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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.

<b>WDID</b>	3 42 010 7001
<b>Discharger</b>	Montecito Sanitary District
<b>Name of Facility</b>	Montecito Sanitary District Wastewater Treatment Facility
<b>Facility Address</b>	1042 Monte Cristo Lane
	Santa Barbara, CA 93108
	Santa Barbara County
<b>Facility Contact, Title and Phone</b>	Diane M. Gabriel, General Manager, (805) 969-4200
<b>Authorized Persons to Sign and Submit Reports</b>	Diane M. Gabriel, General Manager, (805) 969-4200 James A. McManus, Operations and Maintenance Manager, (805) 969-4200 Brett Walker, Laboratory and Treatment Supervisor, (805) 969-4200
<b>Mailing Address</b>	1042 Monte Cristo Lane, Santa Barbara, CA 93108
<b>Billing Address</b>	1042 Monte Cristo Lane, Santa Barbara, CA 93108
<b>Type of Facility</b>	POTW
<b>Major or Minor Facility</b>	Major
<b>Threat to Water Quality</b>	2
<b>Complexity</b>	A
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	None
<b>Facility Permitted Flow</b>	1.5 Million Gallons per Day (MGD)
<b>Facility Design Flow</b>	1.5 Million Gallons per Day (MGD)
<b>Watershed</b>	South Coast Hydrologic Unit
<b>Receiving Water</b>	Pacific Ocean
<b>Receiving Water Type</b>	Saltwater

A. Montecito Sanitary District (hereinafter Discharger) is the owner and operator of the Montecito Sanitary District Wastewater Treatment Facility (hereinafter Facility), a Publicly Owned Treatment Works (POTW), as shown on Attachment A. The Facility serves a population of approximately 10,000 persons.

For the purposes of this Order, references to the "Discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policies 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 No. 01-116, which was adopted on December 7, 2001, and was scheduled to expire on December 6, 2006 (Order No. 01-116).

C. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on June 2, 2005. Upon determining that the Report of Waste Discharge/Application was incomplete, staff required Montecito Sanitary District (District) to submit additional information. Staff deemed the application complete during a meeting on July 21, 2006, and in writing on July 31, 2005. Staff conducted a routine facility inspection on April 13, 2006.

## II. FACILITY DESCRIPTION

A. **Description of Wastewater and Biosolids Treatment or Controls** – The treatment system consists of comminution, activated sludge, secondary sedimentation, chlorination, and dechlorination. The design average dry weather flow rate is 1.5 MGD. The following table summarizes the Annual Average Daily Flows during the last five years.

**Table A-1. Annual Average Daily Flows**

Year	Average Daily Wet-Weather Flow <sup>1,2</sup>	Maximum Daily Wet-Weather Flows <sup>1,2</sup>	Average Daily Dry-Weather Flows <sup>1,3</sup>	Peak Daily Dry-Weather Flow <sup>1,3,4</sup>
2001	1.1677	1.6347	0.9862	See below <sup>5</sup>
2002	0.9760	1.3177	0.8992	2.09
2003	1.0068	1.3658	0.9848	2.30
2004	0.9368	1.3118	0.8248	2.06
2005	1.2992	2.1387	0.9703	2.45

- 1 All flows reported in million gallons per day (MGD).
- 2 Wet-weather flows are from November through April.
- 3 Dry-weather flows are from May through October.
- 4 Based on an instantaneous daily value.
- 5 Permit was adopted in December 1, 2001, December is not considered a dry-weather month; therefore, no data was available to calculate the peak dry-weather flow..

Biosolids are managed via aerobic digestion, dewatered by belt press, and composted off-site.

**B. Discharge Points and Receiving Waters** – Wastewater is discharged to the Pacific Ocean through a 1,550-foot outfall/diffuser system. The outfall (Discharge Point 001) terminates in the Santa Barbara Channel / Pacific Ocean (34°24'48" N. Latitude, 119° 38'52" W. Longitude) in approximately 35 feet of water. The hydraulic capacity of the outfall is 1.5 MGD. The minimum initial dilution ratio of seawater to effluent is 89:1.

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

Effluent limitations/Discharge Specifications contained in the existing Order for discharges from the outfall terminating in the Pacific Ocean and representative monitoring data from the term of the previous Order are as follows:

**Table C-1. Historic Effluent Limitations and Monitoring Data**

Parameter	Units	Effluent Limitation		
		Average Monthly	Average Weekly	Maximum Daily
BOD, 5-day	mg/L	30	45	90
	lbs/day	375*	563*	1126*
Total Non-Filterable Residue (Suspended Solids)	mg/L	30	45	90
	lbs/day	375*	563*	1126*
Grease and Oil	mg/L	25	40	75
	lbs/day	313*	500*	938*
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	Within limits of 6.0 to 9.0 at all times			
Acute Toxicity	TUa	1.5	2.0	2.5

\* For Flows less than 1.5 MGD, mass emission rates shall not exceed the "Maximum Allowable Mass Emission Rate."

**D. Compliance Summary** – Central Coast Water Board records indicate the Discharger complied with Order No. 00-001 with the exceptions shown in the following tables. The Discharger responded appropriately to each incident.

**Table D-1 – Effluent Violations**

<b>Date</b>	<b>Violation</b>	<b>Effluent Limit Violated</b>	<b>Reported Value and Cause (if known)</b>	<b>Staff Enforcement Action</b>
1/1/2005	Total Coliform Median Number	23 MPN per 100 ml	26 MPN per 100 ml, cause by large storm event	Verbal

**Table D-2 – Sanitary Sewer Overflows**

<b>Date</b>	<b>Volume (gallons)</b>	<b>Discharge to Waterbody (Y/N)</b>	<b>Reported Cause</b>	<b>Staff Enforcement Action</b>
11/4/2004	1,200	N	Construction debris blockage	None recommended
11/4/2004	300-500	N	Construction debris blockage	None recommended
8/12/2004	<200	N	Force Main Puncture	None recommended
1/12/2004	5,000	N	Root and grease blockage	Verbal
11/13/2003	100	N	Root blockage	None recommended
9/29/2003	100-150	N	Root blockage	None recommended
5/20/2003	100	N	Root Blockage	None recommended
5/4/2003	900	Y	Root and grease blockage	None recommended
4/14/2003	100-150	N	Root and grease blockage	None recommended
4/2/2003	200	Y	Root and grease blockage	None recommended
3/18/2003	100-150	N	Root blockage	None recommended
1/29/2003	1,200	N	Root blockage	None recommended
12/15/2002	100	N	Root blockage	None

				<b>recommended</b>
11/30/2002	500	N	Root blockage	None recommended
9/26/2002	20	N	Root blockage	None recommended
6/7/2002	500	N	Root Blockage	Verbal
5/29/2002	300	N	Root and grease blockage	None recommended
5/28/2002	1,500	N	Root and grease blockage	Verbal
11/23/2001	2,500	Y	Root Blockage	Verbal

Central Coast Water Board records also indicate several minor reporting violations, resulting in staff's informal verbal or written enforcement actions. The Discharger responded appropriately by submitting the information or modifying monitoring practices to include the data in future reports.

E. **Planned Changes** – The Discharger proposes no planned changes to the facility during the next Order term that may impact the development of this Order.

### 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 (U.S. EPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the CWC for discharges that are not subject to regulation under CWA section 402.

#### 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 the CEQA, Public Resources Code sections 21000-21177. This action regulates an existing facility and involves negligible or no expansion of use, and is also exempt from the provisions of the CEQA in accordance with Section 15301, Title 14 of the California Code of Regulations.

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

1. **Water Quality Control Plans.** In 1994, the Central Coast Water Board adopted a Water Quality Control Plan for the Central Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Central Coast Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.

The State Water Board revised and adopted the Water Quality Control Plan, Ocean Waters of California (2005 Ocean Plan) on January 20, 2005. The 2005 Ocean Plan contains water quality objectives and other requirements governing discharges to the Pacific Ocean.

Beneficial uses applicable to the Pacific Ocean are as follows:

Discharge Point	Receiving Water Name	Basin Plan Beneficial Use(s)
001	Pacific Ocean	<u>Existing:</u> Water contact recreation (REC-1); non-contact water recreation (REC-2); industrial service supply (IND); navigation (NAV); marine habitat (MAR); shellfish harvesting (SHELL); commercial and sport fishing (COMM); rare, threatened, or endangered species (RARE); wildlife habitat (WILD); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN).

2. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. The permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.
3. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 40 CFR §122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding



provisions require 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. All limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with some minor exceptions due to the appropriate use of rounding the results of effluent limit calculations for this Order.

Furthermore, the maximum daily acute toxicity limit shown as 3.1 TUa is higher than the limit in Order No. 01-116 (2.5 TUa) because of the State Water Board's modification of the Ocean Plan in 2001. With regard to anti-backsliding, according to the State Water Board's *Final Functional Equivalent Document – Amendment of the Water Quality Control Plan for Ocean Waters of California (California Ocean Plan)*, September 1, 2000, page 27, Comment/Response No. 1.34,

The Clean Water Act's antibacksliding provisions would not apply. The relevant provisions are in Section 402(o)(1) of the Clean Water Act (Act). The section prohibits, with certain exceptions, a permit issuer from replacing existing permit limits with less stringent limits in two types of cases. First, technology-based limits based on best professional judgment cannot be revised to reflect subsequently EPA-promulgated effluent limitation guidelines which are less stringent. Second, the Act prohibits backsliding from water quality-based effluent limitations. In this case, the SWRCB is proposing to replace technology-based acute toxicity limitations based on best professional judgment with, assuming reasonable potential, water quality-based limits. This approach is not subject to antibacksliding restrictions.

4. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code Sections 13267 and 13383 authorize the regional water boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.
5. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (2005 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 2005 Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The 2005 Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

**2005 Ocean Plan Beneficial Uses**

Discharge Point	Receiving Water	2005 Ocean Plan Beneficial Uses
Outfall 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 Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

In order to protect the beneficial uses, the 2005 Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the 2005 Ocean Plan.

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

**D. Other Plans, Policies and Regulations**

1. **Stormwater Management.** Storm water runoff due to rainfall that falls upon the wastewater treatment facility and that may be exposed to on-site pollutant sources is routed to the facility's headworks for treatment. This permit regulates all storm water discharges at this facility and complies with Federal regulations for storm water management [Title 40, Code of Federal Regulations (CFR), Parts 122, 123, and 124], and therefore this facility is exempt from coverage under the State's Water Quality Order No. 97-03-DWQ, *NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities*.
2. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs).** The General Waste Discharge Requirements Order No. 2006-0003-DWQ, adopted May 2, 2006, applies to publicly owned sanitary sewer systems (collection systems) that are one mile or greater in length. The General WDRs requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals, organization, legal authority, operations and maintenance program, design and performance provisions, overflow emergency response plan, fats, oils, and greases (FOG) control program, systems evaluations and capacity assurance program, monitoring, measures, and program modifications, and SSMP Program audit. Additionally, the General WDRs requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report

SSOs that are greater than 1,000 gallons. Furthermore, such must also report SSO discharges less than 1,000 gallons that discharge to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General WDRs. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination.

Staff removed the *Collection System Maintenance and Renovation Program* requirements language (Section D of Order No. 01-116). The language was removed because the Discharger had submitted an application to the State Water Board in order to obtain coverage under the General WDRs. The Discharger's application was submitted July 10, 2006. Official notification of General WDRs enrollment was provided by the State Water Board via e-mail August 18, 2006.

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

The CWA requires point source discharges 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: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §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** – To effectively regulate this waste discharge, including protecting public and environmental health and facilitating compliance monitoring, it is necessary to know the discharge location and that the discharge is properly treated. Order Section III specifies the authorized discharge location, and prohibits the discharge of untreated wastes to surface waters or conveyances thereto.

#### **B. Technology-Based Effluent Limitations**

##### **1. Scope and Authority**

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at section 122.44, 40 of the Code of Federal Regulations (40 CFR) 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.

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

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

Based on this statutory requirement, U.S. EPA developed secondary treatment regulations, which are specified in 40 CFR 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), and pH.

- 2. Applicable Technology-Based Effluent Limitations** – Staff applied effluent CBOD<sub>5</sub> and TSS concentrations and removal efficiencies directly from 40 CFR 133.102. While pH limitations are also provided in 40 CFR, staff used water quality based effluent limits from the 2005 Ocean Plan. Please see Fact Sheet Section C.4 for more detail regarding pH effluent limits.

Where applicable, the above technology-based limits are also expressed in terms of mass loading, with units of pounds/day. 40 CFR 122.45(f)(2) provides that, "Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the Discharger to comply with both limitations."

The 2005 Ocean Plan Section III.C.4.j states that, "Discharge requirements shall also specify effluent limitations in terms of mass emission rate limits utilizing [2005 Ocean Plan Equation No. 3]."

The preceding Permit also contained mass loading limits, so including them in the renewed Permit is consistent with anti-backsliding requirements.

Staff calculated mass loading limits using the following equation (based on Equation No. 3 of the 2005 Ocean Plan):

$$\text{mass loading in lbs/day} = 8.34 \times C_e \times Q$$

where:

$C_e$  = the effluent concentration limit, in mg/L;

Q = the flow rate observed over the concentration limit's period (e.g., daily, weekly/7-day, monthly/30-day), in millions of gallons per day (MGD), and;

The conversion factor of 8.34 has units of [(lbs/Million Gallons) / (mg/L)].

For example, the effluent CBOD<sub>5</sub> 30-day average concentration limit is 25 mg/L (Ce). Using the permitted flow rate of 1.5 MGD and the conversion factor 8.34:

$$\text{CBOD}_5 \text{ effluent mass loading} = 8.34 \times 25 \times 1.5$$

$$\text{CBOD}_5 \text{ effluent mass loading} = 312.75 \text{ lbs/day}$$

Because the significant figures are limited to two by the concentration and flow rate, the calculated mass loading is rounded to 313 lbs/day. Staff followed this rounding convention for all calculated effluent limits in the Permit.

Staff established the maximum daily effluent limits for CBOD<sub>5</sub> and TSS based on best professional judgment in previous permits. In accordance with anti-backsliding provisions, staff recommends maintaining these limits.

#### Summary of Technology-based Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations		
		30-day Average	7-day Average	Maximum Daily
Carbonaceous Biochemical Oxygen Demand, 5-day (CBOD <sub>5</sub> )	mg/L	25	40	85
	% removal	Not less than 85%	N/A	N/A
	lbs/day	310	500	1,100
Total Suspended Solids (TSS)	mg/L	30	45	90
	% removal	Not less than 85%	N/A	N/A
	lbs/day	380	560	1,100

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

#### 1. Scope and Authority

Section 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) U.S. EPA 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 Section 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 2005 Ocean Plan.

The 2005 Ocean Plan is applicable, in its entirety, to point source discharges to the ocean (2005 Ocean Plan, *Introduction*, C.1). The 2005 Ocean Plan Section III.C.4 establishes that water quality-based effluent limitations (WQBELs) for water quality objectives listed in the 2005 Ocean Plan Table B, with the exception of acute toxicity and radioactivity, shall be determined using the 2005 Ocean Plan Equation No. 1. Staff discusses the use of Equation No. 1 in the next section of this Fact Sheet.

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

Applicable beneficial uses are discussed on Permit Section II, Finding H and I, or Fact Sheet Section III.C.1. and C.5.

The 2005 Ocean Plan and Basin Plan numeric and narrative water quality criteria and objectives apply to the discharge. Narrative criteria are transcribed in the permit and include footnotes to indicate their source.

The discharge must meet the 2005 Ocean Plan requirements outside a "zone of initial dilution" (dilution zone) around the outfall diffuser. The 2005 Ocean Plan defines the dilution zone as the region in which the rapid, initial mixing occurs.

Computer models are employed to estimate the minimum initial dilution ratio (dilution ratio) of seawater to effluent achieved during the initial mixing phase in the dilution zone. The dilution ratio is used to determine the maximum concentrations of the specified the 2005 Ocean Plan constituents allowed in the wastewater before it is discharged. The proposed Order applies a dilution ratio of 89:1 to the discharge to determine effluent limitations derived from the 2005 Ocean Plan water quality objectives.

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

During the July 14, 2000 Central Coast Water Board public hearing for the adoption of Order No. 00-001 for Carpinteria Sanitary District and Order No. 00-061 for Carmel Area Water District (both Ocean dischargers), the Central Coast Water Board rejected the use of limited data sets to statistically determine reasonable potential for municipal dischargers. The Central Coast Water Board found that the pollutant loading to publicly owned, domestic wastewater treatment

facilities varies greatly, and the potential always exists for pollutants to be discharged at a level that may cause, have reasonable potential to cause, or contribute to an excursion above effluent limitations (and therefore above state water quality objectives/standards). Intermittent disposal of household pesticides, detergents, and other toxics may not be captured by infrequent monitoring (and thus not be accounted for in the statistical reasonable potential analysis), but may cause, have reasonable potential to cause, or contribute to an excursion above effluent limitations. Based on this rationale, the Central Coast Water Board retained all effluent limits based on Ocean Plan Table B.

This rationale and approach was documented in staff's report to the Central Coast Water Board on February 1, 2002 (Agenda Item No. 22). The Discharger continues to collect, treat, and dispose of domestic/municipal wastewater. Based on the inherent variability of such wastewater, as discussed above, staff continues to recommend findings of reasonable potential and the application of all effluent limits according to the entirety of the 2005 Ocean Plan Table B.

#### 4. WQBEL Calculations

The 2005 Ocean Plan Section III.B, Table A establishes POTW effluent limitations for Grease and Oil, Suspended Solids, Settleable Solids, Turbidity, and pH. Staff did not use the 2005 Ocean Plan Suspended Solids limit because it is not as stringent as the technology-based limits in 40 CFR 133.102 or Order No. 01-116 (the preceding Permit). Staff applied the 2005 Ocean Plan's pH limit because, although equal to 40 CFR in range (6 to 9), it lacks the conditional applicability of 40 CFR and is therefore the more stringent standard. The 2005 Ocean Plan's effluent pH limit is also equal to the preceding Order, so applying this standard is consistent with anti-backsliding requirements.

The 2005 Ocean Plan Section III.C.4 establishes that water quality-based concentration effluent limitations (WQBELs) for water quality objectives listed in the 2005 Ocean Plan Table B, with the exception of acute toxicity and radioactivity, shall be determined using the 2005 Ocean Plan Equation No. 1, as follows:

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

where:

$C_e$  = the effluent concentration limit, in ug/L

$C_o$  = the concentration (water quality objective) to be met at the completion of initial dilution, in ug/L

$C_s$  = background seawater concentration (see table below), in ug/L

$D_m$  = minimum probable initial dilution expressed as parts seawater per part wastewater. The minimum probable initial dilution applying to the discharger 89:1, therefore  $D_m = 89$ .

