs = background seawater concentration (µg/L) (see Table below)
Dm = minimum probable initial dilution expressed as parts seawater per part wastewater

The Dm is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Prior to issuance of Order No. R4-2002-0129, staff of the State Water Board had determined the minimum probable initial dilution for Discharge Point 001 to be 98 to 1. In this permit, same dilution ratio of 98:1 has also been applied to Discharge Point 001.

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. As site- specific water quality data is not available, in accordance with Table B implementing procedures, Cs equals zero for all pollutants, except the following:

Table 9. Pollutants with Background Seawater Concentrations

Constituent	Background Seawater Concentration (Cs)
Arsenic	3 µg/L

Constituent	Background Seawater Concentration (Cs)
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

As examples, WQBELs for copper (no effluent limitation in this Order), chronic toxicity, and tributyltin are calculated as follows:

Table 10. Ocean Plan Water Quality Objectives (Co) for Copper, Chronic Toxicity and Tributyltin

Constituents	6-Month Median	Daily Maximum	Instantaneous Maximum	30 Day Average
Copper	3 µg/L	12 µg/L	30 µg/L	--
Chronic toxicity	--	1 TUc	--	--
Tributyltin	--	--	--	0.0014 µg/L

Using the equation, **Ce=Co+Dm(Co-Cs)**, effluent limitations are calculated as follows before rounding to two significant digits. All calculations are based on discharge through Discharge Point 001 and, therefore, a dilution ratio (Dm) of 98:1 is applied.

Copper

Ce = 3 + 98 (3-2) = 101 µg/L (prescribed as Average Monthly, see Section 3 above)
Ce = 12 + 98 (12-2) = 992 µg/L (Daily Maximum)
Ce = 30 + 98 (30-2) = 2,774 µg/L (Instantaneous Maximum)

Chronic Toxicity

Ce = 1 + 98 (1-0) = 99 TUc (Daily Maximum)

Tributyltin

Ce = 0.0014 + 98 (0.0014-0) = 0.1386 µg/L (Average Monthly)

Based on the implementing procedures described above, effluent limitations have been calculated for all Table B pollutants (radioactivity) from the Ocean Plan and incorporated into this Order when applicable.

Determination of radioactivity limitation: Since the descriptive water quality objective for radioactivity in the 2005 California Ocean Plan fails to establish an applicable narrative or numerical effluent limit for radionuclides, Regional Water Board staff used BPJ to establish radioactivity limitations for the effluent using Maximum Contaminant Levels (MCLs) for the drinking water specified in Title 22, California Code of Regulations because it is the only scientifically-based regulatory criteria available.

Table 11. Summary of Water Quality-based Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Radioactivity						
Gross alpha	PCi/L	--	--	15	--	--
Gross beta	PCi/L	--	--	50	--	--
Combined Radium-226 & Radium-228	PCi/L	--	--	5.0	--	--
Tritium	PCi/L	--	--	20,000	--	--
Strontium-90	PCi/L	--	--	8.0	--	--
Uranium	PCi/L	--	--	20	--	--
Benzidine	µg/L	0.0068	--	--	--	--
	lbs/day[6]	0.0018	--	--	--	--
Heptachlor epoxide	µg/L	0.002	--	--	--	--
	lbs/day[6]	0.00053	--	--	--	--
PCBs	µg/L	0.0019	--	--	--	--
	lbs/day[6]	0.0005	--	--	--	--
TCDD	µg/L	0.00000039	--	--	--	--
	lbs/day[6]	0.0000001	--	--	--	--

6. Whole Effluent Toxicity (WET)

The 2005 Ocean Plan specifies that the Discharger shall conduct chronic toxicity testing for ocean water discharges if the minimum dilution of the effluent falls below 100:1 at the edge of the mixing zone. It does not require acute toxicity testing in addition to chronic toxicity testing for this type of ocean water discharge. Since the applicable dilution factor of 98:1 for the Facility outfall is below 100:1, this Order requires the Discharger to only conduct chronic toxicity testing.

