ORDER NO. R3-2014-0013
NPDES NO. CA0048551

WASTE DISCHARGE REQUIREMENTS FOR THE MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY REGIONAL TREATMENT PLANT

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

Table 1. Discharger Information

Discharger	**Monterey Regional Water Pollution Control Agency**
Name of Facility	**Regional Wastewater Treatment Plant**
Facility Address	**14811 Del Monte Boulevard**
	Marina, CA 93933
	Monterey County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary Treated Wastewater and Brine Wastes	36 º 43 ’ 40 ” N	121 º 50 ’ 15 ” W	Pacific Ocean (Monterey Bay National Marine Sanctuary)[1]

[1] The termination of the outfall is outside the National Marine Sanctuary Zone of Prohibition.

Table 3. Administrative Information

This Order was adopted by the Central Coast Region Water Quality Control Board on:	**May 22, 2014**
This Order shall become effective on:	**August 1, 2014**
This Order shall expire on:	**July 31, 2019**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**February 1, 2019**
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Central Coast Region have classified this discharge as follows:	**Major discharge**

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

Digitally signed by Kenneth A Harris Jr.
DN: cn=Kenneth A Harris Jr., o=Central Coast Regional Water Quality Control Board, ou=Executive Officer, email=Ken.Harris@waterboards.ca.gov, c=US
Date: 2014.05.29 16:19:26 -07'00'

Kenneth A. Harris Jr., Executive Officer

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I. FINDINGS

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

A. Legal Authorities. This Order serves as Waste Discharge Requirements (WDR's) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.

B. Background and Rationale for Requirements. The Central Coast Water Board developed this Order's requirements based on information submitted in the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the Order's waste discharge requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.

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

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

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

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order R3-2008-0008 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Coast Water Board from taking enforcement action for past violations of the previous Order.

II. DISCHARGE PROHIBITIONS

A. Discharge to the Pacific Ocean at a location other than those described by this Order at 36° 43' 40" N. Latitude, 121° 50' 15" W. Longitude are prohibited.

B. The rate of discharge to Monterey Bay shall not exceed 81.2 million gallons per day (MGD).

C. The influent flow to the secondary treatment system shall not exceed 29.6 MG average dry weather flow and 75.6 MGD peak wet weather flow.

D. The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.A.7 (Bypass), is prohibited.

E. Discharge of any waste in any manner other than as described by this Order, excluding storm water regulated by General Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities) is prohibited.

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

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

III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

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

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
$CBOD_5$	mg/L	25	40	85	--
	lbs/day [1]	6,200	10,000	21,000	--
TSS	mg/L	30	45	90	--
	lbs/day [1]	7,400	11,000	22,000	--
Oil & Grease	mg/L	25	40	75	--
	lbs/day [1]	6,200	10,000	19,000	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
Settleable Solids	mL/L/hr	1.0	1.5	--	3.0
Turbidity	NTUs	75	100	--	230
pH [2]	pH units	6.0 – 9.0 at all times			

[1] The mass-based (lbs/day) effluent limitations in this table are based on the average dry weather flow design capacity of 29.6 MGD for the treatment facility and are therefore only good up to this flow. For flows above 29.6 MGD, mass-based effluent limitations shall be calculated individually using the concentration-based effluent limitations and the observed flow at the time of sampling per the following equation:

lbs/day = 0.00834 x Ce x Q
where:
Ce = the effluent concentration limit in ug/L
Q = observed flow rate in MGD

[2] Excursions from the effluent limit range are permitted subject to the following limitations (40 CFR 401.17):

a. The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and

b. No individual excursion from the range of pH values shall exceed 60 minutes.

Note: 40 CFR 401.17(2)(c) notes that, for the purposes of 40 CFR 401.17, "excursion" is defined as "an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the applicable effluent limitations guidelines." The State Board may adjust the requirements set forth in paragraph 40 CFR 401.17 (a) with respect to the length of individual excursions from the range of pH values, if a different period of time is appropriate based upon the treatment system, plant configuration, or other technical factors.

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

Table 5. Effluent Limitations for the Protection of Marine Aquatic Life

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Cadmium	µg/L	150	580	1,500
	lb/day[1]	36	140	360
Chromium (Hexavalent) [2]	µg/L	290	1,200	2,900
	lb/day[1]	72	290	720
Lead	µg/L	290	1,200	2,900
	lb/day[1]	72	290	720
Selenium	µg/L	2,200	8,800	22,000
	lb/day[1]	540	2,200	5,400
Silver	µg/L	79	390	1,000
	lb/day[1]	20	95	250
Cyanide [3]	µg/L	150	580	1,500
	lb/day[1]	36	140	360
Total Residual Chlorine [4] [5]	µg/L	290	1,200	8,800
	lb/day[1]	72	290	2,200
Acute Toxicity [6]	TUa	---	4.7	---
Chronic Toxicity [6]	TUc	---	150	---
Phenolic Compounds (non-chlorinated)	µg/L	4,400	18,000	44,000
	lb/day[1]	1,100	4,300	11,000
Endosulfan	µg/L	1.3	2.6	3.9

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
	lb/day[1]	0.32	0.65	0.97
Endrin	µg/L	0.29	0.58	0.88
	lb/day[1]	0.072	0.14	0.22
HCH	µg/L	0.58	1.2	1.8
	lb/day[1]	0.14	0.29	0.43
Radioactivity	--	Not to exceed limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443		

[1] The mass-based (lbs/day) effluent limitations in this table are based on the average dry weather flow design capacity of 29.6 MGD for the treatment facility and are therefore only good up to this flow. For flows above 29.6 MGD, mass-based effluent limitations shall be calculated individually using the concentration-based effluent limitations and the observed flow at the time of sampling per the following equation:

lbs/day = 0.00834 x Ce x Q
where:
Ce = the effluent concentration limit in ug/L
Q = observed flow rate in MGD

[2] The Discharger may at their option meet this objective as a total chromium objective.

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

[4] Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours shall be determined using the following equation:
$\log_y=-0.43(\log_x)+1.8$ where: y = the water quality objective (in µg/L) to apply when chlorine is being discharged; and
x = the duration of uninterrupted chlorine discharge in minutes.
The applicable effluent limitation must then be determined using Equation No. 1 from the Ocean Plan.

[5] The Discharger is not required to disinfect secondary effluent due to treatment system performance and outfall configuration and placement. The total chlorine residual effluent limitations are retained in this Order in the event the Discharger implements chlorine-based disinfection in the future and to verify compliance with semiannual Table 1 Pollutant monitoring requirements which include total chlorine residual.

[6] See Attachment A for applicable definitions.

Table 6. Effluent Limitations for the Protection of Human Health (Non-Carcinogens)

Pollutant	Unit	30-day Average
Acrolein	µg/L	32,000
	lb/day[1]	7,900
Antimony	µg/L	180,000
	lb/day[1]	43,000
Bis(2-Chloroethoxy)Methane	µg/L	640
	lb/day[1]	160
Bis(2-Chloroisopropyl)Ether	µg/L	180,000
	lb/day[1]	43,000
Chlorobenzene	µg/L	83,000
	lb/day[1]	21,000
Di-n-Butyl Phthalate	µg/L	510,000
	lb/day[1]	130,000
Dichlorobenzenes	µg/L	740,000
	lb/day[1]	180,000

Pollutant	Unit	30-day Average
Diethyl Phthalate	µg/L	4,800,000
	lb/day[1]	1,200,000
Dimethyl Phthalate	µg/L	120,000,000
	lb/day[1]	30,000,000
2-Methyl-4,6-Dinitrophenol	µg/L	32,000
	lb/day[1]	7,900
2,4-Dinitrophenol	µg/L	580
	lb/day[1]	140
Ethylbenzene	µg/L	600,000
	lb/day[1]	150,000
Fluoranthene	µg/L	2,200
	lb/day[1]	540
Hexachlorocyclopentadiene	µg/L	8,500
	lb/day[1]	2,100
Nitrobenzene	µg/L	720
	lb/day[1]	180
Thallium	µg/L	290
	lb/day[1]	72
Toluene	µg/L	12,000,000
	lb/day[1]	3,100,000
Tributylin	µg/L	0.20
	lb/day[1]	0.050
1,1,1-Trichloroethane	µg/L	79,000,000
	lb/day[1]	19,000,000

[1] The mass-based (lbs/day) effluent limitations in this table are based on the average dry weather flow design capacity of 29.6 MGD for the treatment facility and are therefore only good up to this flow. For flows above 29.6 MGD, mass-based effluent limitations shall be calculated individually using the concentration-based effluent limitations and the observed flow at the time of sampling per the following equation:

lbs/day = 0.00834 x Ce x Q
where:
Ce = the effluent concentration limit in ug/L
Q = observed flow rate in MGD

Table 7. Effluent Limitations for the Protection of Human Health (Carcinogens)

Pollutant	Unit	30-day Average
Acrylonitrile	µg/L	15
	lb/day[1]	3.6
Aldrin	µg/L	0.0032
	lb/day[1]	0.00079
Benzene	µg/L	860
	lb/day[1]	210
Benzidine	µg/L	0.010
	lb/day[1]	0.0025
Beryllium	µg/L	4.8
	lb/day[1]	1.2
Bis(2-Chloroethyl)Ether	µg/L	6.6
	lb/day[1]	1.6

Pollutant	Unit	30-day Average
Bis(2-Ethylhexyl)Phthalate	µg/L	510
	lb/day[1]	130
Carbon Tetrachloride	µg/L	130
	lb/day[1]	32
Chlordane	µg/L	0.0034
	lb/day[1]	0.00083
Chlorodibromomethane	µg/L	1,300
	lb/day[1]	310
Chloroform	µg/L	19,000
	lb/day[1]	4,700
1,4 Dichlorobenzene	µg/L	2,600
	lb/day[1]	650
3,3'-Dichlorobenzidine	µg/L	1.2
	lb/day[1]	0.29
1,2-Dichloroethane	µg/L	4,100
	lb/day[1]	1,000
1,1-Dichloroethylene	µg/L	130
	lb/day[1]	32
Dichlorobromomethane	µg/L	910
	lb/day[1]	220
Dichloromethane (Methylene Chloride)	µg/L	66,000
	lb/day[1]	16,000
1,3-Dichloropropene	µg/L	1,300
	lb/day[1]	320
Dieldrin	µg/L	0.0058
	lb/day[1]	0.0014
2,4-Dinitrotoluene	µg/L	380
	lb/day[1]	94
1,2-Diphenylhydrazine	µg/L	23
	lb/day[1]	5.8
Halomethanes	µg/L	19,000
	lb/day[1]	4,700
Heptachlor	µg/L	0.0073
	lb/day[1]	0.0018
Heptachlor Epoxide	µg/L	0.0029
	lb/day[1]	0.00072
Hexachlorobenzene	µg/L	0.031
	lb/day[1]	0.0076
Hexachlorobutadiene	µg/L	2,000
	lb/day[1]	500
Hexachloroethane	µg/L	370
	lb/day[1]	90
Isophorone	µg/L	110,000
	lb/day[1]	26,000
N-Nitrosodimethylamine	µg/L	1,100
	lb/day[1]	260

Pollutant	Unit	30-day Average
N-Nitrosodi-n-Propylamine	µg/L	55
	lb/day[1]	14
N-Nitrosodiphenylamine	µg/L	370
	lb/day[1]	90
PAHs (total)	µg/L	1.3
	lb/day[1]	0.32
PCBs	µg/L	0.0028
	lb/day[1]	0.00068
TCDD Equivalents	µg/L	5.7E-07
	lb/day[1]	1.4E-07
1,1,2,2-Tetrachloroethane	µg/L	340
	lb/day[1]	83
Tetrachloroethylene	µg/L	290
	lb/day[1]	72
Toxaphene	µg/L	0.031
	lb/day[1]	0.0076
Trichloroethylene	µg/L	3,900
	lb/day[1]	970
1,1,2-Trichloroethane	µg/L	1,400
	lb/day[1]	340
2,4,6-Trichlorophenol	µg/L	42
	lb/day[1]	10
Vinyl Chloride	µg/L	5,300
	lb/day[1]	1,300

[1] The mass-based (lbs/day) effluent limitations in this table are based on the average dry weather flow design capacity of 29.6 MGD for the treatment facility and are therefore only good up to this flow. For flows above 29.6 MGD, mass-based effluent limitations shall be calculated individually using the concentration-based effluent limitations and the observed flow at the time of sampling per the following equation:

lbs/day = 0.00834 x Ce x Q
where:
Ce = the effluent concentration limit in µg/L
Q = observed flow rate in MGD

c. Percent Removal: The average monthly percent removal of $CBOD_5$ and TSS shall not be less than 85 percent.

d. Initial Dilution: The minimum initial dilution of treated effluent at the point of discharge to Monterey Bay shall not be less than 145 to 1 (seawater to effluent) at any time.

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

The Discharger shall comply with applicable state and local requirements regarding the production and use of recycled wastewater, including requirements of California

Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria).

IV. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause a violation of the following receiving water limitations which are based on water quality objectives (Water-Contact Standards) contained in the Ocean Plan and are a required part of this Order. Compliance with these limitations shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed except where other stations are defined.

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is farther from the shoreline, and in areas outside this zone designated for water contact recreation use by the Central Coast Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column.

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

   a. Total coliform density shall not exceed 1,000 per 100 mL;
   b. Fecal coliform density shall not exceed 200 per 100 mL; and
   c. Enterococcus density shall not exceed 35 per 100 mL.

   Single Sample maximum;

   a. Total coliform density shall not exceed 10,000 per 100 mL;
   b. Fecal coliform density shall not exceed 400 per 100 mL; and
   c. Enterococcus density shall not exceed 104 per 100 mL.
   d. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1

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

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

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

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

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

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

7. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen-demanding waste.

8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

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

10. The concentration of substances set forth in Chapter II, Table 1 of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.

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

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

13. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Table 1 of the Ocean Plan.

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

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

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

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

B. Groundwater Limitations

Activities at the facility shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the Basin Plan.

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

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

V. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with the following provisions:

   Before changing the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of an inland watercourse, in any way, the Discharger shall file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code section 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

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

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

C. Special Provisions

1. Reopener Provisions

This permit may be reopened and modified in accordance with NPDES regulations at 40 C.F.R. §§ 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA-approved, new State water quality objective.

This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a California Ocean Plan (Ocean Plan) Table 1 water quality objective.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

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

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

The Discharger shall maintain a TRE Workplan, which describes steps that the Discharger intends to follow if a toxicity effluent limitation in this Order is exceeded. The workplan shall be prepared in accordance with current technical guidance and reference material, including EPA/600/2-88-070 (for industrial discharges) or EPA/600/2-88/062 (for municipal discharges), and shall describe, at least:

i. Actions proposed to investigate/identify the causes/sources of toxicity,

ii. Actions proposed to mitigate the discharge's adverse effects, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken), and

iii. A schedule to implement these actions.

When monitoring detects effluent toxicity greater than a limitation in this Order, the Discharger shall resample as soon as practicable, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer (EO) as soon as possible after receiving monitoring results. If subsequent monitoring indicates that the discharge consistently exceeds a toxicity effluent limit, the Discharger, upon notification of the EO, shall conduct a TRE considering guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (EPA document nos. EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

Table 8. Toxicity Reduction Evaluation—Schedule

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

b. Water Contact Monitoring (Bacterial Characteristics)

In accordance with Ocean Plan section III.D.1.b, if a single sample exceeds any of the bacteriological single sample maximum (SSM) standards contained within section V.A.1 of this Order, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. The EO shall be notified within 24 hours of receiving analytical results and repeat sampling shall be conducted within 24 hours of receiving analytical results and continued based per a sampling frequency as directed by the EO until the sample result is less than the SSM standard or until a sanitary survey is conducted to determine the source of the high bacterial densities.

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

(This requirement is also footnoted in Table E-8 of Section VIII.A of Attachment E Monitoring and Reporting Program.)

c. Brine Waste Disposal Study

Prior to increasing the volume of brine waste discharged through the ocean outfall beyond 375,000 gallons average daily flow, the Discharger shall submit a brine waste disposal study to the Executive Officer for approval. The study shall include, at a minimum, the following elements: (1) a projection of the brine volume and characteristics, (2) an assessment of the impact of the increased brine volume on permit compliance, (3) an assessment of the impact of the increased brine volume on the minimum probable initial dilution at the point of discharge, (4) a detailed description of the brine waste disposal facilities which are proposed to accommodate the increased brine volume and facilitate blended secondary effluent and brine wastes flow metering and sampling, and (5) a schedule for the design and construction of the new brine disposal facilities. The Order includes a requirement to send a copy of the study to the MBNMS.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The 2012 California Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order, no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a program becomes necessary. The 2012 Ocean Plan PMP language is included herein to provide guidance in the event that a PMP must be developed and implemented by the Discharger.

PMP Goal: The PMP goal is to reduce all potential pollutant sources through pollutant minimization (control) strategies, including pollution prevention measures, to maintain pollutant effluent concentrations at or below the effluent limitation.

Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence of impairment of beneficial uses. The completion and implementation of a Pollution Prevention Plan, required in accordance with California Water Code §13263.3 (d), will fulfill the PMP requirements.

Determining the Need for a PMP:

1. The Discharger must develop and conduct a PMP if all of the following conditions are true:

(a) The calculated effluent limitation is less than the reported Minimum Level.

(b) The concentration of the pollutant is reported as DNQ.

(c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

2. Alternatively, the Discharger must develop and conduct a PMP if all of the following conditions are true:

(a) The calculated effluent limitation is less than the Method Detection Limit (MDL).

(b) The concentration of the pollutant is reported as ND.

(c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

Special Provision for Evidence of Pollutant Presence

Central Coast Water Boards may include special provisions in the discharge requirements to require the gathering of evidence to determine whether the pollutant is present in the effluent at levels above the calculated effluent limitation. Examples of evidence may include:

1. Health advisories for fish consumption;
2. Presence of whole effluent toxicity;
3. Results of benthic or aquatic organism tissue sampling;
4. Sample results from analytical methods more sensitive than methods included in the permit (in accordance with the 2012 Ocean Plan, Chapter III, Section C.5.b, *Deviations from Minimum Levels in Appendix II*; or
5. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

Elements of a PMP

The Central Coast Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The program shall include actions and submittals acceptable to the Central Coast Water Board including, but not limited to, the following:

1. An annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
2. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
3. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;
4. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,
5. An annual status report that shall be sent to the Central Coast Water Board including:
   (a) All PMP monitoring results for the previous year;
   (b) A list of potential sources of the reportable pollutant;
   (c) A summary of all action taken in accordance with the control strategy; and,
   (d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications – Not Applicable

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Biosolids Management.

i. Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only

landfill in accordance with 40 C.F.R. parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the U.S. EPA and to the Regional Water Board at least 180 days prior to beginning the alternative means of disposal.

ii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 C.F.R. part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.

iii. All requirements of 40 C.F.R. part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.

iv. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.

v. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.

vi. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.

vii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State. The Discharger shall submit an annual report to the U.S. EPA and the Regional Board.

viii. Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 C.F.R. part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 19th of each year and report for the period of the previous calendar year.

b. Pretreatment

The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 C.F.R. part 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by the U.S. EPA, or other appropriate parties, as provided in the CWA, as amended (33 USA 1351 et seq.).

The Discharger shall implement and enforce its Approved Publicly Owned Treatment Works (POTW) Pretreatment Program. Implementation of the Discharger's Approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. U.S. EPA may initiate enforcement action against an industrial user for non-compliance with applicable standards and requirements as provided in the CWA.

The Discharger shall enforce the requirements promulgated under Sections 307(b), (c), and (d) and 402(b) of the CWA. The Discharger shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

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

i. Implement necessary legal authorities as provided in 40 C.F.R. § 403.8(f)(1);

ii. Enforce the pretreatment requirements under 40 C.F.R. §§ 403.5 and 403.6;

iii. Implement the programmatic functions as provided in 40 C.F.R. § 403.8(f)(2); and,

iv. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 C.F.R. § 403.8(f)(3).

The Discharger shall submit annually a report to the U.S. EPA – Region 9, the Central Coast Water Board, and the State Water Resources Control Board describing the Discharger's pretreatment activities over the previous twelve months. In the event that the Discharger is not in compliance with conditions or requirements of this permit affected by the pretreatment program, it shall also include reasons for non-compliance and a statement how and when it shall comply. This annual report is due by February 1st of each year and shall contain, but not be limited to, the contents described in the "Pretreatment Reporting Requirements" contained in the Attachment E Monitoring and Reporting Program.

The Discharger shall comply, and ensure affected "indirect dischargers" comply, with Paragraph No. II.D.1 of the "Standard Provisions and Reporting Requirements."

6. Other Special Provisions

a. Discharges of Storm Water. For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge

Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.

b. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ)**. This General Order, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Order is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and adverse effects of sanitary sewer overflows. The Discharger has enrolled in this General Order.

7. Compliance Schedules – Not Applicable

VI. COMPLIANCE DETERMINATION

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

A. General.

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

B. Multiple Sample Data.

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

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

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

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

b. Lethal Concentration 50% (LC 50)

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

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

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

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

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

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

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

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

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

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

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

b. No Observed Effect Level (NOEL)

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

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

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

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

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

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

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

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

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

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

Enclosed Bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Ocean Waters are the territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

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

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

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Central Coast Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reported Minimum Level is the ML, also known as the Reporting Level, or RL (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Central Coast Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

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

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

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

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

State Water Quality Protection Areas (SWQPAs) are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

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

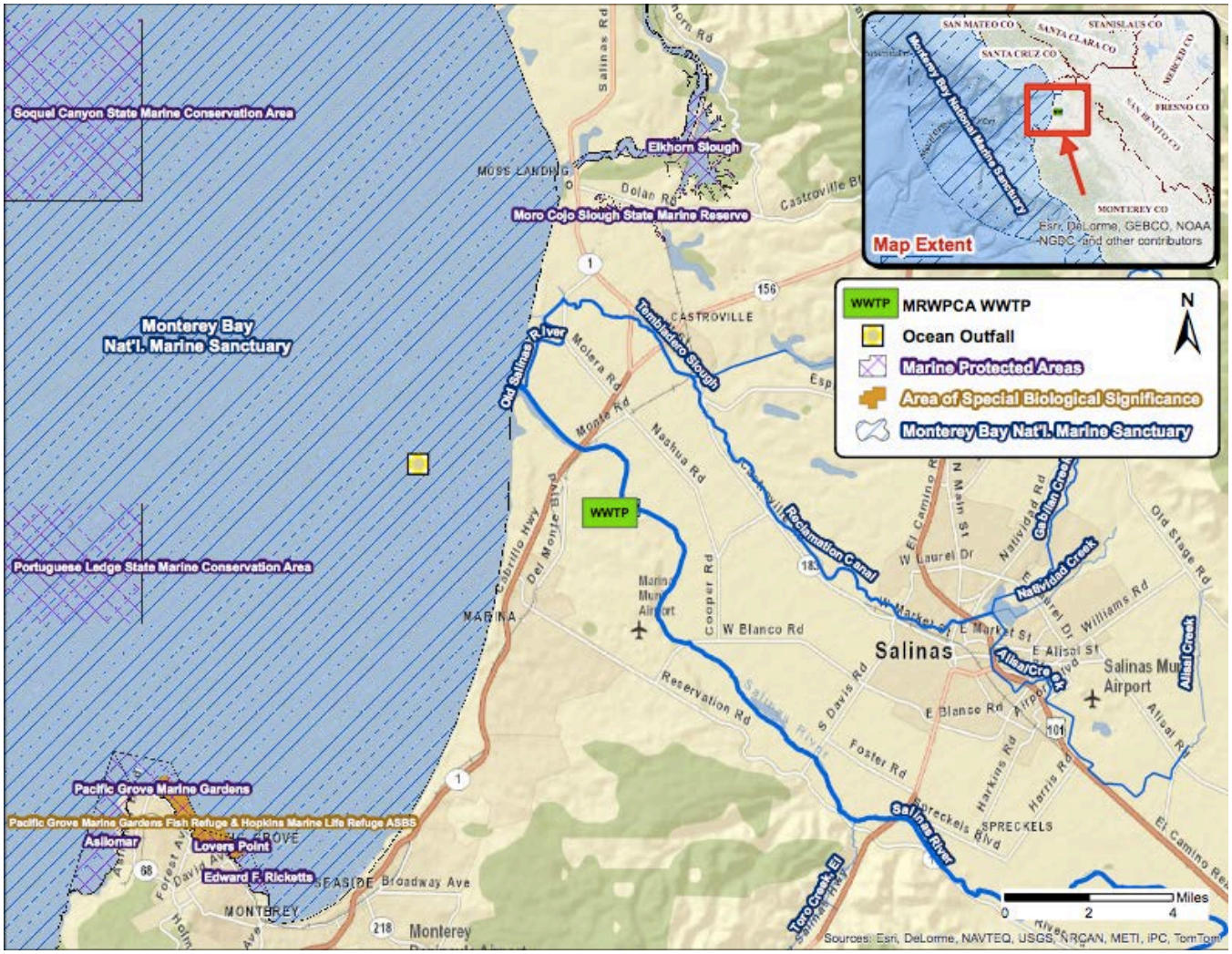
Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

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

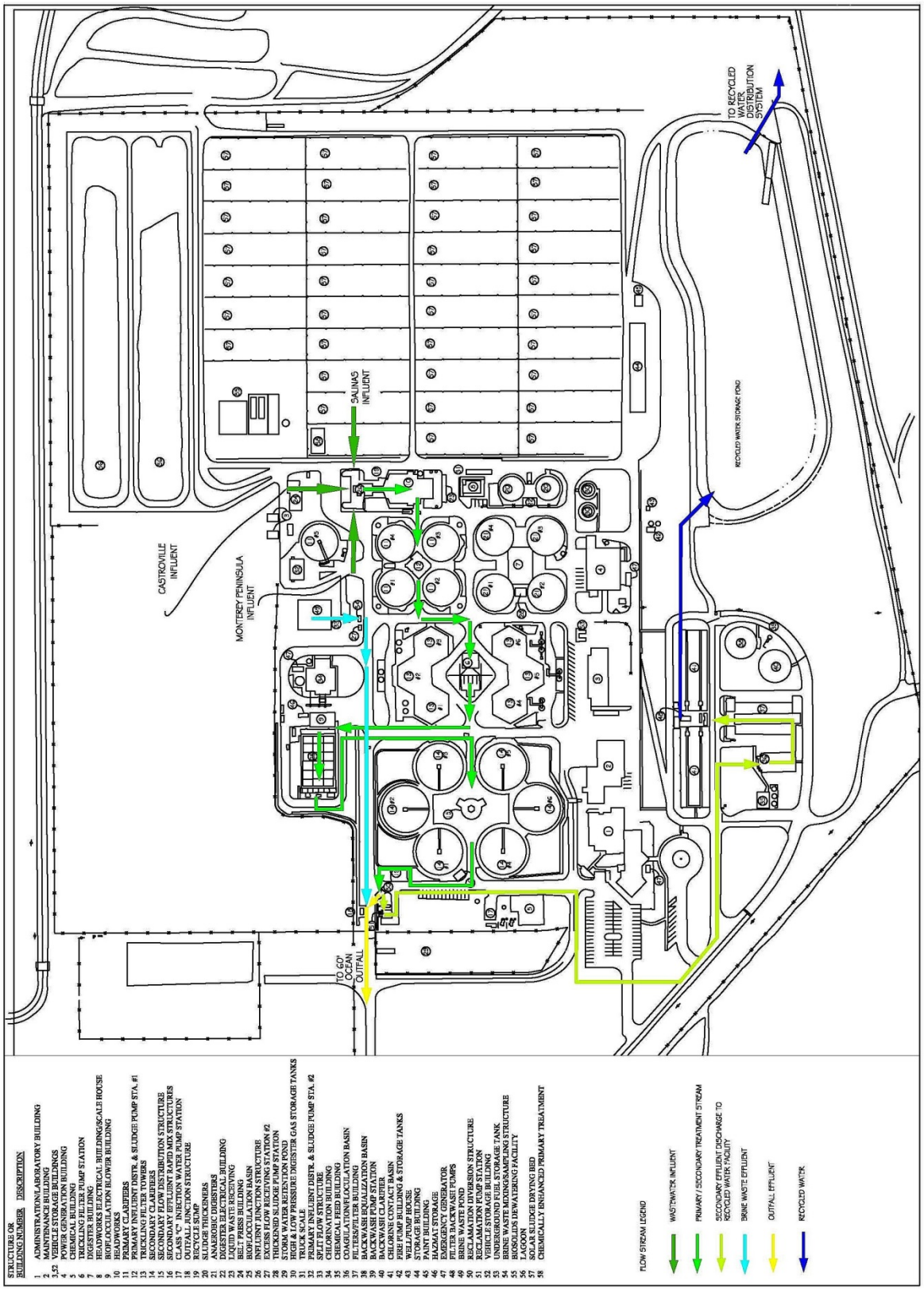
Waste: As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

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

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

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

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

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR § 122.41(i)(4).)

G. Bypass

1. Definitions

   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)

   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Central Coast Water Board may take enforcement action against the Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):

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

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

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

4. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).).

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):

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

b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

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

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a

period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

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

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

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

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

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

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

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

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Central Coast Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).).

3. All reports required by this Order and other information requested by the Central Coast Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

   c. The written authorization is submitted to the Central Coast Water Board and State Water Board. (40 CFR § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Central Coast Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

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

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

C. Monitoring Reports

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

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

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Coast Water Board. (40 CFR § 122.41(l)(4)(ii).)

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

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

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

3. The Central Coast Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly Owned Treatment Works (POTWs)

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

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

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

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

VIII. CENTRAL COAST WATER BOARD STANDARD PROVISIONS

A. Prohibitions

1. Introduction of "incompatible wastes" to the treatment system is prohibited.

2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.

3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under §307(a) of the Clean Water Act (CWA) is prohibited.

4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.

5. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:
   a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or
   b. Flow through the system to the receiving water untreated; and
   c. Cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited.

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

B. Provisions

1. Collection, treatment, and discharge of waste shall not create nuisance or pollution, as defined by California Water Code (CWC) §13050.

2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.

3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.

4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer.

5. Wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Code of Regulations.

6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:

   a. violation of any term or condition contained in this order.
   b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts.
   c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge.
   d. a substantial change in character, location, or volume of the discharge.

7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.

8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:

   a. Promulgation of a new or revised effluent standard or limitation.
   b. A material change in character, location, or volume of the discharge.
   c. Access to new information that affects the terms of the permit, including applicable schedules.
   d. Correction of technical mistakes or mistaken interpretations of law.
   e. Other causes set forth under Sub-part D of 40 CFR Part 122.

9. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:

a. identify possible situations that could cause "upset," "overflow," "bypass," or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

10. Physical facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.

11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.

12. If the discharger's facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, Recommended Security Controls for Federal Information Systems, can provide guidance.

13. Production and use of recycled water is subject to the approval of the Central Coast Water Board. Production and use of recycled water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Code of Regulations and Chapter 7, Division 7, of the California Water Code. An engineering report pursuant to section 60323, Title 22, of the California Code of Regulations is required and a waiver or water reclamation requirements from the Central Coast Water Board is required before recycled water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

C. General Monitoring Requirements

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

increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

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

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Public Health (DPH) for the constituents being analyzed. Bioassays performed to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board (State Water Board) and the State Department of Fish and Game.

3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.

4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

D. General Reporting Requirements

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

   a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).
   b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).
   c. A description of the sampling procedures and preservation sequence used in the survey.
   d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

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

2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.

3. The "Discharger" shall file a report of waste discharge at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.

4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:
   a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity.
   b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

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

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

   California Regional Water Quality Control Board
   Central Coast Region
   centralcoast@waterboards.ca.gov
   895 Aerovista Place, Suite 101
   San Luis Obispo, CA 93401-7906

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

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

6. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing "Discharger" and proposed "Discharger" containing a specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.

7. Except for data determined to be confidential under CWA §308 (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Federal Standard Provision – Records IV.C.

8. By February 1st of each year, the discharger shall submit an annual report to the Central Coast Water Board and MBNMS. The report shall contain the following:

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

E. General Pretreatment Provisions

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards by the date specified therein or, if a new indirect discharger, upon commencement of discharge.

F. Enforcement

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed $5,000 per day.

2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

G. Definitions
(Not otherwise included in Attachment A to this Order)

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

2. “Daily Maximum” limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples” except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a “grab sample.”

3. “Discharger," as used herein, means, as appropriate: (1) the Discharger, (2) the local sewering entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger," it refers to the discharger.)

4. “Duly Authorized Representative" is one where:

   a. the authorization is made in writing by a person described in the signatory paragraph of Standard Provision V.B.;
   b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
   c. the written authorization was submitted to the Central Coast Water Board.

5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.

6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

7. "Incompatible wastes" are:

   a. Wastes that create a fire or explosion hazard in the treatment works.
   b. Wastes that will cause corrosive structural damage to treatment works, or wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes.
   c. Solid or viscous wastes in amounts that cause obstruction to flow in sewers or that cause other interference with proper operation of treatment works.
   d. Any waste, including oxygen-demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency.
   e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.

8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

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

   Log Mean = (C1 x C2 x...x Cn)1/n

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

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

    mass emission rate (lbs/day) = 8.34 x Q x C; and
    mass emission rate (kg/day) = 3.79 x Q x C

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

11. "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above,

using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.

12. “Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision G.10, above, using the "six-month median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.

13. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.

14. "Monthly Average" (or "Weekly Average,” as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

    Average = (X1 + X2 + ... + Xn) / n

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.

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

17. "Pollutant-free wastewater" means inflow and infiltration, stormwaters, and cooling waters and condensates which are essentially free of pollutants.