**BACKGROUND SEAWATER CONCENTRATIONS (Cs)**

Waste Constituent	Cs ( $\mu\text{g/L}$ )
Arsenic	3.
Copper	2.
Mercury	0.0005
Silver	0.16
Zinc	8.

For all other Table B parameters, Cs = 0.

Where applicable, water quality-based limits are also expressed in terms of mass loading, with units of pounds/day. 40 CFR 122.45(f)(2) provides that, "Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the Discharger to comply with both limitations."

The 2005 Ocean Plan Section III.C.4.j states that, "Discharge requirements shall also specify effluent limitations in terms of mass emission rate limits utilizing [2005 Ocean Plan Equation No. 3]." Staff calculated maximum allowable mass-based effluent limits, where the mass loading in pounds per day =  $8.34 \times C_e \times Q$ .

where:

$C_e$  = the effluent concentration limit, in mg/L;

$Q$  = the flow rate observed over the concentration limit's period (e.g., daily, weekly/7-day, monthly/30-day), in millions of gallons per day (MGD), and;

The conversion factor of 8.34 has units of [(lbs/Million Gallons) / (mg/L)].

**Example Calculation of QBEL Concentration (Using Arsenic as an example):**

From the 2005 Ocean Plan Table B:

$C_o$  (the daily maximum water quality objective for Arsenic) =  $32 \mu\text{g/L}$ ;

$C_s$  (according to the table of background seawater concentrations for Arsenic) =  $3 \mu\text{g/L}$ , and;

$D_m$  (the minimum probable initial dilution) = 89.

Therefore:

Using the 2005 Ocean Plan Equation No. 1, the calculated daily maximum QBEL for Arsenic ( $C_e$ ) =  $32 + 89(32 - 3)$ , or  $C_e = 2,613 \mu\text{g/L}$ , or  $2.6 \text{ mg/L}$  using two significant figures.



**Example Calculation of WQBEL Maximum Allowable Mass Loading (Using the Arsenic effluent limits calculated above as an example):**

Q (the maximum permitted flow) = 1.5 million gallons per day.

Ce = 2.613 mg/L

Therefore:

Using the 2005 Ocean Plan Equation No. 3, the mass loading limit for Arsenic =  $8.34 \times 2.613 \times 1.5 = 33 \text{ lbs/day}$ , using two significant figures.

**Summary of Water Quality-Based Effluent Limitations**  
**Discharge Point 001**

**Effluent Limitations Derived from the 2005 Ocean Plan Table A**

Parameter	Units	Effluent Limitations		
		30-day Average	7-day Average	Maximum Daily
pH	pH units	6 to 9 at all times		
Grease & Oil	mg/L	25	40	75
	lbs/day	310*	500*	940*
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	230

\* For flows less than 1.5 MGD, mass emission rates shall not exceed the "Maximum Allowable Mass Emissions Rate."

**Effluent Limitations for the Protection of**  
**Marine Aquatic Life – Derived from the 2005 Ocean Plan Table B**

	Units of Measurement	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/L	450	2,600	6,900
	lb/Day	5.7	33	87
Cadmium	µg/L	90	360	900
	lb/Day	1.1	4.5	11
Chromium (Hexavalent) <sup>1</sup>	µg/L	180	720	1800
	lb/Day	2.3	9.0	23
Copper	µg/L	92	900	2500
	lb/Day	1.2	11	32
Lead	µg/L	180	720	1,800
	lb/Day	2.3	9.0	23
Mercury	µg/L	3.6	14	36
	lb/Day	0.045	0.18	0.45

**Effluent Limitations for the Protection of  
 Marine Aquatic Life – Derived from the 2005 Ocean Plan Table B**

	<b>Units of Measurment</b>	<b>6-Month Median</b>	<b>Daily Maximum</b>	<b>Instantaneous Maximum</b>
Nickel	$\mu\text{g/L}$	450	1,800	4,500
	lb/Day	5.6	23	56
Selenium	$\mu\text{g/L}$	1,400	5,400	14,000
	lb/Day	17	68	170
Silver	$\mu\text{g/L}$	49	240	620
	lb/Day	0.61	3.0	7.7
Zinc	$\mu\text{g/L}$	1,200	6,500	17,000
	lb/Day	14	81	220
Cyanide <sup>2</sup>	$\mu\text{g/L}$	90	360	900
	lb/Day	1.1	4.5	11
Total Chlorine Residual <sup>3</sup>	$\mu\text{g/L}$	180	720	5400
	lb/Day	2.3	9.0	68
Ammonia (as N)	$\mu\text{g/L}$	54,000	220,000	540,000
	lb/Day	680	2,700	6,800
Chronic Toxicity	TUc	-----	76	-----
Acute Toxicity	TUa	-----	2.0	-----
Phenolic Compounds (non-chlorinated)	$\mu\text{g/L}$	2,700	11,000	27,000
	lb/Day	34	140	340
Chlorinated Phenolics	$\mu\text{g/L}$	90	360	900
	lb/Day	1.1	4.5	11
Endosulfan	$\mu\text{g/L}$	0.81	1.6	2.4
	lb/Day	0.01	0.02	0.03
Endrin	$\mu\text{g/L}$	0.18	0.36	0.54
	lb/Day	0.0023	0.0045	0.0068
HCH	$\mu\text{g/L}$	0.36	0.72	1.1
	lb/Day	0.0045	0.009	0.014
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			

**Effluent Limitations for the Protection Of Human Health –  
 Non-Carcinogens – Derived from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>
Acrolein	µg/L	20,000
	lb/Day	250
Antimony	µg/L	110,000
	lb/Day	1,400
bis(2-chloroethoxy) methane	µg/L	400
	lb/Day	5.0
bis(2-chloroisopropyl)ether	µg/L	110,000
	lb/Day	1,400
chlorobenzene	µg/L	51,000
	lb/Day	640
chromium (III)	µg/L	17,000,000
	lb/Day	210,000
di-n-butyl pthalate	µg/L	320,000
	lb/Day	3,900
dichlorobenzenes	µg/L	460,000
	lb/Day	5,700
diethyl phthalate	µg/L	3,000,000
	lb/Day	37,000
dimethyl phthalate	µg/L	74,000,000
	lb/Day	920,000
4,6-dinitro-2-methylphenol	µg/L	20,000
	lb/Day	250
2,4-dinitrophenol	µg/L	360
	lb/Day	4.5
ethylbenzene	µg/L	370,000
	lb/Day	4,600
fluoranthene	µg/L	1,400
	lb/Day	17
hexachlorocyclopentadiene	µg/L	5,200
	lb/Day	65
nitrobenzene	µg/L	440
	lb/Day	5.5
thallium	µg/L	180
	lb/Day	2.3
toluene	µg/L	7,700,000
	lb/Day	96,000
tributyltin	µg/L	0.14
	lb/Day	0.0016

**Effluent Limitations for the Protection Of Human Health –  
 Non-Carcinogens – Derived from the 2005 Ocean Plan Table B**

Chemical	Units of Measurement	30-day average
1,1,1-trichloroethane	$\mu\text{g/L}$	49,000,000
	lb/Day	610,000

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived  
 from the 2005 Ocean Plan Table B**

Chemical	Units of Measurement	30-day average
acrylonitrile	$\mu\text{g/L}$	9.0
	lb/Day	0.11
aldrin	$\mu\text{g/L}$	0.002
	lb/Day	0.000025
benzene	$\mu\text{g/L}$	530
	lb/Day	6.6
benzidine	$\mu\text{g/L}$	0.0062
	lb/Day	0.000078
beryllium	$\mu\text{g/L}$	3.0
	lb/Day	0.037
bis(2-chloroethyl)ether	$\mu\text{g/L}$	4.1
	lb/Day	0.05
bis(2-ethylhexyl)phthalate	$\mu\text{g/L}$	320
	lb/Day	3.9
carbon tetrachloride	$\mu\text{g/L}$	81
	lb/Day	1.0
chlordane	$\mu\text{g/L}$	0.0021
	lb/Day	0.00003
chlorodibromomethane	$\mu\text{g/L}$	770
	lb/Day	9.7
chloroform	$\mu\text{g/L}$	12,000
	lb/Day	150
DDT	$\mu\text{g/L}$	0.015
	lb/Day	0.00019
1,4-dichlorobenzene	$\mu\text{g/L}$	1,600
	lb/Day	20
3,3-dichlorobenzidine	$\mu\text{g/L}$	0.73
	lb/Day	0.0091
1,2-dichloroethane	$\mu\text{g/L}$	2,500
	lb/Day	32
1,1-dichloroethylene	$\mu\text{g/L}$	81

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived from the 2005 Ocean Plan Table B**

Chemical	Units of Measurement	30-day average
	lb/Day	1.0
dichlorobromomethane	µg/L	560
	lb/Day	7.0
dichloromethane	µg/L	41,000
	lb/Day	510
1,3-dichloropropene	µg/L	800
	lb/Day	10
dieldrin	µg/L	0.0036
	lb/Day	0.000045
2,4-dinitrotoluene	µg/L	230
	lb/Day	2.9
1,2-diphenylhydrazine	µg/L	14
	lb/Day	0.18
halomethanes	µg/L	12,000
	lb/Day	150
heptachlor	µg/L	0.0045
	lb/Day	0.000056
heptachlor epoxide	µg/L	0.0018
	lb/Day	0.000023
hexachlorobenzene	µg/L	0.019
	lb/Day	0.00024
hexachlorobutadiene	µg/L	1,300
	lb/Day	16
hexachloroethane	µg/L	230
	lb/Day	2.8
isophorone	µg/L	66,000
	lb/Day	820
N-nitrosodimethylamine	µg/L	660
	lb/Day	8.2
N-nitrosodi-N-propylamine	µg/L	34
	lb/Day	0.43
N-nitrosodiphenylamine	µg/L	230
	lb/Day	2.8
PAHs	µg/L	0.79
	lb/Day	0.0099
PCBs	µg/L	0.0017
	lb/Day	0.000021
TCDD equivalents	µg/L	0.00000035
	lb/Day	0.000000044
1122-tetrachloroethane	µg/L	210

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived from the 2005 Ocean Plan Table B**

Chemical	Units of Measurement	30-day average
	lb/Day	2.6
tetrachloroethylene	µg/L	180
	lb/Day	2.3
toxaphene	µg/L	0.019
	lb/Day	0.00024
trichloroethylene	µg/L	2,400
	lb/Day	30
1,1,2-trichloroethane	µg/L	850
	lb/Day	11
2,4,6-trichlorophenol	µg/L	26
	lb/Day	0.33
vinyl chloride	µg/L	3,200
	lb/Day	41

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

The 2005 Ocean Plan Table B includes daily maximum water quality objectives for acute and chronic toxicity.