Although all chronic toxicity testing results reported during the term of the previous Order exhibited compliance with the chronic toxicity limit, the chronic toxicity limit shall be retained in the Order in order to provide a backstop to preventing the discharge of toxic pollutants in toxic amounts.

[6] The mass emission rates are based on the plant design flow rate of 31.7 mgd, and are calculated as follows: Flow(MGD) x Concentration (µg/L) x 0.00837 (L·lbs/MG·µg) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. The effluent limitations of marine aquatic life toxicants, non-carcinogenic and carcinogenic human health toxicants except benzidine, heptachlor epoxide, PCBs, and TCDDs are deleted because they did not show reasonable potential to cause or contribute to an excursion above the respective water quality standards. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations. The results of reasonable potential analyses for benzidine, heptachlor epoxide, PCBs, and TCDDs were inconclusive, therefore, for the purpose of satisfying Anti-Backsliding requirements, the effluent limitations for these four pollutants in Order R4-2002-0129 were carried over.

2. Satisfaction of Antidegradation Policy

On October 28, 1968, the State Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Water Boards. The State Board has, in State Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 C.F.R., Part 131.12) require that all permitting actions be consistent with the federal antidegradation policy. Together, the State and Federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The provisions of this Order are consistent with the antidegradation policies.

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 BOD, TSS, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, pH are discussed in Section IV.B.2. of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the 2005 Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law

and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to part 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 and the applicable water quality standards for purposes of the CWA.

Table 12. Summary of Final Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations[7]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
$BOD_5 20^0C$	mg/L	30	45	--	--	--	Existing
	lbs/day[5]	7,960	11,900	--	--		
	% removal	85	--	--	--		
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--	Secondary treatment standard
	lbs/day[5]	7,960	11,900	--	--		
	% removal	85	--	--	--		
pH	pH unit	6.0 – 9.0				--	Ocean Plan
Oil and Grease	mg/L	25	40	--	75	--	Ocean Plan
	lbs/day[5]	6,630	10,600	--	19,900		
Settleable Solids	ml/L	1.0	1.5	--	3.0	--	Ocean Plan
Turbidity	NTU	75	100	--	225	--	Ocean Plan
Marine Aquatic Life Toxicants							
Arsenic[8]	µg/L	--	--	--	--	7.4[9]	No RP[10]
	lbs/day[6]	--	--	--	--	2.0	
Cadmium[8]	µg/L	--	--	--	--	1[11]	No RP[10]
	lbs/day[6]	--	--	--	--	0.27	
Chromium (VI)[8]	µg/L	--	--	--	--	8[12]	No RP[10]
	lbs/day[6]	--	--	--	--	2.1	

[7] Effluent limitations should include average monthly, average weekly, maximum, instantaneous minimum, and instantaneous maximum. However, all pollutants and parameters do not have instantaneous minimum, therefore, instantaneous minimum is removed from Table 8. The definitions of average monthly, average weekly, maximum, and instantaneous maximum are available at Attachment A.

[8] Numeric number for metal represents total recoverable value.

[9] See Procedures for the determination of performance goals at Section IV.E.1.a. of Fact Sheet.

[10] Effluent data collected between August 2002 and December 2007 showed no reasonable potential to exceed 2005 Ocean Plan's Water Quality Objectives. Therefore, there are no effluent limitations for this pollutant.

[11] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of ICPM Method for this pollutant is 0.2 µg/L.