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

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

    $C_{Effluent}$ Removal Efficiency (%) = 100 x (1 – $C_{effluent}$ / $C_{influent}$)

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

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

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

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

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

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Contents

Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (40 C.F.R. §122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health (DPH), in accordance with Water Code §13176, and must include quality assurance/quality control data with their reports.

B. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Central Coast Water Board.

C. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.

1. *A Guide to Methods and Standards for the Measurement of Water Flow, U.S. Department of Commerce, National Bureau of Standards*, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)

2. *Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint*, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)

3. *Flow Measurement in Open Channels and Closed Conduits, U.S. Department of Commerce, National Bureau of Standards*, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)

4. *NPDES Compliance Sampling Manual, U.S. Environmental Protection Agency, Office of Water Enforcement*, Publication MCD-51, 1977, 140 pp. (Available from the

General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)

D. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.

F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 C.F.R. part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxics listed by the California Toxics Rule shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005). Analyses for toxics listed in Table 1 of the California Ocean Plan (2012) shall adhere to guidance and requirements contained in that document.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point	Monitoring Location Name	Monitoring Location Description
---	INF-001	Influent wastewater with a domestic component (this excludes brine wastes but includes hauled septage), prior to treatment and following all significant inputs to the collection system or to the headworks of untreated wastewater and inflow and infiltration where representative samples of wastewater influent can be obtained.
---	INF-002 (Brine)	Influent brine waste via haulers to the brine waste storage facility prior to blending with secondary effluent as applicable.
001	EFF-001 [1]	Location where representative effluent sample, which includes any component of brine waste, discharged through the ocean outfall can be collected, after treatment and before contact with receiving water.
---	RSW-A	Shoreline monitoring station – 900 feet north of the outfall, 1000 feet offshore
---	RSW-B	Shoreline monitoring station – adjacent to the outfall, 1000 feet offshore
---	RSW-C	Shoreline monitoring station – 900 feet south of the outfall, 1000 feet offshore
---	RSW-D	Shoreline monitoring station – 1800 feet south of the outfall, 1000 feet offshore

[1] The Discharger's outfall and brine discharge facilities currently do not allow for aggregate flow metering or sampling of as-discharged combined secondary effluent and brine wastes at high secondary effluent flows (during wet season when recycling is not being implemented) above what is required for blending to safely meet the prescribed effluent limitations.

During the dry season, when the Discharger is recycling essentially 100% the wastewater flow less what is needed for blending with brine wastes, the facility is capable of aggregate flow metering and sampling downstream of a static mixer prior to entering the outfall. During the dry season, brine waste discharge flows (with minimum required secondary effluent blending) and high volume secondary effluent flows are currently metered separately and are sampled separately via grab samples that are manually composited based on the as-discharged flow proportions entering the outfall. Effluent monitoring per the Discharger's current facility configuration and effluent monitoring protocol is acceptable until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste flow metering and sampling (see Special Provision c. within section V.C.2 of the Order).

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF - 001

1. The Discharger shall monitor the untreated wastewater at Monitoring Location INF – 001 as follows:

Table E-2. Influent Monitoring at INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered or Calculated [1]	Daily
Instantaneous Maximum Flow	MGD	Metered or Calculated [1]	Daily
Maximum Daily Flow	MGD	Metered or Calculated [1]	Monthly
Mean Daily Flow	MGD	Calculated	Monthly
$CBOD_5$	mg/L	24-hr Composite	Weekly
TSS	mg/L	24-hr Composite	Weekly

[1] Metered at the treatment facility headworks or calculated based on the summation of collection system pump station flow metering which is more accurate at low flow rates.

B. Monitoring Location INF – 002 (Brine)

1. The Discharger shall monitor brine waste delivered to the facility at Monitoring Location INF – 002 (Brine) as follows:

Table E-3. Influent Brine Monitoring at INF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Weekly Volume Received	G	Metered or Calculated	Weekly
Monthly Volume Received	G	Calculated	Monthly
Annual Volume Received	MG	Calculated	Annually
Volume Routed to Emergency Storage [1]	G	Metered or Calculated	Weekly/Monthly/Annually
Other	The Discharger shall report all brine sampling data collected as part of the brine facility operation (i.e., analytical data used to characterize brine waste and determine appropriate blending ratios for discharge).		

[1] Sludge holding lagoons and drying beds, or other storage as noted on the monitoring reports.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF - 001

1. The Discharger shall monitor effluent discharged at Discharge Point 001 at Monitoring Location EFF – 001 as follows:

Table E-4. Effluent Monitoring at EFF – 001[1]

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow [2]	MGD	Metered or Calculated	Daily
Instantaneous Max Flow [2]	MGD	Metered or Calculated	Daily
Maximum Daily Flow [2]	MGD	Metered or Calculated	Monthly
Mean Daily Flow [2]	MGD	Calculated	Monthly
Brine Waste Dilution Ratio	---	Calculated	Daily
pH	pH units	Metered	Weekly [3]
Temperature	º F	Measured [4]	Weekly [3]
$CBOD_5$	mg/L	24-hr Composite [4]	Weekly [3]
TSS	mg/L	24-hr Composite [4]	Weekly [3]
Settleable Solids	mL/L/hr	Grab	Weekly [3]
Chlorine Residual [5]	mg/L	Continuous [4]	Daily [3]
Chlorine Used [5]	lbs/day	Recorded	Daily [3]
Turbidity	NTUs	Grab	Weekly [3]
Oil and Grease	mg/L	Grab	Weekly [3]
Ammonia	mg/L	Grab	Monthly
Nitrate	mg/L	Grab	Monthly
Urea	mg/L	Grab	Monthly
Silicate	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Iron	mg/L	Grab	Quarterly
Magnesium	mg/L	Grab	Quarterly
Hardness	mg/L	Grab	Quarterly
$Chromium^{+6}$	µg/L	24-hr composite	Quarterly
Cyanide	µg/L	24-hr composite	Quarterly
Selenium	µg/L	24-hr composite	Quarterly
Acute Toxicity [6] [7]	TUa	Grab	Semiannually
Chronic Toxicity [6] [7]	TUc	Grab	Semiannually
Ocean Plan Table 1 Metals [7] [8] [9]	µg/L	HVWS [10] [11]	Semiannually
Ocean Plan Table 1 pollutants [7] [9] [12]	µg/L	HVWS [10] [11]	Semiannually
Remaining Priority Pollutants [7] [9] [13]	µg/L	HVWS [10] [11]	3x / permit term [14]

[1] Effluent sampling per the Discharger's current brine waste and outfall facility configuration and sampling protocols is acceptable until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste monitoring (see Table E-1 and Special Provision c. within section V.C.2 of the Order).

[2] Individual reporting for secondary effluent and brine waste effluent flows are required along with as-discharged combined flow for blended secondary effluent and brine waste. The calculation of combined effluent flow per the Discharger's current brine waste and outfall facility configuration is acceptable until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste flow metering (see Table E-1 and Special Provision c. within section V.C.2 of the Order).

[3] Brine waste samples shall be collected per a minimum monthly sampling frequency and be manually composited per the Discharger's current brine waste and outfall facility configuration and sampling protocols until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste monitoring (see Table E-1 and Special Provision c. within section V.C.2 of the Order).

[4] Brine waste samples shall be collected as grab samples and manually composited per the Discharger's current brine waste and outfall facility configuration and sampling protocols until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste monitoring (see Table E-1 and Special Provision c. within section V.C.2 of the Order).

[5] When applicable – the Discharger is not required to disinfect whole effluent prior to discharge and currently does not do so. However, the Discharger is required to monitor for chlorine residual semiannually per the Ocean Plan Table 1 Pollutants monitoring.

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

[7] Monitoring for the Ocean Plan (2012) Table 1 pollutants and whole effluent acute and chronic toxicity shall occur one time in a dry season and one time in a wet season each year so that characterization of effluent occurs one time per year when the discharge is primarily secondary treated wastewater (wet season) and one time per year when the discharge is primarily brine waste (dry season). Toxicity and Ocean Plan Table 1 pollutant sampling/monitoring shall be conducted concurrently as practicable.

[8] Those twelve metals (Sb, As, Cd, Cr^{+3}, Cr^{+6}, Cu, Pg, Hg, Ni, Se, Ag, and Zn) with applicable water quality objectives established by Table 1 of the Ocean Plan. Analysis shall be for total recoverable metals.

[9] Procedures, calibration techniques, and instrument/reagent specifications shall conform to 40 C.F.R. part 136 and applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table 1; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML. In addition, data must comply with QA/QC requirements of 40 C.F.R. part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 C.F.R. part 136.

[10] HVWS = High-volume water sampling

[11] The Discharger shall utilize high volume water sampling (HVWS) methods employed by the CCLEAN program for compliance determination of the Table 1 pollutants and the implementation of all other pollutant monitoring requirements contained within this Order, when appropriate, given the subsequent analytical methods are in accordance with 40 C.F.R. part 136 or as allowable per the Implementation Provisions for Table 1 contained in section III.C.5.b of the Ocean Plan.

[12] Those pollutants in 2012 Ocean Plan Table 1. Analyses, compliance determination, and reporting shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III. The Discharger shall ensure its analytical laboratory uses the Minimum Levels (MLs) presented in Ocean Plan Appendix II as the lowest calibration standards. The Discharger shall select the lowest ML necessary to demonstrate compliance with effluent limitations. If effluent limitations are less than the lowest ML, then the Discharger shall use the lowest ML.

[13] The "Remaining Priority Pollutants" (see Table E-5 below) consist of the priority pollutants listed in Part D of EPA Form 3510-2A (Rev. 1-99) that currently do not have ocean criteria (water quality objectives) per Table 1 of the Ocean Plan. A complete EPA Form 3510-2A is required for all new and renewal NPDES permit applications pursuant to 40 C.F.R. § 122.21. Expanded Effluent Testing Data per Part D of EPA Form 3510-2A is required for all treatment works with design flows greater than or equal to 1.0 MGD or with a pretreatment program (or required to have a pretreatment program), or otherwise required by the permitting authority to provide the data.

[14] At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old. Remaining priority pollutant monitoring shall occur at least one time in a dry season and one time in a wet season so that characterization of effluent occurs one time per year when the discharge is primarily secondary treated wastewater (wet season) and one time per year when the discharge is primarily brine waste (dry season).

Table E-5. Remaining Priority Pollutants

Volatile Organic Compounds
Bromoform
Chloroethane
2-Chloroethyl Vinyl Ether
1,1-Dichloroethane
Trans-1,2-Dichloro-Ethylene
1,2-Dichloropropane
1,3-Dichloro-Propylene
Methyl Bromide
Methyl Chloride
Methylene Chloride
Acid Extractable Compounds
P-Chloro-M-Cresol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-O-Cresol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
Base-Neutral Compounds
Acenaphthene
Acenaphthylene
Anthracene
Benzo(A)Anthracene
Benzo(A)Pyrene
3,4-Benzo-Fluoranthene
Benzo(ghi)Perylene
Benzo(K)Fluoranthene
4-Bromophenyl Phenyl Ether
Butyl Benzyl Phthalate
2-Chloronapthalene
4-Chlorophenyl Phenyl Ether
Chrysene
Di-N-Octyl Phthalate
Dibenzo(A,H)Anthracene
1,4-Dichlorobenzene
2,6-Dinitrotoluene
Fluorene
Indeno(1,2,3-CD)Pyrene
Naphthalene
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

Compliance with acute toxicity objective shall be determined using a U.S. EPA approved protocol as provided in 40 C.F.R. part 136 (*Methods for Measuring the Acute Toxicity of*

Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, U.S. EPA Office of Water, EPA-821-R-02-012 or the latest edition).

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

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

Table E-6. Approved Test - Acute Toxicity (TUa)

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

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

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

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

$$TUa = [\log(100 - S)]/1.7$$

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

When toxicity monitoring finds acute toxicity in the effluent above the effluent limitation established by the Order, the Discharger shall immediately resample the effluent, if the discharge is continuing, and retest for acute toxicity. Results of the initial failed test and any toxicity monitoring results subsequent to the failed test shall be reported as soon as reasonable to the Executive Officer (EO). The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements (section V.C.2.a of the Order), or to implement other measures.

B. Chronic Toxicity

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

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

Chronic Toxicity (TUc) = 100/NOEL.

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

In accordance with the 2012 Ocean Plan, Appendix III, *Standard Monitoring Procedures*, the Discharger shall use the critical life stage toxicity tests specified in the table below to measure TUc. Other species or protocols will be added to the list after State Water Resources Control Board review and approval.

A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity limitation. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period of no fewer than three sampling events, monitoring can be reduced to the most sensitive species. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

Table E-7. Approved Tests—Chronic Toxicity

Species	Test	Tier [1]	Reference [2]
Giant kelp, *Macrocystis pyrifera*	percent germination; germ tube length	1	a, c
Red abalone, *Haliotis rufescens*	abnormal shell development	1	a, c
Oyster, *Crassostrea gigas*; mussels, *Mytilus spp*.	abnormal shell development; percent survival	1	a, c
Urchin, *Strongylocentrotus purpuratus*; sand dollar, *Dendraster excentricus*	percent normal development	1	a, c
Urchin, *Strongylocentrotus purpuratus*;	percent fertilization	1	a, c

sand dollar, *Dendraster excentricus*			
Shrimp, *Homesimysis costata*	percent survival; growth	1	a, c
Shrimp, *Mysidopsis bahia*	percent survival; fecundity	2	b, d
Topsmelt, *Atherinops affinis*	larval growth rate; percent survival	1	a, c
Silverside, *Menidia beryllina*	larval growth rate; percent survival	2	b, d

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

[2] Protocol References:

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

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

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

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

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

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

If chronic toxicity is measured in the effluent above 150 TUc, the Discharger shall re-sample and submit the results to the Central Coast Water Board as described in section V.C.2.a of this Order.

C. Toxicity Reporting

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

   a. Toxicity test results,

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

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

2. Toxicity test results shall be reported according to the appropriate guidance - *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, U.S. EPA Office of Water, EPA-

821-R-02-012 (2002) or the latest edition, or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821-R-02-012 (2002) or subsequent editions.

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

4. Within 30 days of receipt of test results exceeding an acute or chronic toxicity discharge limitation, the Discharger shall provide written notification to the Executive Officer of:

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

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

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLED WATER MONITORING REQUIREMENTS

The Discharger shall comply with applicable state and local requirements regarding the production and use of recycled wastewater, including requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria). Recycled Water from this Facility is regulated under Order No. 94-82.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Bacteria Monitoring – Monitoring Locations RSW-A, RSW-B, RSW-C, and RSW-D

Bacteria monitoring shall be conducted to assess bacteriological conditions in areas used for body contact recreation (e.g., swimming) and to assess conditions of aesthetics for general recreation use (e.g., picnicking, boating). Bacteria monitoring shall be conducted along the 30-foot contour at Monitoring Locations RSW-A, RSW-B, RSW-C, and RSW-D. Bacteria monitoring shall be conducted in accordance with the following table. Latitude and Longitude shall be provided for all stations when reporting.

Table E-8. Triggered Shoreline Bacteria Monitoring Schedule

Parameter	Units	Sampling Station	Sampling Frequency
Total and Fecal Coliform Bacteria [1], [2], [4]	MPN/100ml	RSW-A, B, C, D	Monthly
Enterococcus Bacteria [1], [3], [4]	MPN/100ml	RSW-A, B, C, D	Monthly

Visual Monitoring [5]	Narrative	RSW-A, B, C, D	Monthly

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

[2] Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR PART 136, unless alternate methods have been approved in advance by US EPA pursuant to 40 CFR PART 136.

[3] Detection methods used for enterococcus shall be those presented in EPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure, or any improved method determined by the Central Coast Regional Board (and approved by EPA) to be appropriate.

[4] If a single sample exceeds any of the bacteriological single sample maximum (SSM) standards contained within section V.A.1 of the Order, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued daily until the sample result is less than the SSM standard or until a sanitary survey is conducted to determine the source of the high bacterial densities. When repeat sampling is required because of an exceedance of any one single sample density, values from all samples collected during that 30-day period will be used to calculate the geometric mean. Shore stations (immediately inshore of 30-foot contour sites) shall be sampled concurrent with 30-foot contour repeat sampling.

[5] Visual monitoring shall include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), antecedent rainfall (7-day), sea state, and tidal conditions (e.g., high, slack, or low tide). Observations of water discoloration, floating oil and grease, turbidity, odor, material of sewage origin in the water or on the beach, and temperature (°C) shall be recorded and reported.

These requirements also satisfy the CCLEAN 30-foot contour bacteriological monitoring requirements noted in Table E-9, below.