**Acute Toxicity**

According to the 2005 Ocean Plan Section III.C.4.b, the mixing zone for the acute toxicity objective shall be ten percent (10%) of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (zone of initial dilution). There is no vertical limitation on this zone. The effluent limitation for the acute toxicity objective listed in the 2005 Ocean Plan Table B shall be determined through the use of the 2005 Ocean Plan Equation No. 2:

$$C_e = C_a + (0.1) D_m (C_a)$$

where:

$C_a$  = the concentration (water quality objective) to be met at the edge of the acute mixing zone, and;

$D_m$  = minimum probable initial dilution expressed as parts seawater per part wastewater (This equation applies only when  $D_m > 24$ ).

so,

$C_a = 0.3$  acute toxicity units, or TU<sub>a</sub>, and;

$D_m = 89$

Therefore,

$$C_e = 0.3 + [0.1 \times 89 \times 0.3]$$

$C_e = 2.97$  TUa (this value is also shown in the above tables in Fact Sheet Section C.4)

### **Chronic Toxicity**

The 2005 Ocean Plan Section III.C.4.c(4) states that, "Dischargers shall conduct chronic toxicity testing if the minimum initial dilution of the effluent falls below 100:1 at the edge of the mixing zone." The Discharger's minimum initial dilution is 89:1.

The daily maximum chronic toxicity effluent limit is based on the 2005 Ocean Plan Table B chronic toxicity water quality objective. The effluent limit is calculated using the 2005 Ocean Plan Equation No. 1 as discussed above in Fact Sheet Section C.4.

### **Toxicity Identification / Reduction Evaluations**

The 2005 Ocean Plan Section III.C.10 states:

If a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table B, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level. The following shall be incorporated into waste discharge requirements: (1) a requirement to conduct a TRE if the discharge consistently exceeds its toxicity effluent limitation, and (2) a provision requiring a discharger to take all reasonable steps to reduce toxicity once the source of toxicity is identified.

Based on the above, where toxicity monitoring shows a violation of the permit's toxicity limitations, the Discharger shall increase the frequency of toxicity testing to once per week and submit the data within 15 days of the conclusion of each weekly test to the Central Coast Water Board's Executive Officer. The Executive Officer will determine whether to initiate enforcement action or whether the Discharger will be required to implement a Toxicity Reduction Evaluation (TRE) requirements, which include conducting a Toxicity Identification Evaluation (TIE).

The basis of the TRE shall be EPA's *Methods for Aquatic Toxicity Identification Evaluations: Phase I, Toxicity Characterization Procedures*, 2nd Edition, 1991b (EPA 600-6-91-003), *Methods for Aquatic Toxicity Identification Evaluations: Phase II, Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993a (EPA 600-R-92-080), *Methods for Aquatic Toxicity Identification Evaluations: Phase III, Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993b (EPA 600-R-92-081), and *Toxicity*

*Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA 833-B-99-002), August 1999, or revised editions.*

**6. Total Coliform Effluent Limitations**

The seven-day median effluent total coliform limitation (23/100 mL) and the maximum total coliform limitation (2,300/100 mL) were established in Order No. 01-116 based on the California Department of Health Services' *Uniform Guidelines for Wastewater Disinfection*. This Order maintains these limits.

**D. Final Effluent Limitations**

**Summary of Final Effluent Limitations  
 Discharge Point 001**

**Effluent Limitations Derived from the 2005 Ocean Plan Table A**

Parameter	Units	30-day Average	7-day Average	Maximum Daily	Basis
Carbonaceous Biochemical Oxygen Demand, 5-day (CBOD <sub>5</sub> )	mg/L	25	40	85	40 CFR 133.102, BPJ and anti-backsliding for max. daily
	% removal	Not less than 85%	N/A	N/A	40 CFR 133.102
	lbs/day	310*	500*	1,100*	40 CFR 122.45(f)(2)
Total Suspended Solids (TSS)	mg/L	30	45	90	40 CFR 133.102, BPJ and anti-backsliding for max. daily
	% removal	Not less than 85%	N/A	N/A	40 CFR 133.102
	lbs/day	380*	570*	1,100*	40 CFR 122.45(f)(2)
pH	pH units	Within limits of 6.0 to 9.0 at all times			2005 Ocean Plan Table A
Grease & Oil	mg/L	25	40	75	2005 Ocean Plan Table A
	lbs/day	310*	500*	940*	40 CFR 122.45(f)(2)
Settleable Solids	mL/L	1.0	1.5	3.0	2005 Ocean Plan Table A
Turbidity	NTU	75	100	230	2005 Ocean Plan Table A

\* For flows less than 1.5 MGD, mass emissions rates shall not exceed the "Maximum Allowable Mass Emissions Rate."



**Effluent Limitations for the Protection of  
 Marine Aquatic Life – Derived from the 2005 Ocean Plan Table B**

Constituent	Units of Measurement	6-Month Median	Daily Maximum	Instantaneous Maximum	Basis
Arsenic	ug/L	450	2,600	6,900	2005 Ocean Plan Table B
	lb/Day	5.7	33	87	
Cadmium	μg/L	90	360	900	2005 Ocean Plan Table B
	lb/Day	1.1	4.5	11	
Chromium (Hexavalent) <sup>1</sup>	μg/L				2005 Ocean Plan Table B
	lb/Day	180	720	1800	
Copper	μg/L	92	900	2500	2005 Ocean Plan Table B
	lb/Day	1.2	11	32	
Lead	μg/L	180	720	1,800	2005 Ocean Plan Table B
	lb/Day	2.3	9.0	23	
Mercury	μg/L	3.6	14	36	2005 Ocean Plan Table B
	lb/Day	0.045	0.18	0.45	
Nickel	μg/L	450	1,800	4,500	2005 Ocean Plan Table B
	lb/Day	5.6	23	56	
Selenium	μg/L	1,400	5,400	14,000	2005 Ocean Plan Table B
	lb/Day	17	68	170	
Silver	μg/L	49	240	620	2005 Ocean Plan Table B
	lb/Day	0.61	3.0	7.7	
Zinc	μg/L	1,200	6,500	17,000	2005 Ocean Plan Table B
	lb/Day	14	81	220	
Cyanide <sup>2</sup>	μg/L	90	360	900	2005 Ocean Plan Table B
	lb/Day	1.1	4.5	11	
Total Chlorine Residual <sup>3</sup>	μg/L				2005 Ocean Plan Table B
	lb/Day	180	720	5400	
Ammonia (as N)	μg/L				2005 Ocean Plan Table B
	lb/Day	54,000	220,000	540,000	
Chronic Toxicity	TUc	----	76	----	2005 Ocean Plan Table B
	TUa	----	2.0	----	
Acute Toxicity	TUc	----			2005 Ocean Plan Table B
	TUa	----			

**Effluent Limitations for the Protection of  
 Marine Aquatic Life – Derived from the 2005 Ocean Plan Table B**

Constituent	Units of Measurement	6-Month Median	Daily Maximum	Instantaneous Maximum	Basis
Phenolic Compounds (non-chlorinated)	µg/L	2,700	11,000	27,000	2005 Ocean Plan Table B
	lb/Day	34	140	340	
Chlorinated Phenolics	µg/L	90	360	900	2005 Ocean Plan Table B
	lb/Day	1.1	4.5	11	
Endosulfan	µg/L	0.81	1.6	2.4	2005 Ocean Plan Table B
	lb/Day	0.01	0.02	0.03	
Endrin	µg/L	0.18	0.36	0.54	2005 Ocean Plan Table B
	lb/Day	0.0023	0.0045	0.0068	
HCH	µg/L	0.36	0.72	1.1	2005 Ocean Plan Table B
	lb/Day	0.0045	0.009	0.014	
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.				2005 Ocean Plan Table B

**Effluent Limitations for the Protection Of Human Health –  
 Non-Carcinogens – Derived from the 2005 Ocean Plan Table B**