[12] See Procedures for the determination of performance goals at Section IV.E.1.b. of Fact Sheet.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Marine Aquatic Life Toxicants							
Copper[8]	µg/L	--	--	--	--	32[12]	No RP[10]
	lbs/day[6]	--	--	--	--	8.5	
Lead[8]	µg/L	--	--	--	--	23[9]	No RP[10]
	lbs/day[6]	--	--	--	--	6.1	
Mercury[8]	µg/L	--	--	--	--	0.3[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.08	
Nickel[8]	µg/L	--	--	--	--	19[9]	No RP[10]
	lbs/day[6]	--	--	--	--	5.0	
Selenium[8]	µg/L	--	--	--	--	4.9[12]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Silver[8]	µg/L	--	--	--	--	1[11]	No RP[10]
	lbs/day[6]	--	--	--	--	0.27	
Zinc[8]	µg/L	--	--	--	--	5[14]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Cyanide	µg/L	--	--	--	--	25[15]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
Chlorine Residual	mg/L	--	--	--	--	0.1[12]	No RP[10]
	lbs/day[5]	--	--	--	--	0.027	
Ammonia as N	mg/L	--	--	--	--	26[12]	No RP[10]
	lbs/day[5]	--	--	--	--	6.9	
Phenolic compounds (non-chlorinated)	µg/L	--	--	--	--	5[12]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Phenolic compounds (chlorinated)	µg/L	--	--	--	--	0.42[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.11	
Endosulfan	µg/L	--	--	--	--	0.25[16]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	

[13] Effluent limitations should include average monthly, average weekly, maximum, instantaneous minimum, and instantaneous maximum. However, all pollutants and parameters do not have instantaneous minimum, therefore, instantaneous minimum is removed from Table 8. The definitions of average monthly, average weekly, maximum, and instantaneous maximum are available at Attachment A.

[14] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of ICPM Method for this pollutant is 1 µg/L.

[15] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of Color Method for cyanide is 5 µg/L.

[16] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.05 µg/L.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Marine Aquatic Life Toxicants							
HCH	µg/L	--	--	--	--	0.1[17]	No RP[10]
	lbs/day[6]	--	--	--	--	0.027	
Endrin	µg/L	--	--	--	--	0.05[18]	No RP[10]
	lbs/day[6]	--	--	--	--	0.013	
Acute toxicity	Tua	--	--	--	--	--	[19]
Chronic toxicity	Tuc	--	--	99	--	18[9]	BPJ[20]
Radioactivity							
Gross alpha	PCi/L	--	--	15	--	--	BPJ[21]
Gross beta	PCi/L	--	--	50	--	--	BPJ[21]
Combined Radium-226 & Radium-228	PCi/L	--	--	5.0	--	--	BPJ[21]
Tritium	PCi/L	--	--	20,000	--	--	BPJ[21]
Strontium-90	PCi/L	--	--	8.0	--	--	BPJ[21]
Uranium	PCi/L	--	--	20	--	--	BPJ[21]
Human Health Toxicants – Non Carcinogens							
Acrolein	µg/L	--	--	--	--	10[22]	No RP[10]
	lbs/day[6]	--	--	--	--	2.7	
Antimony[8]	µg/L	--	--	--	--	2.5[23]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
Bis(2-chloroisopropyl) ether	µg/L	--	--	--	--	10[25]	No RP[10]
	lbs/day[6]	--	--	--	--	2.7	

[17] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.02 µg/L.
[18] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.01 µg/L.
[19] See Section IV.C.6 of Fact Sheet.
[20] All pollutants show no reasonable potential to exceed the 2005 Ocean Plan's water quality objectives. Chronic toxicity of 99 TUc acts as a "backstop", since so many limits have been removed.
[21] See "determination of radioactivity limitation" in Section IV.C.5 of Fact Sheet.
[22] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 2 µg/L.
[23] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of ICPM Method for antimony is 0.5 µg/L.
[24] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GCMS Method for this pollutant is 5 µg/L.
[25] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GCMS Method for this pollutant is 2 µg/L.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Human Health Toxicants – Non Carcinogens							
Chlorobenzene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Chromium (III)[8]	µg/L	--	--	--	--	8[12] --	No RP[10]
	lbs/day[6]	--	--	--	--	2.1--	
Di-n-butyl-phthalate	µg/L	--	--	--	--	0.33[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.0088	
Dichlorobenzenes	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Diethyl phthalate	µg/L	--	--	--	--	0.25[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Dimethyl phthalate	µg/L	--	--	--	--	10[25]	No RP[10]
	lbs/day[6]	--	--	--	--	2.7	
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
2,4-Dinitrophenol	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
Ethyl benzene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Fluoranthene	µg/L	--	--	--	--	0.25[27]	No RP[10]
	lbs/day[6]	--	--	--	--	0.066	
Hexachlorocyclopentadiene	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
Nitrobenzene	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Thallium[8]	µg/L	--	--	--	--	5[29]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Toluene	µg/L	--	--	--	--	0.6[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.16	

[26] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.5 µg/L.