IX. OTHER MONITORING REQUIREMENTS

A. Central Coast Long-Term Environmental Assessment Network (CCLEAN)

1. The Discharger shall participate in the implementation of the CCLEAN Regional Monitoring Program in order to fulfill receiving water compliance monitoring requirements and support the following CCLEAN Program objectives.

    a. Obtain high-quality data describing the status and long-term trends in the quality of nearshore waters, sediments, and associated beneficial uses.

    b. Determine whether nearshore waters and sediments are in compliance with the Ocean Plan.

    c. Determine sources of contaminants to nearshore waters.

    d. Provide legally defensible data on the effects of wastewater discharges in nearshore waters.

    e. Develop a long-term database on trends in the quality of nearshore waters, sediments, and associated beneficial uses.

    f. Ensure that the nearshore component database is compatible with other regional monitoring efforts and regulatory requirements.

g. Ensure that nearshore component data are presented in ways that are understandable and relevant to the needs of stakeholders.

2. General discharger components of the first phase of the CCLEAN Program are outlined in the following table. The CCLEAN Quality Assurance Project Plan (QAPP) will be revised as necessary each year to reflect any program adjustments and submitted to the Central Coast Water Board Quality Assurance Officer for approval prior to initiation of CCLEAN sampling. A detailed technical study design description, including specific location of sampling sites and a description of the specific contents of the CCLEAN Annual Report, shall be provided as a component of the CCLEAN QAPP. Any year-to-year modifications to the program (including implementation of subsequent program phases) shall be identified in this document. The QAPP will also include program components funded by other participant agencies and organizations.

Table E-9. CCLEAN Monitoring Requirements

Sampling Sites	Parameters Sampled at Each Site	Frequency of Sampling	Applicable Water-quality Stressors and Program Objectives
Water Sampling Four wastewater discharges (Santa Cruz, Watsonville, MRWPCA, CAWD) in effluent and two rivers (Pajaro and San Lorenzo)	30-day flow proportioned samples using automated pumping equipment, solid-phase-extraction techniques for POPs (PAHs, chlorinated pesticides, PCBs, dioxins/furans, PBDEs).	Twice per year (wet season and dry season)	Sources, loads, trends, effects and permit compliance for: POPs
	Grabs of effluent for ammonia and nitrate, turbidity, temperature, conductivity, pH, urea, orthophosphate, dissolved silica and total suspended solids	Monthly	Sources, loads, trends and permit compliance for: Nutrients
	Evaluate satellite imagery for algal blooms	Periodically	Effects of: Nutrients
30-ft contour sites for Santa Cruz, Watsonville and MRWPCA	Grabs for total and fecal coliform, *enterococcus*	At least monthly	Sources, trends, effects and permit compliance for: Pathogen indicators
Two nearshore background sites	30-day time-integrated samples using automated pumping equipment and solid-phase-extraction techniques for: POPs (same as for wastewater, except no dioxins/furans), nitrate, ammonia, urea, orthophosphate and dissolved silica, total suspended solids, temperature, conductivity, pH, total and fecal coliform, *enterococcus*	Twice per year (wet season and dry season)	California Ocean Plan compliance for: POPs Nutrients Pathogen indicators
Mussel Sampling Five rocky intertidal sites	One composite of 30-40 mussels for POPs (same as nearshore background ocean sites), total and fecal coliform,	Annually in the wet season	Status, trends, effects and alert level comparisons

	and *enterococcus*		for: POPs Pathogen indicators
Sediment Sampling Six sites along the 80-meter contour	POPs (same as for mussels, except including pyrethroids), sediment grain size and total organic carbon, benthic infauna	Every 5 years in the fall	Status, effects and alert level comparisons for POPs

B. Solids/Biosolids Monitoring, Notification, and Reporting

1. Biosolids Monitoring

a. Biosolids shall be tested for the metals required in 40 C.F.R. § 503.16 (for land application) or 40 C.F.R. § 503.26 (for surface disposal), using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), as required in 40 C.F.R. § 503.8(b)(4), at the following minimum frequencies:

Volume (dry metric tons) [1]	Sampling and Analysis Frequency [2]
0-290	Once per year
290-1500	Once per quarter
1500-15000	Once per 60 days
> 15000	Once per month

[1] For accumulated, previously untested biosolids, the Permittee shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples.

[2] Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis. Biosolids to be land applied shall be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required above.

b. Prior to land application, the Permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 C.F.R. § 503.32. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day. If pathogen reduction is demonstrated using a “Process to Significantly/Further Reduce Pathogens”, the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in 11(a) above. For fecal coliform, at least seven grab samples must be drawn during each monitoring event and a geometric mean calculated from these seven samples.

c. For biosolids that are land applied or placed in a surface disposal site, the Permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 C.F.R. § 503.33(b).

d. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with greater than five million gallons per day (MGD) influent flow shall sample biosolids for

pollutants listed under Section 307(a) of the Clean Water Act (as required in the pretreatment section of the permit for POTW's with pretreatment programs). Class 1 facilities and Federal facilities greater than five MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the time of their next priority pollutant scan if they have not done so within the past five years, and once per five years thereafter.

e. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness in accordance 40 C.F.R. part 261.

f. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

g. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Method 9095) at the frequency in 11 (a) above or more often if necessary to demonstrate that there are no free liquids.

2. Solids/Biosolids Monitoring

The Permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:

a. Notification of non-compliance: The Permittee shall notify U.S. EPA Region 9, the Central Coast Regional Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Permittee shall notify U.S. EPA Region 9 and the affected Regional Boards of the non-compliance in writing within five working days of becoming aware of the non-compliance. The Permittee shall require their biosolids management contractors to notify U.S. EPA Region 9 and the affected Regional Boards of any non-compliance within the same timeframes. See Attachment C for Regional Board contact information.

b. If biosolids are shipped to another State or to Indian Lands, the Permittee must send 60 days prior notice of the shipment to the permitting authorities in the receiving State or Indian Land (the U.S. EPA Regional Office for that area and the State/Indian authorities).

c. For land application: Prior to reuse of any biosolids from this facility to a new or previously unreported site, the Permittee shall notify U.S. EPA and Regional Board. The notification shall include a description and topographic map of the proposed site(s), names and addresses of the applier, and site owner and a listing of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates and determination of agronomic rates. If any biosolids within a given

monitoring period do not meet 40 C.F.R. § 503.13 metals concentration limits, the Permittee (or its contractor) must pre-notify U.S. EPA, and determine the cumulative metals loading at that site to date, as required in 40 C.F.R. § 503.12.

d. The Permittee shall notify the applier of all the applier's requirements under 440 C.F.R. part 503, including the requirement that the applier certify that the management practices, site restrictions, and any applicable vector attraction reduction requirements have been met. The Permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that the harvesting restrictions in effect for up to 38 months have been met.

e. For surface disposal: Prior to disposal to a new or previously unreported site, the Permittee shall notify U.S. EPA and the Regional Board. The notice shall include description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any state or local permits. The notice shall describe procedures for ensuring public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

3. Biosolids Reporting

The Permittee shall submit an annual biosolids report to the U.S. EPA Region 9 Biosolids Coordinator and Regional Board by February 19 of each year for the period covering the previous calendar year. The report shall include:

a. The amount of biosolids generated during the reporting period, in dry metric tons, and the amount accumulated from previous years;

b. Results of all pollutant and pathogen monitoring required in Item 12 above and the Monitoring and Reporting Program of this Order. Results must be reported on a 100% dry weight basis for comparison with 40 C.F.R. part 503 limits;

c. Descriptions of pathogen reduction methods and vector attraction reduction methods, including supporting time and temperature data, and certifications, as required in 40 C.F.R. §§ 503.17 and 503.27;

d. Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and volumes delivered to each.

e. For land application sites, the following information must be submitted by the Permittee, unless the Permittee requires its biosolids management contractors to report this information directly to the U.S. EPA Region 9 Biosolids Coordinator:

1) Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner.

2) Volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;

3) Crop planted, dates of planting and harvesting;

4) For any biosolids exceeding 40 C.F.R. § 503.13 Table 3 metals concentrations: the locations of sites where applied and cumulative metals loading at that site to date;

5) Certifications of management practices in 40 C.F.R. § 503.14; and

6) Certifications of site restrictions in 40 C.F.R. § 503(b)(5).

f. For surface disposal sites:

1) Locations of sites, site operator, site owner, size of parcel on which disposed;

2) Results of any required groundwater monitoring;

3) Certifications of management practices in 40 C.F.R. § 503.24; and

4) For closed sites, date of site closure and certifications of management practices for the three years following site closure.

g. For all biosolids used or disposed at the Permittee's facilities, the site and management practice information and certification required in 40 C.F.R. §§ 503.17 and 503.27; and

h. For all biosolids temporarily stored, the information required in 40 C.F.R. § 503.20 required to demonstrate temporary storage.

Reports shall be submitted to:

Regional Biosolids Coordinator
USEPA (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

Executive Officer
Central Coast Regional Water Quality Control Board
centralcoast@waterboards.ca.gov

i. All the requirements of 40 C.F.R. part 503 and 23 CCR 15 are enforceable by the U.S. EPA and this Regional Board whether or not the requirements are stated in an NPDES permit or any other permit issued to the discharger.

C. Pretreatment Monitoring

At least once per year, influent, effluent, and biosolids shall be sampled and analyzed for the priority pollutants identified under Section 307(a) of the Clean Water Act. A summary of analytical results from representative, flow-proportioned, 24-hour composite

sampling of the plant's influent and effluent for those pollutants U.S. EPA has identified under Section 307(a) of the Act which are known or suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until U.S. EPA promulgates an applicable analytical technique under 40 C.F.R. part 136. Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. The biosolids analyzed shall be a composite sample of a minimum of twelve discrete samples taken at equal time intervals over the 24-hour period. Wastewater and biosolids sampling and analysis shall be performed a minimum of annually and not less than the frequency specified in the required monitoring program for the plant. The Discharger shall also provide any influent, effluent, or biosolids monitoring data for nonpriority pollutants which the Discharger believes may be causing or contributing to interference, pass-through, or adversely impacting biosolids quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 C.F.R. part 136 and amendments thereto. Biosolids samples shall be collected from the last point in solids handling before disposal. If biosolids are dried on-site, samples shall be composited from at least twelve discrete samples from twelve representative locations.

D. Outfall Inspection

At least one time per year, the Discharger shall visually inspect the outfall structure and report in the Annual Report, regarding its physical integrity. The inspection shall note leaks and potential leaks using dye studies, if necessary.

E. MBNMS Spill Reporting

The Discharger shall report all sewage spills under its control that are likely to enter ocean waters, directly to the Monterey Bay National Marine Sanctuary (MBNMS) office at 831-236-6797.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self Monitoring Reports (SMRs)

1. The Discharger shall submit electronic SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal. The Discharger shall use the current version of the Permittee Entry Template (PET) tool to configure data into the applicable CIWQS Data Format, and shall update that template according to this Order (e.g., add/delete parameters, revise limits, update monitoring locations, etc). Blank versions of the latest PET tool are available at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml.

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

3. Sampling and monitoring as required by this MRP shall begin on the effective date of this Order. The Discharger shall complete all required monitoring and reporting according to the following schedule unless otherwise directed by the Executive Officer:

Table E-10. Monitoring Periods and Reporting Schedule

SMR Name	Permit Section for Monitoring & Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report - Monthly	MRP Sections III (Influent) and IV (Effluent)	Monthly	First day of second calendar month following period of sampling
NPDES Monitoring Report – Quarterly	MRP Section IV Table E.4 (Effluent)	Quarterly	1st Quarter: May 1st 2nd Quarter: Aug 1st 3rd Quarter: Nov 1st 4th Quarter: Feb 1st
NPDES Monitoring Report - Semi-Annual	MRP Section IV (Effluent) – Toxicity and Ocean Plan Table 1	Semi-annually	February 1st and August 1st
NPDES Monitoring Report – Remaining Priority Pollutants	MRP Section IV Table E.4 (Effluent) Remaining Priority Pollutants	3x per permit	February 1, 2016, 2017 and 2018 (following sampling as described in footnote 14 table E-4)
Pretreatment Annual Report	MRP Section IX.C and Order Section V.C.5.b	Annually	February 1st following calendar year of sampling and inspections
Ocean Outfall Inspection Report	MRP Section IX.D	Annually	February 1st following calendar year of inspection
Biosolids Annual Report	MRP Section IX.B.3 and Order Section V.C.5.a	Annually	February 19th following calendar year of sampling
Annual Summary Report	Attachment D, Standard Provision VIII.D.8	Annually	February 1st following calendar year of sampling

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (reported ML, also known as the Reporting

Level, or RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136. For each parameter identified in Table 1 of the Ocean Plan, the Discharger shall use a ML no greater than specified in Appendix II of the Ocean Plan.

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

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

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

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

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

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

5. The Discharger shall submit SMRs in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is already entered within CIWQS in a tabular format. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. The Discharger shall include in their CIWQS upload a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. Uploaded reports must also include laboratory data sheets for the analytical results being presented.

c. Discharger shall maintain and update, as necessary, a Permitee Entry Tool (PET) to facilitate data entry into the CIWQS system.

C. Discharge Monitoring Reports (DMRs)

1. At any time during the term of this permit, the State or Central Coast Water Board may notify the Discharger to electronically submit DMR's. Until such notification is given specifically for the submittal of DMR's, the Discharger shall submit DMR's in accordance with the requirements described below.

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

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

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1) or on self-generated forms that follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. Unless otherwise noted, with the next SMR, the Discharger shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section VI. C, of the Order.

ATTACHMENT F – FACT SHEET

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Tables

ATTACHMENT F – FACT SHEET

As described in section I of this Order, the Central Coast Water Board incorporates this Fact Sheet as findings of the Central Coast Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	3 270118002
Discharger	Monterey Regional Water Pollution Control Agency
Name of Facility	Regional Treatment Plant
Facility Address	14811 Del Monte Boulevard Marina, California 93933 Monterey County
Administrative Office	5 Harris Court, Building D Monterey, California 93940 Monterey County
Facility Contact, Title and Phone	James Dix, Operations Manager (831) 883-6183
Authorized Person to Sign and Submit Reports	James Dix, Operations Manager (831) 883-6183
Environmental Contact	Garrett Haertel, Compliance Engineer, (831) 883-6176
Mailing Address	5 Harris Court, Building D, Monterey, California 93940
Billing Address	5 Harris Court, Building D, Monterey, California 93940
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Yes
Recycling Requirements	Producer
Facility Permitted Flow	29.6 million gallons per day (MGD)
Facility Design Flow	29.6 MGD (Average Dry Weather Flow)
Watershed	Lower Salinas Valley HA (309.10)
Receiving Waters	Pacific Ocean (Monterey Bay National Marine Sanctuary, outside the Zone of Prohibition)
Receiving Water Type	Ocean Water

A. The Monterey Regional Water Pollution Control Agency (MRWPCA) (hereinafter, the Discharger) is the owner and operator of a wastewater treatment plant (hereinafter, Facility), which treats domestic, commercial, and industrial wastewaters collected from the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing and Boronda Community Service Districts; and Fort Ord. The wastewater treatment facility is located at 14811 Del Monte Boulevard, Marina, Monterey County.

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

B. The Facility discharges wastewater to the Pacific Ocean (via Monterey Bay), a water of the United States, and is currently regulated by Order No. R3-2008-0008, which was adopted on March 20, 2008, expired on April 30, 2013, and administratively extended until the Board adopts this new permit. The terms and conditions of the current Order will be automatically continued and remain in effect until new Waste Discharge Requirements and a National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

C. The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on November 21, 2012. The application was deemed complete on March 15, 2013.

II. FACILITY DESCRIPTION

A. Wastewater and Biosolids Treatment

The MRWPCA, which currently serves a population of approximately 252,000, was created in 1972. MRWPCA consists of and provides regional wastewater treatment, disposal, and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing and Boronda Community Services Districts; and Fort Ord. Each member entity retains ownership and operating/maintenance responsibility for wastewater collection and transport systems up to the point of connection with interceptors owned and operated by the Discharger. Residential, commercial, and industrial wastewater is conveyed to the MRWPCA Regional Treatment Plant, which has a design treatment capacity of 29.6 MGD (average dry weather flow) and currently treats approximately 18 MGD. The Facility began operation in 1990, replacing six local wastewater treatment facilities.

The MRWPCA currently accepts 30,000 – 50,000 gallons per day (gpd) of brine wastes by truck from business entities which would otherwise be discharging to the sanitary sewer system. Such wastewaters include softener regenerant wastes and reverse osmosis brines, which are now trucked to the Regional Treatment Plant instead of being discharged to the collection system. Because irrigation uses of recycled wastewater are sensitive to elevated levels of total dissolved solids (TDS), the MRWPCA has sought to keep such elevated TDS wastewaters segregated from the influent flow of the Regional

Treatment Plant. Brine wastes are held in a 375,000 gallon (approximate) lined holding pond at the Regional Treatment Plant and ultimately discharged directly to or blended with secondary treated wastewater before being discharged through Discharge Point 001.

Wastewater treatment at the Regional Treatment Plant includes aerated grit removal, primary clarifiers, trickling filters, solids contact, secondary clarifiers, and filtration. Undisinfected secondary clarifier effluent is discharged through Discharge Point 001. Sludge/biosolids are anaerobically digested and sent to two screw presses constructed in 2007. The presses have replaced the sludge drying beds and belt filter press. The holding lagoons and some of the drying beds may still be utilized in emergency situations. Dried solids are then hauled to the Monterey Regional Waste Management District's landfill in Marina, California, adjacent to the Regional Treatment Plant, where it is mixed with wood products and used for slope cover.