Chemical	Units of Measurement	30-day average	Basis
Acrolein	µg/L	20,000	2005 Ocean Plan Table B
	lb/Day	250	
Antimony	µg/L	110,000	2005 Ocean Plan Table B
	lb/Day	1,400	
bis(2-chloroethoxy) methane	µg/L	400	2005 Ocean Plan Table B
	lb/Day	5.0	
bis(2-chloroisopropyl)ether	µg/L	110,000	2005 Ocean Plan Table B
	lb/Day	1,400	
chlorobenzene	µg/L	51,000	2005 Ocean Plan Table B
	lb/Day	640	
chromium (III)	µg/L	17,000,000	2005 Ocean Plan Table B

**Effluent Limitations for the Protection Of Human Health –  
 Non-Carcinogens – Derived from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>	<b>Basis</b>
	lb/Day	210,000	
di-n-butyl phthalate	µg/L	320,000	2005 Ocean Plan Table B
	lb/Day	3,900	
dichlorobenzenes	µg/L	460,000	2005 Ocean Plan Table B
	lb/Day	5,700	
diethyl phthalate	µg/L	3,000,000	2005 Ocean Plan Table B
	lb/Day	37,000	
dimethyl phthalate	µg/L	74,000,000	2005 Ocean Plan Table B
	lb/Day	920,000	
4,6-dinitro-2-methylphenol	µg/L	20,000	2005 Ocean Plan Table B
	lb/Day	250	
2,4-dinitrophenol	µg/L	360	2005 Ocean Plan Table B
	lb/Day	4.5	
ethylbenzene	µg/L	370,000	2005 Ocean Plan Table B
	lb/Day	4,600	
fluoranthene	µg/L	1,400	2005 Ocean Plan Table B
	lb/Day	17	
hexachlorocyclopentadiene	µg/L	5,200	2005 Ocean Plan Table B
	lb/Day	65	
nitrobenzene	µg/L	440	2005 Ocean Plan Table B
	lb/Day	5.5	
thallium	µg/L	180	2005 Ocean Plan Table B
	lb/Day	2.3	
toluene	µg/L	7,700,000	2005 Ocean Plan Table B
	lb/Day	96,000	
tributyltin	µg/L	0.14	2005 Ocean Plan Table B
	lb/Day	0.0016	
1,1,1-trichloroethane	µg/L	49,000,000	2005 Ocean Plan Table B
	lb/Day	610,000	

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived  
 from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>	<b>Basis</b>
acrylonitrile	µg/L	9.0	2005 Ocean Plan Table B
	lb/Day	0.11	B

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived  
 from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>	<b>Basis</b>
aldrin	$\mu\text{g/L}$	0.002	2005 Ocean Plan Table B
	lb/Day	0.000025	
benzene	$\mu\text{g/L}$	530	2005 Ocean Plan Table B
	lb/Day	6.6	
benzidine	$\mu\text{g/L}$	0.0062	2005 Ocean Plan Table B
	lb/Day	0.000078	
beryllium	$\mu\text{g/L}$	3.0	2005 Ocean Plan Table B
	lb/Day	0.037	
bis(2-chloroethyl)ether	$\mu\text{g/L}$	4.1	2005 Ocean Plan Table B
	lb/Day	0.05	
bis(2-ethylhexyl)phthalate	$\mu\text{g/L}$	320	2005 Ocean Plan Table B
	lb/Day	3.9	
carbon tetrachloride	$\mu\text{g/L}$	81	2005 Ocean Plan Table B
	lb/Day	1.0	
chlordane	$\mu\text{g/L}$	0.0021	2005 Ocean Plan Table B
	lb/Day	0.00003	
chlorodibromomethane	$\mu\text{g/L}$	770	2005 Ocean Plan Table B
	lb/Day	9.7	
chloroform	$\mu\text{g/L}$	12,000	2005 Ocean Plan Table B
	lb/Day	150	
DDT	$\mu\text{g/L}$	0.015	2005 Ocean Plan Table B
	lb/Day	0.00019	
1,4-dichlorobenzene	$\mu\text{g/L}$	1,600	2005 Ocean Plan Table B
	lb/Day	20	
3,3-dichlorobenzidine	$\mu\text{g/L}$	0.73	2005 Ocean Plan Table B
	lb/Day	0.0091	
1,2-dichloroethane	$\mu\text{g/L}$	2,500	2005 Ocean Plan Table B
	lb/Day	32	
1,1-dichloroethylene	$\mu\text{g/L}$	81	2005 Ocean Plan Table B
	lb/Day	1.0	
dichlorobromomethane	$\mu\text{g/L}$	560	2005 Ocean Plan Table B
	lb/Day	7.0	
dichloromethane	$\mu\text{g/L}$	41,000	2005 Ocean Plan Table B
	lb/Day	510	
1,3-dichloropropene	$\mu\text{g/L}$	800	2005 Ocean Plan Table B
	lb/Day	10	
dieldrin	$\mu\text{g/L}$	0.0036	2005 Ocean Plan Table B
	lb/Day	0.000045	
2,4-dinitrotoluene	$\mu\text{g/L}$	230	2005 Ocean Plan Table B
	lb/Day	2.9	

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>	<b>Basis</b>
1,2-diphenylhydrazine	$\mu\text{g/L}$	14	2005 Ocean Plan Table B
	lb/Day	0.18	
halomethanes	$\mu\text{g/L}$	12,000	2005 Ocean Plan Table B
	lb/Day	150	
heptachlor	$\mu\text{g/L}$	0.0045	2005 Ocean Plan Table B
	lb/Day	0.000056	
heptachlor epoxide	$\mu\text{g/L}$	0.0018	2005 Ocean Plan Table B
	lb/Day	0.000023	
hexachlorobenzene	$\mu\text{g/L}$	0.019	2005 Ocean Plan Table B
	lb/Day	0.00024	
hexachlorobutadiene	$\mu\text{g/L}$	1,300	2005 Ocean Plan Table B
	lb/Day	16	
hexachloroethane	$\mu\text{g/L}$	230	2005 Ocean Plan Table B
	lb/Day	2.8	
isophorone	$\mu\text{g/L}$	66,000	2005 Ocean Plan Table B
	lb/Day	820	
N-nitrosodimethylamine	$\mu\text{g/L}$	660	2005 Ocean Plan Table B
	lb/Day	8.2	
N-nitrosodi-N-propylamine	$\mu\text{g/L}$	34	2005 Ocean Plan Table B
	lb/Day	0.43	
N-nitrosodiphenylamine	$\mu\text{g/L}$	230	2005 Ocean Plan Table B
	lb/Day	2.8	
PAHs	$\mu\text{g/L}$	0.79	2005 Ocean Plan Table B
	lb/Day	0.0099	
PCBs	$\mu\text{g/L}$	0.0017	2005 Ocean Plan Table B
	lb/Day	0.000021	
TCDD equivalents	$\mu\text{g/L}$	0.00000035	2005 Ocean Plan Table B
	lb/Day	0.00000004	
1122-tetrachloroethane	$\mu\text{g/L}$	210	2005 Ocean Plan Table B
	lb/Day	2.6	
tetrachloroethylene	$\mu\text{g/L}$	180	2005 Ocean Plan Table B
	lb/Day	2.3	
toxaphene	$\mu\text{g/L}$	0.019	2005 Ocean Plan Table B
	lb/Day	0.00024	
trichloroethylene	$\mu\text{g/L}$	2,400	2005 Ocean Plan Table B

**Effluent Limitations for the Protection Of Human Health – Carcinogens – Derived  
 from the 2005 Ocean Plan Table B**

<b>Chemical</b>	<b>Units of Measurement</b>	<b>30-day average</b>	<b>Basis</b>
	lb/Day	30	
1,1,2-trichloroethane	µg/L	850	2005 Ocean Plan Table
	lb/Day	11	B
2,4,6-trichlorophenol	µg/L	26	2005 Ocean Plan Table
	lb/Day	0.33	B
vinyl chloride	µg/L	3,200	2005 Ocean Plan Table
	lb/Day	41	B

**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. Other minor increases and decreases in effluent limits are due to staff's use of two significant figures in calculations, based on the 2005 Ocean Plan water quality objectives.

**2. Satisfaction of Antidegradation Policy**

40 CFR Section 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 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 section 131.12 and State Water Board Resolution No. 68-16.

**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 pollutants listed in Table IV-1 of this Order. Restrictions on the pollutants listed are discussed in Section IV.C.4. of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

**4. Changes in Effluent Limitations**

- a. Addition of Carcinogen Parameters – Staff added chlorodibromomethane, dichlorobromomethane, heptachlor-epoxide, and N-nitrosodi-N-propylamine

effluent limitation in Table IV-4 in accordance with the 2005 Ocean Plan Table B parameters. Effluent limitation were derived using the 2005 Ocean Plan Section III.C.4.a. Equation No. 1.

- b. Revision of Acute Toxicity effluent limitation - Staff changed the proposed acute toxicity effluent limitation in accordance with the 2005 Ocean Plan Section III.C.4.b as noted above. The revised effluent limitation is less stringent than the acute toxicity effluent limitation in the previous Order (Order No. 01-116). However, the revised acute toxicity effluent limitation is consistent with 40 CFR 122.44 (l)(2)(i)(B)(1), which states that "a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if information is available, which was not available at the time of permit issuance (other than revised regulation, guidance, or test methods) and which have justified the application of a less stringent effluent limitation at the time of permit issuance." Furthermore, the revised acute toxicity effluent limitation is now located in Table IV-2 to remain consistent with the 2005 Ocean Plan.
- c. Substitution of BOD<sub>5</sub> with CBOD<sub>5</sub> – Staff substituted biochemical oxygen demand (BOD) with carbonaceous biochemical oxygen demand (CBOD). The Discharger had requested this substitution on the basis that CBOD is more representative of the treatment process of the facility. Using a nitrification inhibitor for calculated CBOD would stabilize the BOD test and in turn demonstrate removal efficiency and eliminate the nitrite/nitrate inferences.