[27] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of HPLC Method for this pollutant is 0.05 µg/L.

[28] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GCMS Method for this pollutant is 1 µg/L.

[29] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of ICPM Method for this pollutant is 1 µg/L.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Human Health Toxicants – Non Carcinogens							
Tributyltin	µg/L	--	--	--	--	0.0263[30]	No RP[10]
	lbs/day[6]	--	--	--	--	0.007	
1,1,1-Trichloroethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	10[18]	No RP[10]
	lbs/day[6]	--	--	--	--	2.7	
Aldrin	µg/L	--	--	--	--	0.025[31]	No RP[10]
	lbs/day[6]	--	--	--	--	0.0066	
Benzene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Benzidine[32]	µg/L	0.0068	--	--	--	--	Existing, Carryover
	lbs/day[6]	0.0018	--	--	--	--	
Beryllium[8]	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	2.0[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.53	
Carbon tetrachloride	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Chlordane	µg/L	--	--	--	--	0.5[33]	No RP[10]
	lbs/day[6]	--	--	--	--	0.13	
Chlorodibromomethane	µg/L	--	--	--	--	1.3[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.34	
Chloroform	µg/L	--	--	--	--	1.4[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.37	
DDT	µg/L	--	--	--	--	0.25[16]	No RP[10]
	lbs/day[6]	--	--	--	--	0.066	

[30] MEC is as performance goal.
[31] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.005 µg/L.
[32] The result of reasonable potential analysis is inconclusive. Therefore, limitations are carried over from the Order No. R4-2002-0129 to prevent backsliding.
[33] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.1 µg/L.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Human Health Toxicants –Carcinogens							
1,4-Dichlorobenzene	µg/L	--	--	--	--	3[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.80	
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
1,2-Dichloroethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
1,1-Dichloroethylene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Bromodichloromethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Dichloromethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
1,3-Dichloropropene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Dieldrin	µg/L	--	--	--	--	0.05[34]	No RP[10]
	lbs/day[6]	--	--	--	--	0.013	
2,4-Dinitrotoluene	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
1,2-Diphenylhydrazine	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Halomethanes	µg/L	--	--	--	--	4.4[12]	No RP[10]
	lbs/day[6]	--	--	--	--	1.2	
Heptachlor	µg/L	--	--	--	--	0.05~~[35]~~[34]	No RP[10]
	lbs/day[6]	--	--	--	--	0.013	
Heptachlor epoxide[31]	µg/L	0.002	--	--	--	--	Existing, Carryover
	lbs/day[6]	0.00053	--	--	--	--	
Hexachlorobenzene	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Hexachlorobutadiene	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Hexachloroethane	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
Isophorone	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	

[34] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC Method for this pollutant is 0.01 µg/L.

Parameter	Units	Effluent Limitations[13]				Performance Goal	Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum		
Human Health Toxicants – Carcinogens							
N-Nitrosodimethylamine	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	25[24]	No RP[10]
	lbs/day[6]	--	--	--	--	6.6	
N-Nitrosodiphenylamine	µg/L	--	--	--	--	5[28]	No RP[10]
	lbs/day[6]	--	--	--	--	1.3	
PAHs	µg/L	--	--	--	--	0.097[12]	No RP[10]
	lbs/day[6]	--	--	--	--	0.026	
PCBs[31]	µg/L	0.0019	--	--	--	--	Existing, Carryover
	lbs/day[6]	0.0005	--	--	--	--	
TCDD equivalents[31]	µg/L	0.00000039	--	--	--	--	Existing, Carryover
	lbs/day[6]	0.0000001	--	--	--	--	
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Tetrachloroethylene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Toxaphene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
Trichloroethylene	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
1,1,2-Trichloroethane	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	
2,4,6-Trichlorophenol	µg/L	--	--	--	--	50[35]	No RP[10]
	lbs/day[6]	--	--	--	--	13	
Vinyl chloride	µg/L	--	--	--	--	2.5[26]	No RP[10]
	lbs/day[6]	--	--	--	--	0.66	