In winter months, secondary treated wastewater from the Regional Treatment Plant is discharged through a diffuser, positioned 11,260 feet offshore at a depth of approximately 100 feet, to Monterey Bay. In summer months, treated wastewater is recycled for irrigation of 12,000 acres of farmland in the northern Salinas Valley. Tertiary treatment of recycled wastewater is provided for design flows of up to 29.6 MGD by the Salinas Valley Reclamation Project (SVRP), which holds tertiary treated wastewater in an 80 acre-foot storage pond before it is distributed to farmland by the Castroville Seawater Intrusion Project (CSIP). The irrigation use of recycled wastewater reduces regional dependence on and use of local groundwater, thereby minimizing seawater intrusion. The SVRP portion of the MRWPCA facility and use of recycled water is regulated via separate water recycling requirements.

B. Discharge Points and Receiving Waters

Discharge from the Regional Treatment Plant at Discharge Point 001 occurs through an 11,260-foot outfall/diffuser system that terminates at a depth of approximately 100 feet in the Pacific Ocean (Monterey Bay) at 36°, 43', 40" N. latitude and 121°, 50', 15" W longitude. The receiving water is part of the Monterey Bay National Marine Sanctuary, designated as such on September 15, 1992. The purpose of the National Marine Sanctuaries Program is to protect areas of the marine environment which possess conservation, recreational, ecological, historical, research, educational, or aesthetic qualities of special national significance. The first priority of the Program is the long-term protection of resources within designated sanctuaries. The Monterey Bay Sanctuary has been recognized for its unique and diverse biological and physical characteristics. The MRWPCA outfall/diffuser system is located outside the Monterey Bay National Marine Sanctuary Zone of Prohibition.

Discharges through Discharge Point 001 consist of secondary treated wastewater and/or brine wastes, as described above. The minimum probable dilution for Discharge Point 001 is 145 to 1, a figure that has been used by Central Coast Water Board staff to determine the need for water quality-based effluent limitations and, if necessary, to calculate those limitations.

C. Summary of Existing Requirements and Effluent Characterization

Effluent limitations contained in the previous Order for discharges from Discharge Point 001 and representative monitoring data for Monitoring Location EFF-001, for the last five years of the permit term (i.e., 2008 through 2012), are presented in the following tables. Wastewater monitored at Monitoring Location EFF-001 is essentially a combination of brine wastes and secondary effluent. Effluent monitoring data that are reported for compliance purposes represent flow-weighted concentrations based on each flow stream contribution, which ensures a representative sample of effluent discharged from the Regional Treatment Plant.

Table F-2. Historic Effluent Limitations and Monitoring Data, Conventional Pollutants, Discharge Point 001

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		Average Monthly	Average Weekly	Daily Maximum	Instantaneous Maximum	Maximum Reported Value
$CBOD_5$	mg/L	25	40	85	--	26 [1]
	lb/day	6,200	10,000	21,000	--	--
TSS	mg/L	30	45	90	--	47 [2]
	lb/day	7,400	11,000	22,000	--	--
$CBOD_5$, and TSS	%	Removal by treatment shall not be less than 85 percent				--
Settleable Solids	mL/L/hr	1.0	1.5	3.0	--	0.3
Turbidity	NTU	75	100	230	--	18
Oil & Grease	mg/L	25	40	75	--	16
	lb/day	6,200	10,000	19,000	--	--
pH	pH Units	6.0 – 9.0				8.4
Total coliform bacteria	MPN/100 mL	1,000	--	--	10,000	1,600

[1] This value represents the highest reported daily maximum value for $CBOD_5$ (September 2009). There were no exceedances of effluent limitations for $CBOD_5$ during the permit term.

[2] This value represents the highest reported daily maximum value for TSS (July 2008). There were no exceedances of effluent limitations for TSS during the permit term.

Table F-3. Historic Effluent Limitations, Toxic Pollutants, Discharge Point 001

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
Arsenic	µg/L	733	4,237	11,245	--	4.0
	lbs/day	181	1,050	2,780	--	--
Cadmium	µg/L	146	584	1,460	--	< 5
	lbs/day	36	144	360	--	--

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
Chromium (Hexavalent)	µg/L	292	1,168	2,920	--	130
	lbs/day	72.1	288	721	--	--
Copper	µg/L	148	1,462	4,090	--	10
	lbs/day	36.5	361	1,010	--	--
Lead	µg/L	292	1,168	2,920	--	0.5
	lbs/day	72.1	288	721	--	--
Mercury	µg/L	5.7675	23.2875	58.3275	--	0.8
	lbs/day	1.42	5.75	14.4	--	--
Nickel	µg/L	730	2,920	7,300	--	3.5
	lbs/day	180	721	1,800	--	--
Selenium	µg/L	2,190	8,760	21,900	--	57
	lbs/day	541	2,160	5,410	--	--
Silver	µg/L	79	385.6	998.8	--	< 0.19
	lbs/day	19.5	95.2	247	--	--
Zinc	µg/L	1,760	10,520	28,040	--	20
	lbs/day	434	2,600	6,920	--	--
Cyanide	µg/L	146	584	1,460	--	59
	lbs/day	36	144	360	--	--
Total Residual Chlorine	µg/L	292	1,168	8,760	--	460 [1]
	lbs/day	72.1	288	2,200	--	--
Ammonia (as N)	µg/L	87,600	350,400	876,000	--	36,400
	lbs/day	21,600	86,500	220,000	--	--
Acute Toxicity	TUa	--	4.65	--	--	2.5
Chronic Toxicity	TUc	--	146	--	--	40
Phenolic Compounds (non-chlorinated)	µg/L	4,380	17,520	43,800	--	< 2
	lbs/day	1,080	4,330	10,800	--	--
Endosulfan	µg/L	1.314	2.6328	3.942	--	< 0.05
	lbs/day	0.324	0.649	0.973	--	--
Endrin	µg/L	0.292	0.584	0.876	--	< 0.005
	lbs/day	0.072	0.144	0.216	--	--
HCH	µg/L	0.584	1.168	1.752	--	0.034
	lbs/day	0.14	0.288	0.433	--	--
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.					408
Acrolein	µg/L	--	--	--	32,120	< 5
	lbs/day	--	--	--	7,930	--
Antimony	µg/L	--	--	--	175,000	0.65

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
	lbs/day	--	--	--	43,300	--
Bis(2-Chloroethoxy)Methane	µg/L	--	--	--	642.4	< 0.5
	lbs/day	--	--	--	159	--
Bis(2-Chloroisopropyl)Ether	µg/L	--	--	--	175,000	< 0.5
	lbs/day	--	--	--	43,300	--
Chlorobenzene	µg/L	--	--	--	83,220	< 0.5
	lbs/day	--	--	--	20,500	--
Chromium (III)	µg/L	--	--	--	27,740,000	87
	lbs/day	--	--	--	6,850,000	--
Di-n-Butyl Phthalate	µg/L	--	--	--	511,000	< 5
	lbs/day	--	--	--	126,000	--
Dichlorobenzenes	µg/L	--	--	--	744,000	< 0.05
	lbs/day	--	--	--	184,000	--
Diethyl Phthalate	µg/L	--	--	--	4,818,000	< 5
	lbs/day	--	--	--	1,190,000	--
Dimethyl Phthalate	µg/L	--	--	--	119,720,000	< 2
	lbs/day	--	--	--	29,600,000	--
4,6-Dinitro-2-methylphenol	µg/L	--	--	--	32,120	< 0.5
	lbs/day	--	--	--	7,930	--
2,4-Dinitrophenol	µg/L	--	--	--	584	< 0.5
	lbs/day	--	--	--	140	--
Ethylbenzene	µg/L	--	--	--	598,600	< 0.5
	lbs/day	--	--	--	148,000	--
Fluoranthene	µg/L	--	--	--	2,190	< 0.5
	lbs/day	--	--	--	541	--
Hexachlorocyclopentadiene	µg/L	--	--	--	8,468	< 0.5
	lbs/day	--	--	--	2,090	--
Nitrobenzene	µg/L	--	--	--	715.4	< 0.5
	lbs/day	--	--	--	177	--
Thallium	µg/L	--	--	--	290	< 0.5
	lbs/day	--	--	--	72	--
Toluene	µg/L	--	--	--	12,410,000	< 0.5
	lbs/day	--	--	--	3,060,000	--
Tributylin	µg/L	--	--	--	0.2044	< 0.05
	lbs/day	--	--	--	0.0505	--
1,1,1-Trichloroethane	µg/L	--	--	--	78,840,000	< 0.5
	lbs/day	--	--	--	19,500,000	--
Acrylonitrile	µg/L	--	--	--	14.7	< 2
	lbs/day	--	--	--	3.6	--

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
Aldrin	µg/L	--	--	--	0.003212	< 0.005
	lbs/day	--	--	--	0.000793	--
Benzene	µg/L	--	--	--	861.4	< 0.5
	lbs/day	--	--	--	213	--
Benzidine	µg/L	--	--	--	0.010074	< 0.5
	lbs/day	--	--	--	0.00249	--
Beryllium	µg/L	--	--	--	4.818	< 0.5
	lbs/day	--	--	--	1.19	--
Bis(2-chloroethyl) ether	µg/L	--	--	--	6.57	< 0.5
	lbs/day	--	--	--	1.62	--
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	511	< 0.5
	lbs/day	--	--	--	126	--
Carbon Tetrachloride	µg/L	--	--	--	131.4	< 0.5
	lbs/day	--	--	--	32.4	--
Chlordane	µg/L	--	--	--	0.003358	< 0.005
	lbs/day	--	--	--	0.000829	--
Chlorodibromomethane	µg/L	--	--	--	1,256	< 0.5
	lbs/day	--	--	--	310	--
Chloroform	µg/L	--	--	--	18,980	< 0.5
	lbs/day	--	--	--	4,690	--
DDT	µg/L	--	--	--	0.02482	0.010
	lbs/day	--	--	--	0.00613	--
1,4-Dichlorobenzene	µg/L	--	--	--	2,628	< 5
	lbs/day	--	--	--	649	--
3,3-Dichlorobenzidine	µg/L	--	--	--	1.1826	< 0.025
	lbs/day	--	--	--	0.292	--
1,2-Dichloroethane	µg/L	--	--	--	4,090	< 0.5
	lbs/day	--	--	--	1,010	--
1,1-Dichloroethylene	µg/L	--	--	--	131.4	< 0.5
	lbs/day	--	--	--	32.4	--
Dichlorobromomethane	µg/L	--	--	--	905	< 0.5
	lbs/day	--	--	--	223	--
Dichloromethane	µg/L	--	--	--	65,700	< 0.5
	lbs/day	--	--	--	16,200	--
1,3-Dichloropropene	µg/L	--	--	--	1,299.4	< 0.5
	lbs/day	--	--	--	321	--
Dieldrin	µg/L	--	--	--	0.00584	< 0.005
	lbs/day	--	--	--	0.0014	--
2,4-Dinitrotoluene	µg/L	--	--	--	379.6	< 2

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
	lbs/day	--	--	--	93.7	--
1,2-Diphenylhydrazine	µg/L	--	--	--	23.36	< 0.5
	lbs/day	--	--	--	5.77	--
Halomethanes	µg/L	--	--	--	18,980	< 0.05
	lbs/day	--	--	--	4,690	--
Heptachlor	µg/L	--	--	--	0.0073	< 0.005
	lbs/day	--	--	--	0.0018	--
Heptachlor Epoxide	µg/L	--	--	--	0.0029	< 0.005
	lbs/day	--	--	--	0.00072	--
Hexachlorobenzene	µg/L	--	--	--	0.03066	< 0.5
	lbs/day	--	--	--	0.00757	--
Hexachlorobutadiene	µg/L	--	--	--	2,044	< 0.5
	lbs/day	--	--	--	505	--
Hexachloroethane	µg/L	--	--	--	365	< 0.5
	lbs/day	--	--	--	90.1	--
Isophorone	µg/L	--	--	--	106,580	< 0.5
	lbs/day	--	--	--	26,300	--
N-nitrosodimethylamine	µg/L	--	--	--	1,065.8	< 0.5
	lbs/day	--	--	--	263	--
N-nitrosdi-N-propylamine	µg/L	--	--	--	55.5	< 0.5
	lbs/day	--	--	--	13.7	--
N-nitrosodiphenylamine	µg/L	--	--	--	365	< 0.5
	lbs/day	--	--	--	90.1	--
PAHs	µg/L	--	--	--	1.2848	< 0.05
	lbs/day	--	--	--	0.317	--
PCBs	µg/L	--	--	--	0.002774	< 0.005
	lbs/day	--	--	--	0.000685	--
TCDD Equivalents	µg/L	--	--	--	5.694×10^{-7}	< 0.0000011
	lbs/day	--	--	--	1.4×10^{-7}	--
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	335.8	< 0.5
	lbs/day	--	--	--	82.9	--
Tetrachloroethylene	µg/L	--	--	--	290	< 0.5
	lbs/day	--	--	--	72	--
Toxaphene	µg/L	--	--	--	0.03066	< 0.005
	lbs/day	--	--	--	0.00757	--
Trichloroethylene	µg/L	--	--	--	3,942	< 0.5
	lbs/day	--	--	--	973	--
1,1,2-Trichloroethane	µg/L	--	--	--	1,372	< 0.5

Parameter	Units	Effluent Limitations				Monitoring Data (7/08 – 11/12)
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average	Maximum Reported Value
	lbs/day	--	--	--	339	--
2,4,6-Trichlorophenol	µg/L	--	--	--	42.34	< 0.5
	lbs/day	--	--	--	10.5	--
Vinyl Chloride	µg/L	--	--	--	5,256	< 0.5
	lbs/day	--	--	--	1,300	--

Source: Monterey Regional Water Pollution Control Agency, Order R3-2008-0008. Effluent data for the period from July 2008 to November 2012 retrieved from CIWQS and ICIS.

[1] This value represents the maximum reported value for total residual chlorine (August 2012). The effluent data for the period from July 2008 to November 2012 included only two values.

D. Compliance Summary

Based on the effluent data available for the period from July 2008 to November 2012, the Discharger did not violate effluent limitations.

A NPDES Permit Compliance Evaluation Inspection (CEI) was conducted at the Regional Treatment Plant on January 8, 2013.

E. Planned Changes

Brine Disposal

During the growing season, typically from March or April through October or November, MRWPCA recycles almost 100 percent of wastewater flows for irrigation uses. A small portion of secondary effluent is retained for blending with brine prior to disposal. To combat high salt concentrations in recycled wastewater, levels that are harmful to irrigated crops, in addition to a source control program, MRWPCA operates a brine disposal project to remove salts from influent flows. Approximately 4.8 million gallons of brine per year are currently diverted from the collection system and discharged directly to MRWPCA's brine disposal facilities. These wastes are not treated with influent flows and therefore do not contribute TDS to recycled wastewater.

Because of benefits to agriculture and reductions in dependence on and use of local groundwater, the MRWPCA's wastewater recycling program is very successful and enhanced by the control of salt concentrations in recycled wastewater. MRWPCA, therefore, anticipates that its brine disposal activities will increase.

This Order establishes effluent limitations, prohibitions, and monitoring requirements applicable to the discharge of brine wastes. Through the requirements of this Order the Central Coast Water Board can ensure that discharges of brine remain consistent with applicable requirements of the Clean Water Act and NPDES implementing regulations, as well as the Basin and Ocean Plans.

Groundwater Replenishment Project

The MRWPCA is moving towards pilot study of providing tertiary treatment of wastewater by micro-filtration (MF) or ultra-filtration (UF), reverse osmosis (RO), and ultra-violet (UV) hydrogen peroxide advanced oxidation. The purpose of the study is to examine the feasibility of groundwater injection of treated wastewater. This study will not result in changes to the quantity or quality of wastewater discharged from the Regional Treatment Plant during the term of this Order and is, therefore, not addressed by 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 serves as Waste Discharge Requirements (WDR's) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.

B. California Environmental Quality Act (CEQA)

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

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

1. **Water Quality Control Plans.** The Central Coast Water Board adopted the *Water Quality Control Plan for the Central Coastal Basin* (the Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan), which was adopted in 1972 and amended in 1978, 1983, 1988, 1990, 1997, 2000, 2005 and 2012. The most recent amendment to the Ocean Plan was adopted by the State Water Resources Control Board (the State Water Board) on October 16, 2012, and became effective on August 19, 2013.