Furthermore, 40 CFR Section 133.102(a)(4) allow this substitution provided that the technology-based effluent limitations identified in 40 CFR Section 133.102 (a)(4)(i – iii), which states:

- 1) The 30-day average shall not exceed 25 mg/L.
- 2) The 7-day average shall not exceed 40 mg/L.
- 3) The 30-day average percent removal shall not be less than 85 percent.

Staff established the maximum daily effluent limits for CBOD<sub>5</sub> on best professional judgment in previous permits. In accordance with anti-backsliding provisions, staff recommends maintaining these limits.

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

### **A. Surface Water**

Staff transcribed receiving water limitations from the 2005 Ocean Plan Section II, Basin Plan Chapter III, and California Code of Regulations, Title 17, Sections 7957 and 7958. Staff used footnotes within the permit to indicate the source of each limit.

The California Code of Regulations (CCR), Title 17, Section 7958, establishes the minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas. The State Water Board amended the 2005 Ocean Plan on January 20, 2005 to make the bacteriological standards identical to Title 17, Section 7958. EPA approval of the amendment is pending. However, on December 16, 2004, EPA promulgated coastal recreation standards that include the same requirements. Staff's review of the 2005 Ocean Plan standards and 17 CCR resulted in the addition of the receiving water enterococcus limits. Total and fecal coliform receiving water limitations were found to be practically equivalent between the two sets of standards.

Receiving water quality is a result of many factors, some unrelated to the discharge, such as non point source wastewater. This Order considers these factors and is designed to minimize the influence of the discharge to the receiving water. Compliance with Receiving Water Limitations shall be determined from samples collected at stations representative of the area of potential influence but outside the zone of initial dilution.

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

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

The 2005 Ocean Plan Section III.G requires that Regional Boards shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste discharge requirements, and may require dischargers to contract with agencies or persons acceptable to the Regional Board to provide monitoring reports. Monitoring provisions contained in waste discharge requirements shall be in accordance with the Monitoring Procedures provided in the 2005 Ocean Plan Appendix III.

The Monitoring and Reporting Program (MRP) is required to: 1) Document short and long term effects of the discharge on receiving waters, sediments, biota, and on beneficial uses of the receiving water; 2) Assess compliance with the 2005 Ocean Plan, and; 3) Determine



compliance with National Pollutant Discharge Elimination System (NPDES) terms and conditions.

#### **A. Influent Monitoring**

Influent monitoring is intended to: 1) Determine compliance with NPDES permit conditions and water quality standards; 2) Assess treatment plant performance, and; 3) Assess the effectiveness of the pretreatment program or source control ordinances.

#### **B. Effluent Monitoring**

1. **Intent of Effluent Monitoring** – Effluent monitoring is intended to: 1) Determine compliance with NPDES permit conditions and water quality standards; 2) Identify operational problems in order to improve plant performance, and; 3) Provide information on waste characteristics and flows for use in interpreting water quality and biological data.

#### **2. Changes in Monitoring Requirements**

- a. **Addition of Fecal Coliform Monitoring** – Staff added effluent fecal coliform monitoring to the preexisting effluent total coliform monitoring contained in the previous MRP. The 2005 Ocean Plan's bacterial water quality objectives are expressed in terms of total and fecal coliforms. Effluent coliform monitoring substitutes for regular receiving water monitoring, so effluent monitoring should provide representative data for both total and fecal coliforms. Receiving water sampling is triggered by the exceedance of the maximum effluent total coliform limit, and includes the analysis of total and fecal coliforms in the receiving water. Effluent fecal coliform data will also provide a basis for comparing effluent and receiving water fecal coliform levels when the Discharger conducts receiving water sampling.
- b. **Addition of Monitoring to Evaluate Compliance with Effluent Limits** – Staff added selenium, endosulfan, endrin, HCH (the sum of alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane), and radioactivity effluent monitoring requirements in MRP Table IV-2. The existing Order No. 01-116 is based on the 1997 version of the 2005 Ocean Plan, and included water quality objectives for each of these added parameters. Though the previous Order included effluent limits for each parameter (except radioactivity), it did not include monitoring requirements. Central Coast Water Board staff and State Water Board staff recommend that Orders include monitoring provisions for parameters with effluent limits. Monitoring provisions for effluent limit parameters are based on the 2005 Ocean Plan Section III.G.

In addition, Appendix III of the 2005 Ocean Plan requires at least one complete scan of the 2005 Ocean Plan Table B parameters annually for discharges in the range of one to ten MGD, which includes this Discharger. These added parameters are part of the 2005 Ocean Plan Table B, and therefore should be analyzed at least annually.

- c. Change in the 2005 Ocean Plan Table B Sampling Frequency – Staff changed the minimum sampling frequency for constituents in MRP Tables IV-2, IV-3, and IV-4 (representing 2005 Ocean Plan Table B parameters) from once during the permit term, to once per year. Appendix III of the 2005 Ocean Plan requires at least one complete scan of the 2005 Ocean Plan Table B parameters annually for discharges in the range of one to ten MGD, which includes the Discharger. The Discharger's compliance history does not indicate a need to monitor more frequently than the 2005 Ocean Plan's minimum requirements.

Effluent sampling frequency for the 2005 Ocean Plan Table B parameters in MRP No. 01-116 was required once in August 2004. If the Discharger did not find the constituents in significant quantities exceeding effluent limitations in the August 2004 sampling, in lieu of sampling they were allowed to provide annually certification that the constituents were not added to the waste stream.

Section G.2 of the 2001 Ocean Plan, *Monitoring Program*, contained language apparently allowing such certification. The 2005 Ocean Plan removed this language and changes to MRP No. R3-2006-0084 eliminate the certification clause.

Appendix III of the 2005 Ocean Plan, *Standard Monitoring Procedures*, establishes minimum effluent sampling requirements for Table B parameters depending on wastewater flow rate. For discharges between one and ten million gallons per day, the minimum monitoring frequency is one complete scan of Table B parameters annually. The Discharger's permitted flow rate is 1.5 MGD.

The monitoring frequencies listed in the 2005 Ocean Plan Appendix III represent the State Water Board's direction for what constitutes an adequate monitoring program for compliance with Table B water quality objectives or, equivalently, with effluent limitations derived from Table B objectives.

Based on the above, MRP No. R3-2006-0084, Tables IV-2, IV-3, and IV-4 require annual effluent sampling for all the 2005 Ocean Plan Table B parameters, without the option of providing certification in lieu of monitoring. The timing of sampling is varied each year to represent different months of the year during typically dry-weather conditions.

The proposed sampling will continue to ensure an adequate data set is available before the next permit renewal, and may serve the State Water Board to assess the attainability of new or revised water quality objectives.

- d. Sampling Type – Regarding sample type (i.e., grab vs. 24-hour composite), staff added the following language to MRP Section IV, "Where specified in Table IV-2, IV-3, and IV-4, 24-hour composite samples shall be collected when appropriate for the constituent and the applicable approved laboratory analytical methods. The Discharger may otherwise employ grab samples." 24-hour composite samples provide data that are more representative because they are collected over a longer period and can better account for the variability of domestic and

municipal wastewater. Wherever feasible for a given parameter, it is therefore desirable to utilize this sample type. Staff recognizes that it is not practical to use 24-hour composite samples for some constituents due to characteristics such as volatility or degradation. The tables list the 24-hour composite sample as the preferred sample type. The above language, however, allows the Discharger to work with its certified laboratory to determine the most appropriate sample type.

- e. Addition of Constituents Introduced in the 2001 Ocean Plan – Staff added monitoring requirements for chlorodibromomethane, dichlorobromomethane, heptachlor epoxide, and N-nitrosodi-N-propylamine. These constituents were introduced in the 2001 Ocean Plan and are maintained in the 2005 Ocean Plan.
- f. Addition of Remaining Priority Pollutant Monitoring – MRP Table IV-5 lists the priority pollutants which are not included in the 2005 Ocean Plan Table B, but for which monitoring data is required pursuant to 40 CFR 131.36 (7-1-03 Edition), and EPA Application Form 3510-2A (Rev. 1-99).

U.S. EPA Application Form 3510-2A (Rev. 1-99), which is a required part of the Discharger's Report of Waste Discharge every five years, requires a minimum of three pollutant scans within four and one-half years of the date of the application. The toxic pollutants listed in the application include the 2005 Ocean Plan Table B parameters as well as other toxic pollutants not listed in the 2005 Ocean Plan. 40 CFR 131.36 (July 1, 2003 Edition) contains a similar priority toxic pollutant listing. MRP Table IV-5 lists these remaining priority toxic pollutants and requires annual sampling.

Of the toxic pollutants listed in MRP Table IV-5, all are common to U.S. EPA's application and 40 CFR 131.36, with the following exceptions: 1) Endrin Aldehyde is listed only in 40 CFR, and; 2) P-Chloro-M-Cresol and 4,6-Dinitro-O-Cresol are listed only in U.S. EPA's application.

Annual sampling of these remaining toxic pollutants will ensure that a complete pollutant scan is available to meet U.S. EPA's minimum application requirements upon the expiration of Order No. R3-2006-0084.