E. Performance Goals

Chapter III, Section F.2, of the 2005 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

[35] See Procedures for the determination of performance goals at Section IV.E.2. of Fact Sheet. Minimum level of GC or GCMS Method for this pollutant is 10 µg/L.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993)* that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

While performance goals were previously placed in many POTW permits in the Region, they have not been continued for discharges that are to inland surface waters. For inland surface waters, the California Toxics Rule (40 C.F.R. part 131.38) has resulted in effluent limits as stringent as many performance goals. However, the Ocean Plan allows for significant dilution, and the continued use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies.

The performance goals are based upon the actual performance of the Oxnard Wastewater Treatment Plant and are specified only as an indication of the treatment efficiency of the Facility. Performance goals are intended to minimize pollutant loading (primarily for toxics), while maintaining the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. They are not considered as enforceable limitations or standards for the regulation of the discharge from the treatment facility. The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted.

Procedures for the determination of performance goals

1. For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound ($UCB_{95/95}$) of the 95th percentile of August 2002 through December 2007 performance data (after complete mixing) using the RPA protocol contained in the 2005 Ocean Plan. Effluent data are assumed lognormally distributed. Performance goals are calculated according to the equation $C_{PG} = Co+Dm(Co-Cs)$ in the Ocean Plan and by setting $Co=UCB_{95/95}$.

    a. If the maximum detected effluent concentration is greater than the calculated performance goal, the calculated performance goal is used as the performance goal; or

b. If the maximum detected effluent concentration is less than the calculated performance goal, the maximum detected effluent concentration is used as the performance goal.

For example, the performance goals for arsenic and cadmium at Discharge Point 001 are calculated as follows:

Arsenic

Co = $UCB_{95/95}$ = 3.044 µg/L; Dm = 98; Cs = 3 µg/L
C_{PG} = Performance Goal = 3.044 µg/L + 98(3.044 µg/L - 3 µg/L) = 7.356 µg/L

Since the maximum detected concentration is 9.7 µg/L that is greater than the calculated PG of 7.356 µg/L, the performance goal for Arsenic is prescribed as 7.356 µg/L.

Chromium (VI)

Co = $UCB_{95/95}$ = 0.0973 µg/L; Dm = 98; Cs = 0 µg/L
C_{PG} = Performance Goal = 0.0973 µg/L + 98(0.0973 µg/L - 0 µg/L) = 9.6327 µg/L

Since the maximum detected concentration is 8 µg/L that is less than the calculated PG of 9.6327 µg/L, the performance goal for chromium (VI) is prescribed as 8 µg/L.

2. For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), performance goals are set at five times the Minimum Levels (applicable analytical techniques: ICPMS, FAA, or CVAA for metals; GCMS, GC, or HPLC for the rest) listed in the 2005 Ocean Plan. However, if the maximum detected effluent concentration is less than the calculated value based on ML, the maximum detected effluent concentration is used as the performance goal.

3. For constituents with no effluent limitations, if the performance goal derived from above steps exceeds the respective calculated Ocean Plan effluent limitation, the calculated effluent limitation is then prescribed as the performance goal for that constituent.

4. For constituents with effluent limitations, if the performance goal derived from above steps exceeds respective effluent limitation, then performance goal is not prescribed for that constituent.