   The Basin Plan implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN). Because of very high levels of total dissolved solids (TDS) in the Pacific Ocean, including Monterey Bay, the receiving waters for discharges from the Monterey

Regional Water Pollution Control Agency Regional Treatment Plant meet an exception to Resolution No. 88-63, which precludes waters with TDS levels greater than 3,000 mg/L from the MUN designation. Beneficial uses established by the Basin Plan for coastal waters between the Salinas River and Point Pinos are as follows:

Table F-4. Basin Plan Beneficial Uses for the Pacific Ocean

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean (Monterey Bay)	• Water Contact and Non-Contact Recreation • Industrial Service Supply • Navigation • Marine Habitat • Shellfish Harvesting • Commercial and Sport Fishing • Rare, Threatened, or Endangered Species

To protect the beneficial uses, the Basin Plan establishes water quality objectives and implementation programs. This Order's requirements implement the Basin Plan.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains the following temperature objective for existing discharges to enclosed bays and coastal waters of California.

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

   The Ocean Plan defines elevated temperature wastes as:

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

3. **California Ocean Plan**. The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, and 2012. The State Water Board adopted the latest amendment on October 16, 2012, and was approved by the Office of Administrative Law on July 3, 2013, and subsequently the USEPA. The Ocean Plan is applicable, in its entirety, to point source discharges to the Pacific Ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in Table F-5, below.

Table F-5. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Use(s)
001	Pacific Ocean (Monterey Bay)	• Industrial Water Supply • Water Contact and Non-Contact Recreation, including Aesthetic Enjoyment • Navigation • Commercial and Sport Fishing • Mariculture • Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS) • Rare and Endangered Species • Marine Habitat • Fish Migration • Fish Spawning and Shellfish Harvesting

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

4. **Antidegradation Policy.** Federal regulation 40 C.F.R. § 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 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Central Coast Water Board's Basin Plan implements, and incorporates by reference both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provisions of 40 C.F.R. § 131.12 and State Water Board Resolution 68-16.

6. **Anti-Backsliding Requirements.** Sections 402 (o)(2) and 303 (d)(4) of the CWA and federal regulations at 40 C.F.R. § 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed.

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

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

CWA section 303 (d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303 (d) listed water bodies and pollutants, the Central Coast Water Board must develop and implement TMDLs (Total Maximum Daily Loads) that will specify WLAs (Waste Load Allocations) for point sources and Load Allocations for non-point sources.

Monterey Harbor is identified as impaired by metals and sediment toxicity on the State's 2008-2010 303 (d) list of impaired water bodies, which was approved by U.S. EPA on November 12, 2011. The discharge is approximately ten miles from Monterey Harbor and not anticipated to affect this impairment. The main body of Monterey Bay is not identified on the 303 (d) List as impaired.

E. Other Plans, Policies and Regulations

1. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, the Order requires, if applicable, the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

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

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. NPDES regulations establish two principal bases for effluent limitations. At 40 C.F.R. § 122.44 (a) permits are required to include applicable technology-based limitations and standards; and at 40 C.F.R. § 122.44 (d) permits are required to include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. When

numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 C.F.R. § 122.44 (d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using U.S. EPA criteria guidance published under CWA Section 304 (a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

A. Discharge Prohibitions

1. Discharge Prohibition II.A (No discharge to Monterey Bay at a location other than as described by the Order). The Order authorizes a single, specific point of discharge to Monterey Bay; and this prohibition reflects CWA section 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition is also retained from the previous permit.

2. Discharge Prohibition II.B (The rate of discharge to Monterey Bay shall not exceed 81.2 MGD). This prohibition reflects the design capacity of the ocean outfall and allows the discharge of blended secondary effluent and brine wastes above the design flow capacity of the secondary treatment facility.

3. Discharge Prohibition II.C (The influent flow to the secondary treatment system shall not exceed 29.6 MGD average dry weather flow and 75.6 MGD peak wet weather flow). This prohibition reflects the design capacity of the secondary treatment system and is intended to limit influent wastewater flows to that of the treatment facility design flows.

4. Discharge Prohibition II.D (Overflows and bypasses prohibited). The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 C.F.R. § 122.41(m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by this Order.

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

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

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

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

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

Table F-6. Secondary Treatment Requirements

Parameter	Effluent Limitation		
	30-Day Avg	7-Day Avg	Percent Removal [1]
$CBOD_5$ [2]	25 mg/L	40 mg/L	85
TSS	30 mg/L	45 mg/L	85
pH	6.0 – 9.0		---

[1] 30-day average
[2] At the option of the permitting authority, effluent limitations for $CBOD_5$ may be substituted for those limitations specified for BOD_5.

In addition, the State Water Board, in Table 2 of the Ocean Plan, has established technology-based requirements, applicable to all POTWs, for oil and grease, suspended and settleable solids, turbidity, and pH.

2. Applicable Technology-Based Effluent Limitations

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

Table F-7. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
$CBOD_5$ [1]	mg/L	25	40	85	--

	lbs/day	6,200	10,000	21,000	--
TSS [1]	mg/L	30	45	90	--
	lbs/day	7,400	11,000	22,000	--
Oil & Grease	mg/L	25	40	75	--
	lbs/day	6,200	10,000	19,000	--
Settleable Solids	mL/L/hr	1.0	1.5	--	3.0
Turbidity	NTUs	75	100	--	230
pH	pH units	6.0 – 9.0 at all times			

[1] 30-day average percent removal shall not be less than 85%.

All technology-based limitations are retained from the previous permit and are required by NPDES regulations at 40 C.F.R. part 133 and/or Table 2 of the Ocean Plan. Mass-based limitations for $CBOD_5$, TSS, and oil and grease are based on a discharge rate of 29.6 MGD, the average dry weather flow design treatment capacity of the Monterey Regional Water Pollution Control Agency Regional Treatment Plant.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

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

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the requirements of 40 C.F.R. § 122.44 (d) (1) (vi), 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.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses for ocean waters of the Central Coast Region are established by the Basin Plan and Ocean Plan and are described in section III.C of this Fact Sheet.

Water quality criteria applicable to ocean waters of the Region are established by the Ocean Plan, which includes water quality objectives for bacterial characteristics,

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

3. Determining the Need for WQBELs

Procedures for performing an (RPA for ocean dischargers are described in Section III.C and Appendix VI of the Ocean Plan. The procedure is a statistical method that projects an effluent data set while taking into account the averaging period of WQOs, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set, and compares the 95th percentile concentration at 95 percent confidence of each Table 1 pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three following endpoints.

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

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

Endpoint 3 - The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in Appendix III (Ocean Plan), is required. An existing effluent limitation for the pollutant shall remain in the permit, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to an excursion above a Table 1 water quality objective.

The State Water Board has developed a reasonable potential calculator (RPcalc 2.0), which is available at:

http://www.swrcb.ca.gov/water_issues/programs/ocean/docs/trirev/stakeholder050505/rpcalc20_setup.exe

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

a. First Path

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

b. Second Path

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

c. Third Path

If the effluent data contain 3 or more detected and quantified values (i.e., values that are at or above the minimum level (ML)), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95th percentile concentration is determined at 95 percent confidence for each pollutant, and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed lognormally. If the 95th percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contain 3 or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

Table F-8. RPA Results for Discharges to Monterey Bay

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

Objectives for Protection of Marine Aquatic Life					
Ammonia (as N)	600	39	0	249	**Endpoint 2 – Effluent limitation not required.**
Arsenic	8	8	3	3.0	**Endpoint 2 – Effluent limitation not required.**
Cadmium	1	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorinated Phenolics	1	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (VI)	2	18	0	0.89	**Endpoint 1 – Effluent limitation is necessary.**
Copper	3	8	3	2.1	**Endpoint 2 – Effluent limitation not required.**
Cyanide	1	8	0	0.40	**Endpoint 1 – Effluent limitation is necessary.**
Endosulfan (total)	0.009	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Endrin	0.002	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
HCH	0.004	8	7	0.00023	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Lead	2	8	7	0.0034	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Mercury	0.04	8	3	0.0060	**Endpoint 2 – Effluent limitation not required.**
Nickel	5	8	3	0.024	**Endpoint 2 – Effluent limitation not required.**
Non-chlorinated Phenolics	30	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Selenium	15	8	0	0.39	**Endpoint 1 – Effluent limitation is necessary.**
Silver	0.7	8	8	0.16	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Total Residual Chlorine	2	21	19	3.2	**Endpoint 1 – Effluent limitation is necessary.**
Zinc	20	8	3	8.1	**Endpoint 2 – Effluent limitation not required.**
Objectives for Protection of Human Health - Noncarcinogens					
1,1,1-Trichloroethane	540000	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrophenol	4.0	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2-Methyl-4,6-Dinitrophenol	220	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrolein	220	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Antimony	1200	8	7	0.0045	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethoxy)Methane	4.4	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroisopropyl)Ether	1200	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorobenzene	570	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chromium (III)	190000	8	1	0.60	**Endpoint 2 – Effluent limitation not required.**
Dichlorobenzenes	5100	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Diethyl Phthalate	33000	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Dimethyl Phthalate	820000	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Di-n-Butyl Phthalate	3500	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Ethylbenzene	4100	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Fluoranthene	15	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorocyclo-pentadiene	58	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Nitrobenzene	4.9	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Thallium	2	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toluene	85000	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tributylin	0.0014	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Objectives for Protection of Human Health - Carcinogens					
1,1,2,2-Tetrachloroethane	2.3	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1,2-Trichloroethane	9.4	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,1-Dichloroethylene	0.9	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,2-Dichloroethane	28	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

1,2-Diphenylhydrazine	0.16	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,3-Dichloropropylene	8.9	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
1,4-Dichlorobenzene	18	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
TCDD Equivalents	3.9×10^{-9}	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4,6-Trichlorophenol	0.29	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
2,4-Dinitrotoluene	2.6	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
3,3'-Dichlorobenzidine	0.0081	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Acrylonitrile	0.10	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Aldrin	2.2×10^{-5}	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzene	5.9	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Benzidine	6.9×10^{-5}	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Beryllium	0.033	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Chloroethyl)Ether	0.045	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Bis(2-Ethylhexyl)Phthalate	3.5	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Carbon Tetrachloride	0.90	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlordane	2.3×10^{-5}	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chlorodibromomethane	8.6	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Chloroform	130	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
DDT (total)	0.00017	18	17	0.00068	**Endpoint 2 – Effluent limitation not required.**
Dichlorobromomethane	6.2	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

Dieldrin	0.00004	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Halomethanes	130	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor	0.00005	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Heptachlor Epoxide	0.00002	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobenzene	0.00021	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachlorobutadiene	14	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Hexachloroethane	2.5	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Isophorone	730	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Methylene Chloride	450	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodimethylamine	7.3	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodi-n-Propylamine	0.38	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
N-Nitrosodiphenylamine	2.5	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PAHs (total)	0.0088	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
PCBs	1.9×10^{-5}	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Tetrachloroethylene	2.0	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Toxaphene	0.00021	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Trichloroethylene	27	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.
Vinyl Chloride	36	8	8	ND	Endpoint 3 – RPA is inconclusive. Less than 3 detects or greater than 80% ND.

(1) If the number of censored values (those expressed as a "less than" value) account for less than 80 percent of the total number of effluent values, calculate the M_L (the mean of the natural log of transformed data) and S_L (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.

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

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than 3 detected and quantified values, or when the effluent data set contains 3 or more detected and quantified values but the number of censored values accounts for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective, and accounting for ties. The sample number is reduced by one for each tie, when the dilution-adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limits in the expiring permit are retained.

An RPA was conducted using effluent data reported from monitoring events from July 2008 to November 2012. The effluent data was obtained from eSMR data posted to CIWQS and from DMR data posted to ICIS for Monitoring Location EFF-001, which represents flow-weighted concentrations based on each flow stream contribution (i.e., brine wastes and secondary effluent). The following tables present results of the RPA, performed in accordance with procedures described by the Ocean Plan for the Monterey Regional Water Pollution Control Agency Regional Treatment Plant. The maximum effluent concentration adjusted for complete mixing, the applicable WQO, and the RPA endpoint for each Table 1 pollutant is identified. As shown in the following tables, the RPA commonly lead to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as ND (not detected). In these circumstances, the Central Coast Water Board concludes that additional monitoring will be required for those pollutants during the term of the reissued permit and existing effluent limits will be retained.

4. WQBEL Calculations

Based on results of the RPA, performed in accordance with methods of the Ocean Plan for discharges to the Pacific Ocean, the Central Coast Water Board is establishing WQBELs for chromium (VI), cyanide, selenium, and total residual chlorine based on a conclusion of Endpoint 1. An Endpoint 2 was concluded for ammonia, arsenic, chromium (III), copper, mercury, nickel, zinc, and DDT (total). Effluent limits are not required for pollutants resulting in an Endpoint 2. All other Ocean Plan Table 1 pollutants resulted in an Endpoint 3; therefore, the limits for these pollutants are retained in this Order. The Regional Water Board is also

establishing WQBELs for whole effluent, acute and chronic toxicity, which are also pollutants or pollutant parameters identified by Table 1 of the Ocean Plan, based on information about the receiving water and/or the discharge instead of characterization of effluent monitoring data.

As described by Section III. C of the Ocean Plan, effluent limits for Table 1 pollutants are calculated according to the following equation.

$$Ce = Co + Dm (Co – Cs)$$

Where …

Ce = the effluent limitation (µg/L)

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

Cs = background seawater concentration (µg/L)

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 145)

For the Monterey Regional Water Pollution Control Agency, the Dm of 145 is unchanged from Order No. R3-2008-0008. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. As site-specific water quality data are not available, in accordance with Table 1 implementing procedures, Cs equals zero for all pollutants, except the following.

Table F-9. Background Concentrations (Cs) - Ocean Plan (Table 3)

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

For all other Table 1 parameters, Cs=0

Applicable water quality objectives from Table 1 of the Ocean Plan are as follows.

Table F-10. Water Quality Objectives (Co)–Ocean Plan (Table 1)
Objectives for Protection of Marine Aquatic Life

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/L	8	32	80
Cadmium	µg/L	1	4	10
Chromium (VI)	µg/L	2	8	20
Copper	µg/L	3	12	30

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Lead	µg/L	2	8	20
Mercury	µg/L	0.04	0.16	0.4
Nickel	µg/L	5	20	50
Selenium	µg/L	15	60	150
Silver	µg/L	0.7	2.8	7
Zinc	µg/L	20	80	200
Cyanide	µg/L	1	4	10
Total Chlorine Residual	µg/L	2	8	60
Ammonia	µg/L	600	2400	6000
Acute Toxicity	TUa	-------	0.3	-------
Chronic Toxicity	TUc	-------	1	-------
Non-chlorinated Phenolics	µg/L	30	120	300
Chlorinated Phenolics	µg/L	1	4	10
Endosulfan (total)	µg/L	0.009	0.018	0.027
Endrin	µg/L	0.002	0.004	0.006
HCH	µg/L	0.004	0.008	0.012
Radioactivity	µg/L	-------	-------	-------

Table F-11. Water Quality Objectives (Co)–Ocean Plan (Table 1) Objectives for Protection of Human Health – (Non-Carcinogens)

Pollutant	Units	30-day Average
Acrolein	µg/L	220
Antimony	µg/L	1200
Bis(2-Chloroethoxy)Methane	µg/L	4.4
Bis(2-Chloroisopropyl)Ether	µg/L	1200
Chlorobenzene	µg/L	570
Chromium (III)	µg/L	190,000
Di-n-Butyl Phthalate	µg/L	3500
Dichlorobenzenes	µg/L	5100
Diethyl Phthalate	µg/L	33000
Dimethyl Phthalate	µg/L	820,000
2-Methyl-4,6-Dinitrophenol	µg/L	220
2,4-Dinitrophenol	µg/L	4
Ethylbenzene	µg/L	4100
Fluoranthene	µg/L	15
Hexachlorocyclopentadiene	µg/L	58
Nitrobenzene	µg/L	4.9
Thallium	µg/L	2
Toluene	µg/L	85,000
Tributyltin	µg/L	0.0014
1,1,1-Trichloroethane	µg/L	540,000

Table F-12. Water Quality Objectives (Co)–Ocean Plan (Table 1) Objectives for Protection of Human Health – (Carcinogens)

Pollutant	Units	30-day Average
Acrylonitrile	µg/L	0.1
Aldrin	µg/L	0.000022
Benzene	µg/L	5.9
Benzidine	µg/L	0.000069
Beryllium	µg/L	0.033
Bis(2-Chloroethyl)Ether	µg/L	0.045
Bis(2-Ethylhexyl)Phthalate	µg/L	3.5
Carbon Tetrachloride	µg/L	0.9
Chlordane	µg/L	0.000023
Chlorodibromomethane	µg/L	8.6
Chloroform	µg/L	130
DDT (total)	µg/L	0.00017
1,4 Dichlorobenzene	µg/L	18
3,3'-Dichlorobenzidine	µg/L	0.0081
1,2-Dichloroethane	µg/L	28
1,1-Dichloroethylene	µg/L	0.9
Dichlorobromomethane	µg/L	6.2
Methylene Chloride	µg/L	450
1,3-Dichloropropylene	µg/L	8.9
Dieldrin	µg/L	0.00004
2,4-Dinitrotoluene	µg/L	2.6
1,2-Diphenylhydrazine	µg/L	0.16
Halomethanes	µg/L	130
Heptachlor	µg/L	0.00005
Heptachlor Epoxide	µg/L	0.00002
Hexachlorobenzene	µg/L	0.00021
Hexachlorobutadiene	µg/L	14
Hexachloroethane	µg/L	2.5
Isophorone	µg/L	730
N-Nitrosodimethylamine	µg/L	7.3
N-Nitrosodi-n-Propylamine	µg/L	0.38
N-Nitrosodiphenylamine	µg/L	2.5
PAHs (total)	µg/L	0.0088
PCBs	µg/L	0.000019
TCDD Equivalents	µg/L	0.0000000039
1,1,2,2-Tetrachloroethane	µg/L	2.3
Tetrachloroethylene	µg/L	2
Toxaphene	µg/L	0.00021
Trichloroethylene	µg/L	27
1,1,2-Trichloroethane	µg/L	9.4
2,4,6-Trichlorophenol	µg/L	0.29
Vinyl Chloride	µg/L	36

Effluent limits are calculated using the equation Ce = Co + Dm (Co – Cs) as outlined above. As an example, effluent limitations are calculated as follows for total residual chlorine, chronic toxicity, and acute toxicity.