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

In accordance with the 2005 Ocean Plan, Appendix III, *Standard Monitoring Procedures*, compliance monitoring for acute toxicity shall be determined using an EPA approved protocol as provided in 40 CFR PART 136. The presence of acute toxicity will be determined as specified in *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (EPA-821-R-02-012, or subsequent editions). Acute toxicity monitoring shall be conducted using marine test species instead of freshwater species when measuring compliance. The Discharger shall use one of the approved marine test species identified in EPA-821-R-02-012, or subsequent editions.

In accordance with the 2005 Ocean Plan, Appendix III, *Standard Monitoring Procedures*, the Discharger shall use the critical life stage toxicity tests specified in the 2005 Ocean Plan Table III-1, *Approved Tests – Chronic Toxicity (TUc)* to measure chronic toxicity.

#### D. Receiving Water Monitoring

##### 1. Surface Water

Receiving water monitoring is conducted to verify compliance with the 2005 Ocean Plan. Monitoring in the vicinity of the Discharger's Ocean Outfall must document water and sediment quality as well as biological communities at the "Zone of Initial Dilution" (ZID) boundary, at reference stations, and at areas beyond the ZID where discharge impacts might reasonably be expected.

- a. Staff added shore sampling language Section VI.A.1. of the MRP in order to demonstrate receiving water compliance with the 2005 Ocean Plan water quality objectives and in accordance with Section III.G. of the 2005 Ocean Plan. This section includes trigger mechanism that explains that shore sampling shall occur if three consecutive samples of total coliform bacteria exceed 2,300 per 100 ml. Shore sampling shall encompass total, fecal coliform, and enterococcus analysis at the monitoring locations identified in Section II of the monitoring and report program (MRP). Additionally, the shore sampling must occur during dry weather conditions. Staff included the following paragraph for MRP Section VI.A.1 regarding shore station sampling triggered by effluent bacterial violations in order to obtain representative samples of outfall discharges.

"The Discharger shall to the best of its ability conduct the above receiving water sampling during dry weather or at least three days after a significant rain event. The Executive Officer may grant a discretionary exception to this sampling requirement during extreme rain events where receiving water sampling is unlikely to provide data representative of the Discharger's discharge. The Discharger shall conduct effluent total coliform, fecal coliform, and enterococcus sampling daily during such events or the subsequent period of its influence on receiving waters. Once shore station sampling can resume, effluent sampling may return to its regular schedule according the Order."

This language is based on staff's best professional judgment and recent experience during the extreme rainfall events that occurred along the Santa Barbara County coast during January 2005.

- b. Ocean sampling stations (bottom sediment) sampling language has been retained from the MRP of Order No. 01-116, except for some minor language revisions in order to maintain consistency with the statewide template and the 2005 Ocean Plan requirements.

- c. Benthic biota monitoring language remains consistent with the MRP of Order No. 01-116, except for some minor language revisions in order to maintain consistency with the statewide permitting standards and the 2005 Ocean Plan requirements.

## E. Other Monitoring Requirements

### 1. Biosolids/Sludge Monitoring

See Section VII.B.1.a below, *Biosolids Requirements*. Staff changed MRP biosolids language according to the recommendations of U.S. EPA's Region IX Biosolids Coordinator.

### 2. 2005 Ocean Plan Monitoring Provisions

Staff added the following monitoring sections according to the 2005 Ocean Plan provisions (introduced in the 2001 Ocean Plan):

- a. MRP Section VIII – Minimum Levels
- b. MRP Section IX – Sample Reporting Protocols
- c. MRP Section X – Compliance Determination
- d. MRP Section XI – Pollutant Minimization Program

These sections are taken directly from the 2005 Ocean Plan for the Discharger's reference. Staff modified the language where applicable for the Discharger.

### 3. Rainfall

Staff added reporting of daily rainfall totals alongside facility flow measurement to facilitate the evaluation of the influence of inflow and infiltration on wastewater flows received at the facility.

## VII. RATIONALE FOR PROVISIONS

### A. Standard Provisions

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

Section 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. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(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 Water Code section 13387(e).

## B. Special Provisions

### 1. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Biosolids Requirements:** 40 CFR 122.44(b)(2) states that each NPDES permit shall include standards for sewage sludge use or disposal.

Section 13377 of the Porter-Cologne Water Quality Control Act requires waste discharge requirements to include all provisions necessary to protect beneficial uses and prevent nuisance, whether or not specified by Division 7 of that Act.

Management of all biosolids and sludge must comply with all requirements of 40 CFR Parts 257, 258, 501, and 503, including all monitoring, record-keeping, and reporting requirements. Waste discharge requirements (WDRs) issued by Regional Water Boards in California also serve as federal NPDES permits, and so are issued with full authorization from the U.S. Environmental Protection Agency. While the Central Coast Water Board has not been delegated the authority to enforce the biosolids program, as federal NPDES permits, WDRs include state and federal regulatory language applicable to a waste discharge. U.S. EPA supplied and recommends the standard language in this permit, and offered the following commentary during a NPDES permit renewal adopted by the Central Coast Water Board on October 22, 2004 (for the City of Santa Barbara).

According to the U.S. EPA Region 9 Biosolids Coordinator, it was the original intent of the Clean Water Act that biosolids conditions be placed in all NPDES permits. The intent of permit language is also to go above and beyond the minimum reporting and notification requirements contained in the 40 CFR 503 rule itself, as additional mechanisms beyond the 503 requirements are needed to require notice of violations, reporting of all use and disposal practices, interstate notification for all use and disposal practices, handling of biosolids at the plant site and prior to final use or disposal, etc.

Because dischargers may change practices within the five-year span of a permit, the standard language recommended for NPDES permits is intended to place conditions for specific use or disposal practices, which become applicable if the Discharger selects that specific use or disposal option.

The 503 rule is very clear that the preparer of the biosolids is responsible for the use or disposal. After several court cases where POTWs contracted with composters and then continued to send their biosolids to the compost sites even after it became blatantly evident that the "composters" were not composting and/or distributing the finished compost, U.S. EPA decided it was desirable to put a clause in permits clarifying that the POTW still retains responsibility for the biosolids through final use or disposal. This is a necessary incentive for POTWs to terminate a contract with composters who are not performing, and to clean up if a composter leaves the country and leaves behind the biosolids.

Where a Discharger transfers biosolids to a composter (which must test the pollutant levels of the final compost), testing of the biosolids by the Discharger prior to being blended with other biosolids is desirable from a pretreatment standpoint. Many Dischargers are required to test priority pollutants as part of the pretreatment program; however, the pretreatment requirements do not cover all the metals regulated under 40 CFR 503, or require use of the solid waste methods and conversion to 100% dry weight basis. Therefore, in some cases the 503 tests are more indicative of any source control problems. The composter typically also requires this data from a Discharger, so that the composter can identify any biosolids feedstocks with high metal concentrations.

Central Coast Water Board staff agrees with U.S. EPA that the permit should properly disclose the Discharger's responsibilities regarding biosolids disposal, and so recommends the biosolids language provided by U.S. EPA for the Order and MRP.

## **2. Reopener Provisions**

Section VI.C.1 of this Order includes language regarding reopener provisions. This section states "This permit may be reopened and modified in accordance with federal regulations at 40 CFR Parts 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any U.S. EPA approved, new federal or state objective."

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

Section XI of the MRP of this Order addresses the development of a Pollution Minimization Program in accordance with Section III.C.9 of the 2005 Ocean Plan. However, Section IX includes language requiring the discharger to develop Pollution Minimization Program only if the Central Coast Water Board notifies the Discharger in writing. Language included in this section is consistent with the 2005 Ocean Plan.

## **VIII. PUBLIC PARTICIPATION**

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

### **A. Notification of Interested Parties**

The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and

recommendations. Notification was provided through posting and publishing in the Santa Barbara News Press on September 13, 2006, and through direct mailing to the following known interested parties. Written comments were due no later than October 6, 2006.

- Ms. Diane Gabriel, Mr. Jim McManus, and Mr. Brett Walker, Montecito Sanitary District
- Mr. Rick Merrifield, Santa Barbara County Environmental Health Services Department
- Ms. Kira Schmidt, Channel Keepers
- Mr., Jim Maughan, State Water Resources Control Board
- Mr. Terry Oda, United States Environmental Protection Agency
- Ms. Hillary Hauser, Heal The Ocean
- Mr. Brian Trautwein, Environmental Defense Center

#### **B. Written Comments**

##### **Comment 1: Sewage Spill Notification**

**Mr. Paul Jenzen** of Santa Barbara County Environmental Health Services Department provided a verbal comment regarding sewage spill notification to the Santa Barbara County Environmental Health Services Department.

**Staff Response 1:** Staff has added spill notification language in Section XII.E. of the monitoring and reporting program. Specifically, Section XII.E.10. states "the discharger shall report SSOs to the Santa Barbara County Environmental Health Services department in accordance with California Health and Safety Code Section 5410 et seq."

Additionally, the Discharger has obtained coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs). The General WDRs requires the discharger to notify the Central Coast Water Board as well as other appropriate agencies (i.e., County Environmental Health and Safety Department and Office of Emergency Services) if untreated or partially treated waste discharge to surface waters or has the potential to enter surface waters (Section G.4. of the General WDRs). Furthermore, Section A.4. of the General WDRs Monitoring and Reporting Program states that "reporting requirements [listed in this Section A.4] do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services) or State law."



**Ms Diane Gabriel, Montecito Sanitary District General Manager**, submitted written comments on October 5, 2006. Prior to the submittal of the written comments, two conference calls between Central Coast Water Board staff and the Discharger were conducted on October 2, 2006, and October 3, 2006. The purpose of the conference calls was to provide the Discharger with further clarification and guidance on the proposed Order. Staff included significant concerns and comments that arose from the conference calls in Comments 2 through 7. Typographical errors and minor revisions that do not alter the intent of the Order are not discussed here.

### **Comment 2: Receiving Water Introductory Language**

The Discharger recognizes that there are factors other than the District's discharges that could cause an exceedance of applicable water quality standards. The Discharger is concerned that they may be held responsible for the actions of others and that any exceedances of the receiving water limitations will automatically constitute a violation of the Discharger's Order.

**Staff Response 2:** Receiving water limitations, as drafted, already limit violations to exceedances the Discharger causes. The Central Coast Water Board already has authority to require additional investigation prior to taking enforcement actions. Receiving water introductory language now states, "Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause a violation of the following receiving water limitations in the Pacific Ocean. The Central Coast Water Board may require the Discharger to investigate the cause of exceedances in the receiving water before determining whether the Discharger caused any water conditions that exceed the following receiving water limitations."

### **Comment 3: Shore Sampling Locations**

Section II of the Monitoring and Reporting Program (MRP) identifies shore sampling locations that shall be sampled pursuant to Section VI of the MRP. The monitoring location description explains that the sampling stations will be located 100 feet upcoast and downcoast. During the October 2, 2006 conference call, staff determined that sampling locations 100 feet upcoast and downcoast from the outfall would not adequately represent the discharges from the outfall and proposed to change the description to 1,000 feet upcoast and downcoast from the outfall. The Discharger was concerned with the shore sampling definition and explained that the distance upcoast and downcoast may present safety issues during sampling.

**Staff Response 3:** Staff concurs with the Discharger's concern. Staff has added a footnote to the shore sampling description that now states "If the sample location is not accessible at 1,000 feet, then samples shall be collected at an accessible location as close as possible to the designated location."

#### **Comment 4: Receiving Water Sampling**

In order to adequately comply with the receiving water limitations (Section V.A.1 of the Order), the Discharger had commented that enterococcus should be added to the receiving water monitoring for shore sampling.

**Staff Response 4:** Staff concurs with the comment and has made the appropriate addition to Section VI.A.1 of the MRP. This section now includes the sampling and analysis of total coliform, fecal coliform, and enterococcus for shore sampling.

#### **Comment 5: Ocean Outfall Inspection**

Section VII.A. Ocean Outfall Inspection, states "[a]t least once per year (in the same month annually) the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions." The Discharger was concerned with this language because that the contractor that conducts the outfall visual inspections may or may not be able to inspect the outfall the same month every year.

**Staff Response 6:** Staff understands the Discharger concern and has added language to Section VII.A. This section now states "[a]t least once per year (in the same month annually or between June and September as appropriate) the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions."

#### **Comment 7: Reporting Requirements**

Montecito Sanitary District noted that Section XII.B (Self-Monitoring Reports) contained quarterly and semiannual reporting requirements that do not apply. Furthermore, Tables XII-1 and XII-2 contained similar reporting requirements, definitions, and schedules that do not apply. The Discharger requested the removal of these reporting requirements, definitions, and reporting schedule to avoid any confusion.

**Staff Response 7:** Staff concurs with the request and has removed hourly, quarterly, semiannual reporting requirements, definitions, and reporting schedules in Section XII.B., Table XII-1, and Table XII-2.

**Montecito Sanitary District** submitted the following written comments on October 5, 2006.

#### **Comment 8: Effluent Monitoring Schedule**

"In Section IV, Effluent Monitoring Requirements, a monitoring schedule of July 2007, June 2008, May 2009, April 2010, and March 2011 is being proposed. The tentative order states that "the Annual Effluent Monitoring shall be collected during dry weather

conditions." The District's existing permit requires the Annual Effluent Monitoring to take place in August every year. We have not experienced any wet weather issues with performing the Annual Effluent Sampling in August. We also see no wet weather issues with performing the Annual Effluent Sampling in May, June or July. Upon review of the District's historic rainfall records we find March and April as months of significant rainfall in our area. This could pose a problem in obtaining accurate dry weather sampling conditions. The District would appreciate your consideration of changing the proposed Annual Effluent Monitoring schedule to the following historically dry weather months: September 2007, August 2008, July 2009, June 2010 and May 2011."

**Staff Response 8:** Staff concurs with the request and has modified Section IV to indicate monitoring to occur September 2007, August 2008, July 2009, June 2010, and May 2011.

#### **Comment 9: Biosolids Monitoring**

"In Table IX-1, Minimum Biosolids Monitoring, sampling is required for Priority Pollutants in August 2011. If it is the intention of the Regional Board to have the results of these tests for review and consideration prior to the issuance of the District's next tentative order (2011-2016), it would seem appropriate for the month of the required sampling to be changed to earlier in the year, possibly to May 2011 to coincide with the District's proposed month for Annual Effluent Monitoring."

**Staff Response 9:** Staff concurs with the request and has made the appropriate changes to Table IX-1, Section VII.B. Biosolids monitoring for priority pollutants will coincide with the effluent monitoring in May 2011.

#### **Comment 10: Monitoring Consistency**

"Lastly, we would appreciate your consideration to revise not only the Biosolids Monitoring, but the Toxicity, Benthic Biota and Ocean Bottom Sediment Sampling, to coincide with the Annual Effluent Monitoring month for that particular year. This will be more productive and efficient when working with our contract laboratories. Additionally, it would prove to be beneficial in the analysis of the various sampling results, enabling "cause and effect" determinations to be made."

**Staff Response 10:** Staff has reviewed the Discharger's comments to coincide for biosolids, toxicity, benthic and ocean bottom sediment monitoring requirements with the annual effluent monitoring for priority pollutants. Section VII.B.1., Table VII-1 (Minimum Biosolids Monitoring) has been modified to remove the word "August." The table now requires the Discharger to monitor moisture, pH, boron, cadmium, copper, chromium (total), lead, mercury, nickel, silver, zinc, Total Kjeldahl Nitrogen, ammonia (as N), nitrate (as N), total phosphorus, Paint Filter Test, Oil/Grease, and Priority Pollutants. This modification will allow the Discharger to monitor biosolids concurrent with the effluent monitoring in September 2007, August 2008, July 2009, June 2010, and May 2011.

Section IV, Table IV-1 (acute and chronic toxicity), Section VI.B, Table VI- (ocean bottom sediment), and Section VII.B.1 1 (benthic biota) requires the Discharger to collect samples annually. These sections are not specific for which month samples are to be collected; therefore, the Discharger has discretion to monitor concurrent with the effluent monitoring. These sections will not be changed.

**Ms. Hillary Hauser, Executive Director, Heal the Ocean** submitted written comments on October 17, 2006. Due to staff oversight, Heal the Ocean was not sent the notification letter for public comment of this Order. Although the written comments were submitted after the public comment period, they were accepted and incorporated into the Order. Heal the Ocean's comments are included below.

#### **Comment 11: Flow Statistics**

"We have reviewed almost all WDRs for wastewater treatment plants that discharge into the Pacific Ocean, and the majority of them include within their facility descriptions data on Annual Average Dry Weather Flow, the Peak Seasonal Dry Weather Flow, and the Maximum Wet Weather Flow. The MSD revised WDR needs to include this information."

**Staff Response 11:** Staff concurs with the request and has incorporated flow statistics table and description in Section II.A. of the Fact Sheet.

#### **Comment 12: Ocean outfall information**

"The facility description (WDR Pg. 3) is missing a detailed account of the ocean outfall distance from shore and depth of water at the discharge point. Other WDRs have this information in the facility description and in the Fact Sheet, whereas the MSD WDR has this information only in Appendix F - Fact Sheet. We ask that this information be inserted into the facility description (WDR Pg. 3) as well as the Appendix, to eliminate the problem of searching through the entire document to find it."

**Staff Response 12:** Staff included a description of the ocean outfall's distance from the shore and depth of water at the discharger point in Section II.B. of the Order. This will provided consistency with Section II.B. of the Fact Sheet

### **C. Public Hearing**

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

**Date:** December 1, 2006

**Time:** The meeting is scheduled to begin at 8:30 a.m. This public hearing is not currently scheduled for a particular time during the meeting, and the Board may take up the issue at any time. Please see the meeting agenda upon publication (approximately two weeks before the hearing date).

**Location:** Central Coast Regional Water Quality Control Board Room  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

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

Please be aware that dates and venues may change. Our web address is [www.waterboards.ca.gov/centralcoast](http://www.waterboards.ca.gov/centralcoast), where you can access the current agenda for changes in dates and locations.

#### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Central Coast Water Board regarding the final WDRs in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be submitted within 30 days of the Central Coast Water Board's action to the following address:

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

Persons may find additional instructions for filing petitions at: <http://www.waterboards.ca.gov/html/petitions.html>, or may request them from Central Coast Water Board staff shown below in Fact Sheet Section VIII.G.

#### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Central Coast Water Board by calling or faxing Sue Gerdson at (805) 549-3465 (phone) or (805) 788-3521 (fax).

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

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

### **G. Additional Information**

Requests for additional information or questions regarding this order should be directed to David LaCaro at (805) 549-3892 or [dlacono@waterboards.ca.gov](mailto:dlacono@waterboards.ca.gov), or Harvery Packard at (805) 542-4639 or [hpackard@waterboards.ca.gov](mailto:hpackard@waterboards.ca.gov).