The performance goals for Discharge Point 001 are prescribed in this Order. The listed performance goals are not enforceable effluent limitations or standards. However, the Discharger shall maintain, if not improve, its treatment efficiency. Any exceedance of the performance goals shall trigger an investigation into the cause of

the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary. If there are three successive exceedances of chronic toxicity performance goal, the Discharger shall implement the initial investigation Toxicity Reduction Evaluation workplan and initiate a Toxicity Identification Evaluation as specified in Section V (Whole Effluent Toxicity Testing Requirements) of the MRP.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan and the Ocean Plan contain numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 C.F.R. § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the tentative Order are included to ensure protection of beneficial uses of the receiving water.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program

Influent monitoring in this Order follows the influent monitoring requirements in the previous Order with minor modification. The monitoring frequencies for parameters have been increased due to RP with those parameters.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed Monitoring and Reporting Program (Attachment E). This provision requires compliance with the Monitoring and Reporting Program, and is based on 40 C.F.R. parts 122.44(i), 122.62,122.63, and 124.5. The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board policies. The Monitoring and Reporting Program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed Monitoring and Reporting Program (Attachment E) and as required in the Ocean Plan.

The effluent monitoring in this Order follows the effluent monitoring requirements in the existing Order. The changes (in bold) are summarized in the following table.

Table 13. Monitoring Frequency Comparisons

Parameter	Monitoring Frequency (2002 Permit)	Monitoring Frequency (2008 Permit)
Total waste flow	continuous	continuous
Total residual chlorine	continuous	continuous
Turbidity	continuous	continuous
Temperature	weekly	weekly
pH	daily	daily
Total and fecal coliform	daily	daily
Settleable solids	daily	daily
Suspended solids	daily	daily
Oil and grease	weekly	weekly
$BOD_5 20^oC$	daily	daily
Total coliform	daily	daily
Fecal Coliform	5 times/month	5 times/month
Enterococcus	5 times/month	5 times/month
Ammonia nitrogen	weekly	**monthly**
Nitrate nitrogen	monthly	monthly
Nitrite nitrogen	monthly	monthly
Organic nitrogen	monthly	monthly
Chronic toxicity	monthly	monthly
Arsenic	quarterly	**semiannually**
Cadmium	quarterly	**semiannually**
Chromium VI	quarterly	**semiannually**
Copper	quarterly	**semiannually**
Lead	quarterly	**semiannually**
Mercury	quarterly	**semiannually**
Nickel	quarterly	**semiannually**
Silver	quarterly	**semiannually**
Zinc	quarterly	**semiannually**
Cyanide	quarterly	**semiannually**
Phenolic compounds (non-chlorinated)	quarterly	**semiannually**
Phenolic compounds (chlorinated)	quarterly	**semiannually**
Aldrin	monthly	**quarterly**
Dieldrin	monthly	**quarterly**
Chlordane & related compounds	monthly	**quarterly**
DDT & derivatives	monthly	monthly
Endrin	quarterly	**semiannually**
PCBs	monthly	monthly
Toxaphene	monthly	**semiannually**
PAHs	quarterly	**semiannually**
TCDD	quarterly	quarterly
Acrylonitrile	quarterly	**semiannually**
Heptachlor epoxide	quarterly	quarterly
Benzidine	quarterly	quarterly

Parameter	Monitoring Frequency (2002 Permit)	Monitoring Frequency (2008 Permit)
Bis(2-chloroethyl)ether	quarterly	**semiannually**
3,3-dichlorobenzidine	quarterly	**semiannually**
1,2-diphenyl-hydrazine	quarterly	**semiannually**
Heptachlor & derivatives	quarterly	**semiannually**
Hexachlorobenzene	quarterly	**semiannually**
n-Nitrosodi-n-Propylamine	quarterly	**semiannually**
Remaining pollutants in Table B of 2005 Ocean Plan (except acute toxicity)	semiannually	semiannually
Pesticides**	semiannually	semiannually
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	semiannually	semiannually

The reduction of monitoring frequencies for pollutants listed in the above table is based on the fact that previous monitoring data for these pollutants indicate that the discharge did not demonstrate reasonable potential to exceed water quality standards. However, monitoring frequency for benzidine, heptachlor epoxide, PCBs, and TCDD remains the same, because the results of reasonable potential analysis are inconclusive.