Total Residual Chlorine

Ce = 2 + 145 (2 – 0) = 292 µg/L (6-Month Median)

Ce = 8 + 145 (8 – 0) = 1,168 µg/L (Daily Maximum)

Ce = 60 + 145 (60 – 0) = 8,760 (Instantaneous Maximum)

Chronic Toxicity

Ce = 1 + 145 (1 - 0) = 146 TUc (Daily Maximum)

Acute Toxicity

To determine an effluent limitation for acute toxicity, the Ocean Plan allows a mixing zone that is ten percent of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (the zone of initial dilution); and therefore, the effluent limitation for acute toxicity is determined by the following equation:

Ce = Co + (0.1) Dm (Co)

Where Co equals 0.3 and Dm equals 145, the effluent limitation for acute toxicity is 4.7 TUa.

Mass Based Effluent Limitations

Implementing provisions at Section III. C of the Ocean Plan require that, in addition to concentration-based limits, effluent limitations for Table 1 pollutants be expressed in terms of mass. Therefore, the Order includes mass-based limits based on a flow rate of 29.6 MGD.

Significant Figures

For consistency purposes, all limits calculated are expressed with two significant digits.

Table F-13. Effluent Limitations for the Protection of Marine Aquatic Life

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Cadmium	µg/L	150	580	1,500
	lb/day[1]	36	140	360
Chromium (Hexavalent) [2]	µg/L	290	1,200	2,900
	lb/day[1]	72	290	720
Lead	µg/L	290	1,200	2,900
	lb/day[1]	72	290	720
Selenium	µg/L	2,200	8,800	22,000
	lb/day[1]	540	2,200	5,400
Silver	µg/L	79	390	1,000
	lb/day[1]	20	95	250

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Cyanide [3]	µg/L	150	580	1,500
	lb/day[1]	36	140	360
Total Residual Chlorine [4]	µg/L	290	1,200	8,800
	lb/day[1]	72	290	2,200
Acute Toxicity [5]	TUa	---	4.7	---
Chronic Toxicity [5]	TUc	---	150	---
Phenolic Compounds (non-chlorinated)	µg/L	4,400	18,000	44,000
	lb/day[1]	1,100	4,300	11,000
Endosulfan	µg/L	1.3	2.6	3.9
	lb/day[1]	0.32	0.65	0.97
Endrin	µg/L	0.29	0.58	0.88
	lb/day[1]	0.072	0.14	0.22
HCH	µg/L	0.58	1.2	1.8
	lb/day[1]	0.14	0.29	0.43
Radioactivity	--	Not to exceed limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443		

[1] Mass limitations are based on 29.6 MGD maximum effluent flow.
[2] The Discharger may at their option meet this objective as a total chromium objective.
[3] If a discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR PART 136, as revised May 14, 1999.
[4] Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours shall be determined using the following equation:
$\log_y = -0.43(\log_x)+1.8$ where: y = the water quality objective (in µg/L) to apply when chlorine is being discharged; and
x = the duration of uninterrupted chlorine discharge in minutes.
The applicable effluent limitation must then be determined using Equation No. 1 from the Ocean Plan.
[5] See Attachment A for applicable definitions.

Table F-14. Effluent Limitations for the Protection of Human Health (Non-Carcinogens)

Pollutant	Unit	30-day Average
Acrolein	µg/L	32,000
	lb/day[1]	7,900
Antimony	µg/L	180,000
	lb/day[1]	43,000
Bis(2-Chloroethoxy)Methane	µg/L	640
	lb/day[1]	160
Bis(2-Chloroisopropyl)Ether	µg/L	180,000
	lb/day[1]	43,000
Chlorobenzene	µg/L	83,000
	lb/day[1]	21,000
Di-n-Butyl Phthalate	µg/L	510,000
	lb/day[1]	130,000
Dichlorobenzenes	µg/L	740,000

Pollutant	Unit	30-day Average
	lb/day[1]	180,000
Diethyl Phthalate	µg/L	4,800,000
	lb/day[1]	1,200,000
Dimethyl Phthalate	µg/L	120,000,000
	lb/day[1]	30,000,000
2-Methyl-4,6-Dinitrophenol	µg/L	32,000
	lb/day[1]	7,900
2,4-Dinitrophenol	µg/L	580
	lb/day[1]	140
Ethylbenzene	µg/L	600,000
	lb/day[1]	150,000
Fluoranthene	µg/L	2,200
	lb/day[1]	540
Hexachlorocyclopentadiene	µg/L	8,500
	lb/day[1]	2,100
Nitrobenzene	µg/L	720
	lb/day[1]	180
Thallium	µg/L	290
	lb/day[1]	72
Toluene	µg/L	12,000,000
	lb/day[1]	3,100,000
Tributylin	µg/L	0.20
	lb/day[1]	0.050
1,1,1-Trichloroethane	µg/L	79,000,000
	lb/day[1]	19,000,000

[1] Mass limitations are based on 29.6 MGD maximum effluent flow.

Table F-15. Effluent Limitations for the Protection of Human Health (Carcinogens)

Pollutant	Unit	30-day Average
Acrylonitrile	µg/L	15
	lb/day[1]	3.6
Aldrin	µg/L	0.0032
	lb/day[1]	0.00079
Benzene	µg/L	860
	lb/day[1]	210
Benzidine	µg/L	0.010
	lb/day[1]	0.0025
Beryllium	µg/L	4.8
	lb/day[1]	1.2
Bis(2-Chloroethyl)Ether	µg/L	6.6
	lb/day[1]	1.6
Bis(2-Ethylhexyl)Phthalate	µg/L	510
	lb/day[1]	130
Carbon Tetrachloride	µg/L	130

Pollutant	Unit	30-day Average
	lb/day[1]	32
Chlordane	µg/L	0.0034
	lb/day[1]	0.00083
Chlorodibromomethane	µg/L	1,300
	lb/day[1]	310
Chloroform	µg/L	19,000
	lb/day[1]	4,700
1,4 Dichlorobenzene	µg/L	2,600
	lb/day[1]	650
3,3'-Dichlorobenzidine	µg/L	1.2
	lb/day[1]	0.29
1,2-Dichloroethane	µg/L	4,100
	lb/day[1]	1,000
1,1-Dichloroethylene	µg/L	130
	lb/day[1]	32
Dichlorobromomethane	µg/L	910
	lb/day[1]	220
Dichloromethane (Methylene Chloride)	µg/L	66,000
	lb/day[1]	16,000
1,3-Dichloropropene	µg/L	1,300
	lb/day[1]	320
Dieldrin	µg/L	0.0058
	lb/day[1]	0.0014
2,4-Dinitrotoluene	µg/L	380
	lb/day[1]	94
1,2-Diphenylhydrazine	µg/L	23
	lb/day[1]	5.8
Halomethanes	µg/L	19,000
	lb/day[1]	4,700
Heptachlor	µg/L	0.0073
	lb/day[1]	0.0018
Heptachlor Epoxide	µg/L	0.0029
	lb/day[1]	0.00072
Hexachlorobenzene	µg/L	0.031
	lb/day[1]	0.0076
Hexachlorobutadiene	µg/L	2,000
	lb/day[1]	500
Hexachloroethane	µg/L	370
	lb/day[1]	90
Isophorone	µg/L	110,000
	lb/day[1]	26,000
N-Nitrosodimethylamine	µg/L	1,100
	lb/day[1]	260
N-Nitrosodi-n-Propylamine	µg/L	55

Pollutant	Unit	30-day Average
	lb/day[1]	14
N-Nitrosodiphenylamine	µg/L	370
	lb/day[1]	90
PAHs (total)	µg/L	1.3
	lb/day[1]	0.32
PCBs	µg/L	0.0028
	lb/day[1]	0.00068
TCDD Equivalents	µg/L	5.7E-07
	lb/day[1]	1.4E-07
1,1,2,2-Tetrachloroethane	µg/L	340
	lb/day[1]	83
Tetrachloroethylene	µg/L	290
	lb/day[1]	72
Toxaphene	µg/L	0.031
	lb/day[1]	0.0076
Trichloroethylene	µg/L	3,900
	lb/day[1]	970
1,1,2-Trichloroethane	µg/L	1,400
	lb/day[1]	340
2,4,6-Trichlorophenol	µg/L	42
	lb/day[1]	10
Vinyl Chloride	µg/L	5,300
	lb/day[1]	1,300

[1] Mass limitations are based on 29.6 MGD maximum effluent flow.

5. Whole Effluent Toxicity (WET)

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

The Central Coast Water Board has retained acute and chronic toxicity limitations from the previous permit. Further, the effluent limitations have been calculated based on a minimum probable initial dilution of 145 to 1.

The Discharger must also maintain a Toxicity Reduction Evaluation (TRE) Workplan, which describes steps that the Discharger intends to follow in the event that acute and/or chronic toxicity limitations are exceeded. When monitoring measures WET in the effluent above the limitations established by the Order, the Discharger must

resample, if the discharge is continuing, and retest. The Executive Officer will then determine whether to initiate enforcement action, whether to require the Discharger to implement a Toxicity Reduction Evaluation, or to implement other measures.

D. Final Effluent Limitations

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

1. Satisfaction of Anti-Backsliding Requirements

The Order retains effluent limitations established by the previous permit for BOD_5, $CBOD_5$, TSS, oil and grease, settleable solids, turbidity, pH, total coliform, fecal coliform, enterococcus bacteria, total residual chlorine, acute toxicity and chronic toxicity. All WQBELs for Ocean Plan Table 1 pollutants were retained except for those for arsenic, copper, mercury, nickel, zinc, ammonia, chromium (III), and DDT based on results of the RPA as outlined in section IV.C.3 of this Fact Sheet.

The Ocean Plan was amended in 2005 to include a procedure for determining "reasonable potential" by characterization of effluent monitoring data. A RPA, using the updated Ocean Plan procedure, resulted in "no reasonable potential" (endpoint 2) for arsenic, copper, mercury, nickel, zinc, ammonia, chromium (III), and DDT.

Elimination of WQBELs for Table 1 pollutants is consistent with the exception to the CWA's anti-backsliding requirements expressed at section 402(o)(2)(B)(i) of the Act, which allows a reissued permit to include less stringent limitations when "information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods), and which would have justified the application of a less stringent effluent limitation at the time of permit issuance." In these circumstances, less stringent limitations (the elimination of limitations per the RPA) are based on new data, which were generated during the term of the previous permit, and which demonstrate no reasonable potential for discharges from the Facility to cause or contribute to exceedances of applicable water quality standards for arsenic, copper, mercury, nickel, zinc, ammonia, chromium (III), and DDT.

Consequently, the Order does not contain effluent limitations or prohibitions that are less stringent than the previous permit and is consistent with the anti-backsliding requirements.

2. Satisfaction of Antidegradation Policy

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

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 $CBOD_5$; TSS; settleable solids; turbidity; oil and grease; and pH. Restrictions on these pollutants are discussed in section IV. B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

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

E. Interim Effluent Limitations

The Order does not establish interim effluent limitations and schedules for compliance with final limitations. Interim limitations are authorized only in certain circumstances, when immediate compliance with newly established final water quality based limitations is not feasible.

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Receiving water limitations within the proposed Order include the receiving water limitations of the previous Order.

B. Groundwater

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

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring

In addition to influent flow monitoring, influent monitoring for BOD_5 and TSS is required to determine compliance with the Order's 85 percent removal requirement for those pollutants.

B. Effluent Monitoring

Effluent monitoring requirements of the previous permit for Discharge Point 001 (the Ocean outfall) are retained in this Order.

Current Monitoring Protocol. The Discharger's outfall and brine discharge facilities currently do not allow for aggregate flow metering or sampling of as-discharged combined secondary effluent and brine wastes at high secondary effluent flows (during wet season when recycling is not being implemented) above what is required for blending to safely meet the prescribed effluent limitations. Brine wastes are stored in a holding pond and are discharged from the holding pond through a structure that allows for mixing brine wastes with secondary effluent. During the dry season, when the Discharger is recycling essentially 100% of the wastewater flow less what is needed for blending with brine wastes, the Facility is capable of aggregate flow metering and sampling downstream of a static mixer prior to entering the outfall. During the dry season, brine waste discharge flows (with minimum required secondary effluent blending) and high volume secondary effluent flows are currently metered separately and are sampled separately via grab samples that are manually composited based on the as-discharged flow proportions entering the outfall. Effluent monitoring per the Discharger's current facility configuration and effluent monitoring protocol is acceptable until the brine waste disposal facility is upgraded to handle anticipated increases in brine flows and facilitate year-round blended secondary effluent and brine waste flow metering and sampling (see Special Provision c. within section V.C.2 of the Order).

Wastewater monitored at Monitoring Location EFF-001 is a combination of brine wastes and secondary effluent. Effluent monitoring data that are reported for compliance purposes represent flow-weighted concentrations based on each flow stream contribution, which ensures a representative sample of effluent discharged from the Regional Treatment Plant.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. This Order retains acute and chronic WET limitations and monitoring requirements from the previous permit for Discharge Point 001.

D. Receiving Water Monitoring

1. Surface Water Monitoring

The Order retains the surface water receiving water monitoring from the previous permit.

2. Groundwater

Groundwater monitoring requirements are not established by the Order.

E. Other Monitoring Requirements

1. Biosolids/Sludge Monitoring.

Biosolids monitoring requirements are retained from the previous Order.

2. Pretreatment Monitoring.

This Order retains the requirements of the previous permit to conduct pretreatment monitoring and reporting.

3. Outfall Inspection.

This Order retains the requirement of the previous permit to conduct annual, visual inspections (including dye tracer tests) of the outfall structure and report to the Central Coast Water Board regarding its physical integrity.

4. MBNMS Spill Reporting.

This Order retains the requirement of the previous permit to report all sewage spills under its control that are likely to enter ocean waters, directly to the MBNMS office.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387 (e).

B. Special Provisions

1. Reopener Provisions

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

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The requirement to maintain a Toxicity Reduction Work Plan is retained from Order No. R3-2008-0008. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitation established by the Order, the Discharger is required to resample and retest, if the discharge is continuing. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or whether other measures are warranted.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The 2012 California Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a program becomes necessary.

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Biosolids Management

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

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

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

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

6. Other Special Provisions

a. Discharges of Storm Water

The Order does not address discharges of storm water from the treatment and disposal site, except to require coverage by and compliance with applicable provisions of General Permit No. CAS000001 - *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*.

b. Sanitary Sewer System Requirements

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

7. Compliance Schedules

The Order does not establish interim effluent limitations and schedules of compliance with final limitations.

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board considered the issuance of waste discharge requirements (WDRs) that serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Monterey Regional Water Pollution Control Agency Regional Treatment Plant. As a step in the WDR adoption process, the Central Coast Water Board staff developed tentative WDRs. The Central Coast Water Board encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and provided them with an opportunity to submit their written comments and recommendations. Notification was provided through **posting in the Salinas Californian on February 26, 2014**.

B. Written Comments

Staff received three written comments from the Monterey Bay National Marine Sanctuary on February 27, 2014. Those comments are summarized, along with staff's response to the comments, as follows:

1. The MBNMS requested that MRWPCA send annual reports and the brine waste disposal study to the MBNMS office.

Staff Response: Requirements for MRWPCA to send annual reports and the brine waste disposal study to the MBNMS office are included on pages D-14 and 14, respectively.

2. The MBNMS requested improvements to the map on page B-1.

Staff Response: Improvements were made to the map on page B-1.

3. The MBNMS requested that MRWPCA immediately notify the MBNMS office in the event spills enter ocean waters.

Staff Response: A requirement for MRWPCA to notify the MBNMS office in the event spills enter ocean waters is included on page E-18.

Staff received written comments from the Monterey Regional Water Pollution Control Agency, via correspondence dated March 21, 2014. Those comments are summarized, along with staff's response to the comments, as follows:

1. Page 1, Table 1. Discharger Information: include mailing address: 5 Harris Court, Building D, Monterey, CA 93940.

Staff Response: Edits were not made to the Order. This information is contained in the fact sheet, Table F-1.

2. Page 1, Table 2. Include a footnote that the termination of the MRWPCA Outfall is outside the National Marine Sanctuary Zone of Prohibition.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

3. Page 3, MRWPCA recommends including a Facility Information Section within the Order and the addition of the previous Table 4. See Below:

I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	*Monterey Regional Water Pollution Control Agency*
Name of Facility	*Regional Treatment Plant*
Facility Address	*14811 Del Monte Blvd*
	Marina, CA 93933
	Monterey County
Facility Contact, Title, and Phone	*James Dix, Operations Manager, (831) 883-6183*
Environmental Contact	*Garrett Haertel, Compliance Engineer, (831) 883-6176*
Mailing Address	*MRWPCA, 5 Harris Court, Bldg D, Monterey, CA 93940*
Type of Facility	*POTW*
Facility Design Flows	
Average dry weather flow [1]	*29.6 million gallons per day (MGD)*
Peak wet weather flow [1]	*75.6 MGD*
Ultimate wet weather flow [2]	*81.2 MGD*

[1] *Treatment system*
[2] *Ocean outfall*

Staff Response: Edits were not made to the Order. This information is contained in the fact sheet, Table F-1.

4. *Page 3. MRWPCA also recommends reestablishing the "Background" and "Facility Description" Sections under the Findings Heading. From the previous permit:*

A. Background. *The Monterey Regional Water Pollution Control Agency (MRWPCA) is currently discharging pursuant to Order No. R3-2008-0008 and National Pollutant Discharge Elimination System (NPDES) Permit No.CA0048551. The Discharger submitted a Report of Waste Discharge, dated November 21, 2012, and applied for an NPDES permit renewal to discharge up to 29.6 MGD average dry weather flow of treated wastewater from the MRWPCA's Regional Treatment Plant. The application was deemed complete on March 15, 2013.*

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

B. Facility Description. *The MRWPCA, which currently serves a population of approximately 252,000, was created in 1972. MRWPCA consists of and provides regional wastewater treatment, disposal and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas, the Seaside Sanitation District, the Castroville, Moss Landing and Boronda Community Service Districts, and Fort Ord. Each member entity retains ownership and operating/maintenance responsibility for wastewater collection and transport systems up to the point of connection with interceptors owned and operated by the Discharger. Residential, commercial, and industrial wastewater is conveyed to the MRWPCA Regional Treatment Plant. The plant has an average dry weather design treatment capacity of 29.6 MGD and a peak wet weather design capacity of 75.6 MGD. The facility began operation in 1990, replacing six local wastewater treatment facilities.*

In winter months, secondary treated wastewater from the Regional Treatment Plant is discharged through a diffuser, positioned 11,260 feet offshore at a depth of approximately 100 feet, to Monterey Bay. The diffuser was designed to convey ultimate wet weather flows of 81.2 MGD. In summer months, treated wastewater is recycled for irrigation of 12,000 acres of farmland in the northern Salinas Valley. Tertiary treatment of recycled wastewater is provided for design flows of up to 29.6 MGD by the Salinas Valley Reclamation Project (SVRP), which holds tertiary treated wastewater in an 80 acre-foot storage pond before it is distributed to farmland by the Castroville Seawater Intrusion Project (CSIP). The irrigation use of recycled wastewater reduces regional dependence on and use of local groundwater, thereby minimizing saltwater intrusion.

Wastewater treatment at the Regional Treatment Plant includes aerated grit removal, primary clarifiers, trickling filters, solids contact, secondary clarifiers, and filtration. Undisinfected secondary clarifier effluent is discharged through Discharge Point 001. Sludge removed from primary and secondary treatment is thickened using dissolved air floatation and gravity thickeners. It is then pumped to anaerobic digesters where organic matter is consumed and the sludge volume is reduced. The sludge drying beds and belt filter press have been replaced with a Biosolids Dewatering Facility constructed in 2007, utilizing two very large screw presses. The current capacity of the Biosolids Facility is 19.8 dry tons per day (dtpd) at 25% solids content. A significant advantage of the new facility is that it produces biosolids cake 24 hours per day and seven days per week in any weather condition. The holding lagoons and some of the drying beds may still be utilized for emergency storage in case the screw presses require a shut down. The biosolids cake is currently being hauled to the adjacent landfill, where it is mixed with wood products and used for slope cover.

Because irrigation uses of recycled wastewater are sensitive to elevated levels of total dissolved solids (TDS), the MRWPCA has recently sought to keep such elevated TDS wastewaters segregated from the influent flow of the Regional Treatment Plant. Such wastewaters include softener regenerant wastes, groundwater nitrate removal brines and reverse osmosis brines, which are now trucked to the Regional Treatment Plant instead of being discharged to the collection system. The MRWPCA currently accepts 30,000 – 50,000 gallons per day of brine wastes by truck from business entities which

would otherwise be discharging to the sanitary sewer system. Brine wastes are currently held in a 375,000 gallon, lined holding pond at the Regional Treatment Plant and ultimately discharged directly or blended with secondary treated wastewater before being discharged through Discharge Point 001.

MRWPCA feels the inclusion of this language helps explain the complicated systems employed at our facility. Additionally, if this language and sections are added the lettering sequence will need to be updated.

Staff Response: Edits were not made to the Order. This information is contained in the Fact sheet, section II.A.

5. Page 4, II, Discharge Prohibition A. Modify as follows: "Discharge ~~of treated wastewater~~ to the Pacific Ocean…" MRWPCA currently accepts and discharges wastes not classified as treated wastewater. These programs help improve water quality in the basin and all discharges to the Ocean are monitored.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

6. Page 9, Table 7, Footnote 1, Change the units for Ce from mg/L to µg/L.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

7. Page 10, III.C., Change the word reclaimed to recycled as this water quality level has been redefined per the permitted use under Order 94-82.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

8. Page 10, IV.A. Surface Water Limitations. We request that the first paragraph be revised as follows: *"The discharge shall not cause a violation of the following receiving water limitations, which are based on water quality objectives (Water-Contact Standards) contained in the Ocean Plan ~~and are a required part of this Order.~~ Compliance with these limitations shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed except where other sampling stations are defined below:"* As an alternative, the language in Section C of the current permit would be acceptable, specifically the opening paragraph and the first sentence following the number 1.

Staff Response: Central Coast Water Board staff concurs with the comment and has made most of the editorial correction of language consistent with the requirements in the previous Order. Staff has not deleted the phrase "and are a required part of this Order." Receiving water limitations are required in this Order.

9. Page 13, V.C.2.a, Toxicity Reduction Requirements. One sentence in the last paragraph of this section (starting with "When monitoring measures toxicity in the

effluent…") is inconsistent with the Ocean Plan. That sentence states that upon an initial failed test and results of subsequent monitoring, "[t]he EO will *determine whether to initiate enforcement action*, whether to require the Discharger to implement a Toxicity Reduction Evaluation, *or to implement other measures*." However, the Ocean Plan requires the following toxicity implementation requirements to be incorporated into permits: "(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." (See Ocean Plan Section III.C.10.b.) Taking enforcement action or requiring implementation of other measures based on the results of toxicity testing, prior to the conduct of a TRE, is inconsistent with the Ocean Plan. It is also inconsistent with the standard toxicity language contained in the State Permit Template. We therefore request that the subject paragraph be modified as follows: *"When monitoring detects effluent toxicity greater than a limitation in this Order, the Discharger shall resample as soon as practicable if the discharge is continuing and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer (EO) as soon as possible following receipt of monitoring results. ~~The EO will determine whether to initiate enforcement action, whether to require the discharger to implement a Toxicity Reduction Evaluation, or to implement other measures.~~ <u>If subsequent monitoring indicates that the discharge consistently exceeds a toxicity effluent limit, t</u>~~T~~he Discharger<u>, upon notification of the EO,</u> shall conduct a TRE considering guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2 and 3 (EPA document nos. EPA 600/3-88/034. 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule."*

<u>Staff Response:</u> Central Coast Water Board staff concurs with the comment and has made the editorial correction of language which is consistent with the previous Order.

10. Page 14, V.C.2.b. Water-Contact Monitoring (Bacterial Characteristics). This section outlines a monitoring plan for bacteriological monitoring. The plan outlines repeat sampling requirements and frequency. MRWPCA has been granted an exception to normal Water-Contact Monitoring requirements (Samples are normally collected in the surf zone). MRWPCA is allowed to collect its Water-Contact Monitoring samples off-shore due to marine mammals using the beach as a resting area producing high bacterial counts. This off-shore exception requires boat rental, and significant time and resources that other dischargers do not incur. The samples results are also not available within 24 hours of sample collection, which means that based on the "continued daily" requirement, repeat samples should be collected even if the previous sample result is less than the single sample maximum but data is not yet available. MRWPCA recommends the following changes: *"In accordance with Ocean Plan section III.D.1.b., if a single sample exceeds any of the bacteriological single sample maximum (SSM) standards contained within section V.A.1 of this Order, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. <u>The EO should be notified within 24 hours of receiving analytical results and R</u>~~r~~epeat sampling shall be conducted within 24 hours of receiving*

analytical results and continued ~~daily~~ based on a recommended frequency of the EO until the sample result is less than the SSM standard or until a sanitary survey is conducted to determine the source of the high bacterial densities."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language consistent with the requirements in the previous Order.

11. Page D-11, VIII.B.13., On the second to last line, change the word reclaimed to recycled as this water quality level has been redefined per the permitted use under Order No. 94-82.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

12. Page D-12, VIII.C.2., This section outlines laboratory requirements for usage in compliance monitoring. MRWPCA as required by the current and proposed Orders subscribes to the regional monitoring program identified as CCLEAN. This program uses cutting edge technology and laboratory techniques to answer important and complicated questions related to receiving water monitoring. Limiting the laboratories that can be used for this program is counterintuitive. Therefore, MRWPCA recommends the following changes: "*Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:*

    a. *Data results remain consistent with results of samples analyzed by the Central Coast Water Board;*

    b. *A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,*

    c. *Certification is pursued in good faith and obtained as soon as possible after the program is reinstated."*

    This proposed language is directly from the current Order R3-2008-0008.

Staff Response: Edits were not made to the Order. The requirements contained in this Order for the regional monitoring program identified as CCLEAN are consistent with those required of other facilities participating in the CCLEAN program and is a Central Coast Water Board Standard Provision.

13. Page D-15, VIII.G.2., This section lists phenolic compounds as a comparative result based on a "grab sample." There are phenolic compounds in the remaining priority pollutants list (Table E-5) which would be tested with a high volume water sample per Table E-4. This issue requires clarification from RWQCB staff.

Staff Response: Edits were not made to the Order. The requirements contained in this Order for the regional monitoring program identified as CCLEAN are consistent with those required of other facilities participating in the CCLEAN program.

14. Page D-15, VIII.G.4.a., Attachment D has had the titles "Federal" removed in previous sections, therefore we recommend that "Federal" be deleted from this location as well for continuity.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

15. Page D-18, VIII.G.23., Attachment D has had the titles "Federal" removed in previous sections, therefore we recommend that "Federal" be deleted from this location as well for continuity.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

16. Page E-3, Table E-1, The MRWPCA has over time proven that whole effluent disinfection is not necessary and no longer has the physical capacity to chlorinate and dechlorinate. We recommend that monitoring location EFF-001 be described as: "*Location where representative sample of effluent, which includes any component of brine waste, discharged through the ocean outfall can be collected, after treatment ~~and chlorination/dechlorination~~ and before contact with receiving water.*"

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

17. Page E-7, V.A., The approved laboratory that MRWPCA currently employs has proven that our effluent can comply with the acute toxicity objectives at full strength therefore making the serial dilutions irrelevant. We recommend adding the following sentence at the end of the first paragraph: "*If the acute toxicity objective can be met with full strength samples, the need for serial dilutions becomes unnecessary.*"

Staff Response: Edits were not made to the Order. The toxicity requirements contained in this Order are consistent with those required of similar facilities and consistent with U.S. EPA guidance on toxicity testing.

18. Page E-8, V.A/B., Chronic Toxicity should be under heading "B."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

19. Page E-9, V.B., The last paragraph above Table E-7 identifies the speciation tests for chronic toxicity. We recommend that RWQCB staff clarify whether these tests need to be completed at least once every permit cycle or if past results can continue to be used.

Staff Response: Edits were not made to the Order. The toxicity requirements contained in this Order are consistent with those required of similar facilities and consistent with U.S. EPA guidance on toxicity testing.

20. Page E-10, V.B., The last paragraph states: "*If chronic toxicity is measured above 115 TUc, the Discharger shall re-sample and submit the results to the Central Coast Water Board as described in section V.C.2.a of this Order.*" Section V.C.2.a. is related to Toxicity Reduction Requirements which was defined in the previous Order. The 115 TUc numerical limit however is not based on Table 5 of the Order within section III.A.1.b. as was specified in the Order R3-2008-0008. We request that RWQCB staff identify where and how the 115 TUc numerical limit was generated.

Staff Response: Central Coast Water Board staff concurs with the comment. The value in the draft Order was incorrect and the correct value of 115 TUc has been inserted.

21. Page E-11, VII., Change the word reclaimed to recycled as this water quality level has been redefined per the permitted use under Order No. 94-82.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

22. Page E-13, IX.A.2., On the fourth line add: "*Central Coast Water Board…*"

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

23. Page E-17, IX.B.3.e.2., Change the word filed to field.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

24. Page E-19, Table 10, Line 3 related to Semi-Annual Monitoring please change these dates from May 1st and November 1st to February 1st and August 1st to coincide with our current monitoring schedule.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

25. Page E-19, Table 10, Line 4 change the SMR due date to the following: "*Semi-Annual report submittal following the period of monitoring (following sampling as described in footnote 14 table E-4)*".

Staff Response: Edits were not made to the Order. The dates specified in Table 10 align with the Annual Report submittal dates. There are specific dates for all other due date periods (monthly, quarterly, annually).

26. Page E-19, Table 10, Line 6 change the SMR due date to the following: "*February 1st following calendar year of ~~sampling~~ inspection*"

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

27. Page E-19, X.B.4.b., In the second paragraph fourth line inside the parentheses, should the "+" should be a "±"? If not, can the RWQCB staff explain this?

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

28. Page F-4, I.A. Paragraph 1, line 4, Rey in Del Rey Oaks is spelled with an "e" not an "a."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

29. Page F-3, Table F-1. Facility Information; change the Facility Permitted Flow and Facility Design Flow to 29.6 MGD Average Dry Weather Flow. Please change the Receiving Waters to state: "*Pacific Ocean (Monterey Bay National Marine Sanctuary, outside the Zone of Prohibition)*".

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

30. Page F-4, II.A. Paragraph 1, second to last line, "…, 29.6 MGD average dry weather flow and currently treats approximately ~~21~~18 MGD."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

31. Page F-4, II.A. Paragraph 2, line 5, "…~~reclaimed~~recycled…."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

32. Page F-5, II.A. Paragraph 4, lines 3, 5, 8, 9, and 10, "…~~reclaimed~~recycled…."

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

33. Page F-5, II.B. Paragraph 1, At the end of this paragraph include the following sentence: "*The MRWPCA outfall/diffuser system is located outside the Monterey Bay National Marine Sanctuary Zone of Prohibition.*"

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

34. Page F-11, II.B/E. Planned Changes should be under the heading “E” not “B”.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

35. Page F-11, II.E., Brine Disposal, Paragraph 1, lines 4 and 9, “…~~reclaimed~~ recycled….”

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

36. Page F-11, II.E., Brine Disposal, Paragraph 1, line 5 MRWPCA should include a “M”.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

37. Page F-11, II.E., Brine Disposal, Paragraph 2, line 2, “…~~reclamation~~ recycling….”

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

38. Page F-11, II.E., Brine Disposal, Paragraph 2, line 3, “…~~reclaimed~~ recycled….”

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

39. Page F-24, Table F-8 Title needs to be relocated to represent Table F-8.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

40. Page F-25, The Definition for Dm within the calculation states that Dm = 114 but the initial dilution for MRWPCA is 145 as stated just below the Dm definition on Page F-25. RWQCB staff needs to clarify and/or correct this difference.

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

41. Page F-38, VIII.A. “…through the following *posting in the Salinas Californian on February 26th, 2014.*”

Staff Response: Central Coast Water Board staff concurs with the comment and has made the editorial correction of language.

C. Public Hearing

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

Date: **May 22, 2014**
Time: **8:30 a.m.**
Location: **Central Coast Water Board**
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Interested persons were invited to attend. At the public hearing, the Central Coast Water Board voted to keep this permit on the consent calendar, and there was no objection by the discharger or the public.

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

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Central Coast Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Central Coast Water Board's action to the following address:

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

E. Information and Copying

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

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Peter von Langen at (805) 549-3688 or pvonlangen@waterboards.ca.gov or Sheila Soderberg at (805) 542-3592 or Sheila.Soderberg@waterboards.ca.gov.