C. Whole Effluent Toxicity Testing Requirements

Chronic Toxicity. The Ocean Plan (2005) requires the use critical life stage toxicity tests specified in Appendix III of the Ocean Plan to measure chronic toxicity. A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, 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 of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results. Chronic toxicity testing requirements defined in Section V.A of the MRP (Attachment E) are specified on the basis of these Ocean Plan requirements.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan and the Ocean Plan. The conceptual framework for the receiving water program has three components

** See Attachment A for definition of terms.

that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies.

a. Core monitoring is local in nature and focused on monitoring trends in quality and effects of the point source discharge. This includes effluent monitoring as well as some aspects of receiving water monitoring. In the monitoring program described below these core components are typically referred to as local monitoring.

b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations, and is not specified in this permit. Instead, for each regional component, the degree and nature of participation of the Discharger is specified. For this permit, these levels of effort are based upon past participation of the Los Angeles County Sanitation Districts (Discharger or Districts) in regional monitoring programs.

   The Discharger shall participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board. The procedures and time lines for the Regional Water Board approval shall be the same as detailed for special studies, below.

c. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.

   The Discharger and the Regional Water Board shall consult annually to determine the need for special studies. Each year, the Discharger shall submit proposals for any proposed special studies to the Regional Water Board by December 15, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals,

including reporting schedules, shall be presented by the Discharger at a Spring Regional Water Board meeting, to obtain the Regional Water Board approval and to inform the public. Upon approval by the Regional Water Board, the Discharger shall implement its special study or studies.

The receiving water monitoring program contains the following components:

d. Nearshore Microbiological Monitoring: The nearshore microbiological monitoring addresses the question: Are Ocean Plan compliance standards for bacteriological contamination being met? The data collected at nearshore stations provide the means to determine whether bacteriological standards for water contact and shellfish harvesting are being met in the area of greatest potential water contact and shellfish harvesting most proximal to the point of discharge.

e. Nearshore/Offshore Water Quality Monitoring: This monitoring addresses the question: Are Ocean Plan limits for dissolved oxygen and pH being met? Data collected provide the information necessary to demonstrate compliance with the standards.

f. Benthic Sediments Monitoring: The local benthic trends survey addresses the question: Are benthic conditions under the influence of the discharge changing over time? The data collected are used for regular assessment of trends in sediment contamination and biological response along a fixed grid of sites within the influence (or historical influence) of the discharge. The resulting physical and chemical data will be used for assessment of trends in sediment contamination and to draw inferences concerning the relationship between effluent-derived alteration of the benthic habitat and patterns in infaunal community structure. The regional benthic survey addresses the questions: 1) What is the extent, distribution, magnitude and trend of ecological change in soft-bottom benthic habitats within the Southern California Bight? and 2) What is the relationship between biological response and contaminant exposure? The data collected will be used to assess the condition of the sea-floor environment and the health of the biological resources in the Bight.

E. Other Monitoring Requirements

1. Outfall Inspection

This survey answers the question: Are the outfall structures in serviceable condition ensuring their continued safe operation? The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

2. Biosolids/Sludge Monitoring

This section establishes monitoring and reporting requirements for the storage, handling and disposal practices of sludge generated from the operation of this Facility.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Part 122.41(a)(1) and (b) through (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. Part 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with part 123.25, this Order omits federal conditions that address enforcement authority specified in parts 122.41, subsections (j)(5) and (k)(2), because the enforcement authority under the California Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference California Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 C.F.R. part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan and the Ocean Plan.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

If the discharge consistently exceed an effluent limitation for toxicity, the Discharger shall conduct TIE/TRE detailed in Section V of the MRP (Attachment E). The TRE will help the Discharger identify the possible source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce toxicity to the required level.

3. Best Management Practices and Pollution Prevention

~~a.~~ **~~Storm Water Pollution Prevention Plan (SWPPP)~~**

~~CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 C.F.R. part 122.26 that established requirements for storm water discharges under an NPDES permit. To facilitate compliance with federal regulations, on November 1991, the State Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 as State Board Order No. 97-03-DWQ. The City is covered under this general permit and an updated SWPPP is required.~~

~~b.~~a. **Spill Clean-Up Contingency Plan (SCP)**

Since spill or overflow is a common event in the treatment plant service areas, this Order requires the Discharger to review and update, if necessary, SCP after each incident. The Discharger shall ensure that the up-to-date SPC is readily available to the sewage system personnel at all times and that the sewage personnel are familiar with it.

~~c.~~b. **Pollutant Minimization Program.**

This provision is based on the requirements of Section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Requirements.** To implement CWA Section 405(d), on February 19, 1993, USEPA promulgated 40 C.F.R. 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Board, other Regional Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.

b. **Pretreatment Requirements.** This permit contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the CWA; 40 C.F.R. 35 and 403; and/or Section 2233, Title 23, California Code of Regulations.

6. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The Discharger must comply with both the General Order and this Order.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Ventura Water Reclamation Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: (Ventura County Star and prior to March 7, 2008).

B. Written Comments

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

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on **April 01, 2008.**

C. Public Hearing

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

Date: May 1, 2008
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California, Board Room
700 North Alameda Street
Los Angeles, California

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

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

D. Nature of Hearing

This will be a formal adjudicative hearing pursuant to section 648 et seq. of title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with section 11500 of the Government Code) will not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Board must be directed to staff.

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee
2. Regional Board Staff

Any other persons requesting party status must submit a written or electronic request to staff not later than [20] business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business **April 01, 2008**. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The meeting, in which the hearing will be a part of, will start at **9:00 a.m**. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in

the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 30 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of [15] business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on **June 5, 2008**. A continuance will not extend any time set forth herein.

H. 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

I. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Don Tsai at (213) 576-6665.

ATTACHMENT G – GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN (POTW)

1. Information and Data Acquisition

a. Operations and performance review

i. NPDES permit requirements
   (1) Effluent limitations
   (2) Special conditions
   (3) Monitoring data and compliance history

ii. POTW design criteria
   (1) Hydraulic loading capacities
   (2) Pollutant loading capacities
   (3) Biodegradation kinetics calculations/assumptions

iii. Influent and effluent conventional pollutant data
   (1) Biochemical oxygen demand (BOD_5)
   (2) Chemical oxygen demand (COD)
   (3) Suspended solids (SS)
   (4) Ammonia
   (5) Residual chlorine
   (6) pH

iv. Process control data
   (1) Primary sedimentation - hydraulic loading capacity and BOD and SS removal
   (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
   (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth

v. Operations information
   (1) Operating logs
   (2) Standard operating procedures
   (3) Operations and maintenance practices

vi. Process sidestream characterization data
   (1) Sludge processing sidestreams
   (2) Tertiary filter backwash
   (3) Cooling water

vii. Combined sewer overflow (CSO) bypass data
   (1) Frequency
   (2) Volume

viii. Chemical coagulant usage for wastewater treatment and sludge processing
   (1) Polymer
   (2) Ferric chloride
   (3) Alum

b. POTW influent and effluent characterization data

i. Toxicity
ii. Priority pollutants
iii. Hazardous pollutants
iv. SARA 313 pollutants,
v. Other chemical-specific monitoring results

c. Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data

i. EP toxicity
ii. Toxicity Characteristic Leaching Procedure (TCLP)
iii. Chemical analysis

d. Industrial waste survey (IWS)

i. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
ii. Number of IUs
iii. Discharge flow
iv. Standard Industrial Classification (SIC) code
v. Wastewater flow
   (1) Types and concentrations of pollutants in the discharge
   (2) Products manufactured
vi. Description of pretreatment facilities and operating practices
vii. Annual pretreatment report
viii. Schematic of sewer collection system
ix. POTW monitoring data
   (1) Discharge characterization data
   (2) Spill prevention and control procedures
   (3) Hazardous waste generation
x. IU self-monitoring data
   (1) Description of operations
   (2) Flow measurements
   (3) Discharge characterization data
   (4) Notice of sludge loading
   (5) Compliance schedule (if out of compliance)
xi. Technically based local limits compliance reports
xii. Waste hauler monitoring data manifests
xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition