

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

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**DRAFT ORDER NO. R3-2019-0002
NPDES NO. CA0048003**

**DRAFT WASTE DISCHARGE REQUIREMENTS
FOR THE SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
WASTEWATER TREATMENT FACILITY
DISCHARGE TO THE PACIFIC OCEAN**

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	South San Luis Obispo County Sanitation District
Name of Facility	Wastewater Treatment Facility
Facility Address	1600 Aloha Place
	Oceano, CA 93445-9735
	San Luis Obispo County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Secondary Treated Municipal Wastewater and Brine Wastes	35° 06' 04" N	120° 38' 46" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted on:	January 31, 2019
This Order shall become effective on:	April 1, 2019
This Order shall expire on:	March 31, 2024
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs 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:	October 2, 2023
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Central Coast Region have classified this discharge as follows:	Major

I, John M. Robertson, 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.

John M. Robertson, Executive Officer

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I. FACILITY INFORMATION

Information describing the South San Luis Obispo County Sanitation District Wastewater Treatment Facility (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as waste discharge requirements (WDRs) 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 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 authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.
- B. Background and Rationale for Requirements.** The Central Coast Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes 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 IV.B, IV.C, and V.B 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 Persons.** 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.
- 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.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R3-2009-0046 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 violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated wastewater to the Pacific Ocean at a location other than described by this Order at 35° 06' 04" N Latitude and 120° 38' 46" W Longitude is prohibited.

- B. Discharges 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), are prohibited.
- C. The dry weather average monthly rate of discharge to the Pacific Ocean shall not exceed 5.0 MGD.
- D. Wastes shall not be discharged to State Water Quality Protection Areas, described as Areas of Special Biological Significance by the Ocean Plan, except in accordance with Chapter III.E of the Ocean Plan.
- E. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste to the Ocean is prohibited.
- F. The discharge of municipal or industrial waste sludge to the Pacific 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.
- G. The overflow of bypass or wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.G.a (Bypass), is prohibited.
- H. The discharge of materials and substances in the wastewater that results in any of the following is prohibited:
 1. Float or become floatable upon discharge.
 2. May form sediments which degrade benthic communities or other aquatic life.
 3. Accumulate to toxic levels in marine waters, sediments, or biota.
 4. Decrease the natural light to benthic communities and other marine life.
 5. Result in aesthetically undesirable discoloration of the ocean surface.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations for Conventional Pollutants

- 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 Monitoring and Reporting Program, Attachment E:

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
Total Suspended Solids	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
pH	standard units	6.0-9.0 at all times		
Oil and Grease	mg/L	25	40	75
	lbs/day	1,042	1,668	3,127
Settleable Solids	ml/L	1.0	1.5	--

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Turbidity	NTU	75	100	--

1. Mass based effluent limitations were calculated using the following formula:

$$\text{lbs/day} = \text{pollutant concentration (mg/L)} \times \text{Design flow (5.0 MGD)} \times \text{conversion factor (8.34)}$$
 - b. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 80 percent.
 - c. **Fecal Coliform:** The 7-sample median fecal coliform bacteria level shall not be greater than 200 MPN/100 mL, nor shall the maximum daily value exceed 2,000 MPN/100 mL.
 - d. **Initial Dilution:** The minimum initial dilution of treated effluent at the point of discharge to the Pacific Ocean shall not be less than 165 to 1 (seawater to effluent) at any time.

2. Final Effluent Limitations for Toxic Pollutants

- a. The Discharger shall maintain compliance with the following effluent limitations contained in Tables 5, 6, and 7 at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program, Attachment E:

Table 5. Effluent Limitations – Protection of Marine Aquatic Life

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
Arsenic	mg/L	0.83	4.82	12.79
	lbs/day	35	201	533
Cadmium	mg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Chromium (VI)	mg/L	0.33	1.33	3.32
	lbs/day	14	55	138
Mercury	mg/L	6.56	26.48	66.32
	lbs/day	0.27	1.1	2.8
Selenium	mg/L	2.49	9.96	24.90
	lbs/day	104	415	1,038
Silver	mg/L	0.090	0.44	1.14
	lbs/day	3.7	18	47
Cyanide ^[4]	mg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Total Chlorine Residual	mg/L	0.33	1.33	9.96
	lbs/day	14	55	415
Ammonia (as N)	mg/L	99.6	398.4	996
	lbs/day	4,153	16,613	41,533
Acute Toxicity	TUa	--	5.25	--
Chronic Toxicity	TUc	--	166	--
Phenolic Compounds (non-chlorinated)	mg/L	4.98	19.92	49.80
	lbs/day	208	831	2,177

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
Phenolic Compounds (chlorinated)	mg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Endosulfan	µg/L	1.49	2.99	4.48
	lbs/day	0.062	0.12	0.19
Endrin	µg/L	0.33	0.66	1.00
	lbs/day	0.014	0.028	0.042
HCH	µg/L	0.66	1.33	1.99
	lbs/day	0.028	0.055	0.083
Radioactivity		[5]		

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

[2] The daily maximum shall apply to flow-weighted 24-hour composite samples. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate, Q , in MGD.

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

[4] If a Discharger can demonstrate to the satisfaction of the Central Coast Water Board (subject to USEPA 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 metals 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.

[5] 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

Table 6. Effluent Limitations – Protection of Human Health – Non-Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrolein	mg/L	36.52
	lbs/day	1,523
Antimony	mg/L	199.2
	lbs/day	8,307
Bis(2-chloroethoxy) methane	mg/L	0.730
	lbs/day	30
Bis(2-chloroisopropyl) ether	mg/L	199.2
	lbs/day	8,307
Chlorobenzene	mg/L	94.62
	lbs/day	3,946
Chromium (III)	g/L	31.54
	lbs/day	1,315,218
Di-n-butyl phthalate	mg/L	581
	lbs/day	24,228

Parameter	Units	Effluent Limitation
		30-day Average
Dichlorobenzenes ^[1]	mg/L	846.6
	lbs/day	35,303
Diethyl phthalate	g/L	5.478
	lbs/day	228,433
Dimethyl phthalate	g/L	136.12
	lbs/day	5,676,204
4,6-dinitro-2-methylphenol	mg/L	36.52
	lbs/day	1,523
2,4-dinitrophenol	mg/L	0.664
	lbs/day	28
Ethylbenzene	mg/L	680.6
	lbs/day	28,381
Fluoranthene	mg/L	2.49
	lbs/day	104
Hexachlorocyclopentadiene	mg/L	9.628
	lbs/day	401
Nitrobenzene	mg/L	0.813
	lbs/day	34
Thallium	mg/L	0.332
	lbs/day	14
Toluene	g/L	14.11
	lbs/day	588,387
Tributyltin	ng/L	232
	lbs/day	0.0097
1,1,1-trichloroethane	g/L	89.64
	lbs/day	3,737,988

^[2] Sum of 1,2- and 1,3-dichlorobenzene.

Table 7. Effluent Limitations – Protection of Human Health – Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrylonitrile	µg/L	16.6
	lbs/day	0.69
Aldrin	ng/L	3.652
	lbs/day	0.00015
Benzene	µg/L	979.4
	lbs/day	41
Benzidine	ng/L	11.454
	lbs/day	0.00048
Beryllium	µg/L	5.478
	lbs/day	0.23
Bis(2-chloroethyl) ether	µg/L	7.47
	lbs/day	0.31

Parameter	Units	Effluent Limitation
		30-day Average
Bis(2-ethylhexyl) phthalate	µg/L	581
	lbs/day	24
Carbon tetrachloride	µg/L	149.4
	lbs/day	6.2
Chlordane ^[1]	ng/L	3.818
	lbs/day	0.00016
Chlorodibromomethane	mg/L	1.428
	lbs/day	60
Chloroform	mg/L	21.580
	lbs/day	900
DDT ^[2]	ng/L	28.22
	lbs/day	0.0012
1,4-dichlorobenzene	mg/L	2.988
	lbs/day	125
3,3-dichlorobenzidine	µg/L	1.345
	lbs/day	0.056
1,2-dichloroethane	mg/L	4.648
	lbs/day	194
1,1-dichloroethylene	µg/L	149.4
	lbs/day	6.2
Dichlorobromomethane	mg/L	1.029
	lbs/day	43
Dichloromethane	mg/L	74.7
	lbs/day	3115
1,3-dichloropropene	mg/L	1.477
	lbs/day	62
Dieldrin	ng/L	6.64
	lbs/day	0.00028
2,4-dinitrotoluene	µg/L	431.6
	lbs/day	18
1,2-diphenylhydrazine	µg/L	26.56
	lbs/day	1.1
Halomethanes ^[3]	mg/L	21.58
	lbs/day	900
Heptachlor	ng/L	8.3
	lbs/day	0.00035
Heptachlor epoxide	ng/L	3.32
	lbs/day	0.00014
Hexachlorobenzene	ng/L	34.86
	lbs/day	0.0015
Hexachlorobutadiene	mg/L	2.324
	lbs/day	97

Parameter	Units	Effluent Limitation
		30-day Average
Hexachloroethane	µg/L	415
	lbs/day	17
Isophorone	mg/L	121.18
	lbs/day	5,053
N-nitrosodimethylamine	mg/L	1.212
	lbs/day	51
N-nitrosodi-n-propylamine	µg/L	63.08
	lbs/day	2.6
N-nitrosodiphenylamine	µg/L	415
	lbs/day	17
PAHs ^[4]	µg/L	1.461
	lbs/day	0.061
PCBs ^[5]	ng/L	3.154
	lbs/day	0.00013
TCDD equivalents ^[6]	pg/L	0.6474
	lbs/day	0.00000027
1,1,2,2-tetrachloroethane	µg/L	381.8
	lbs/day	16
Tetrachloroethylene	µg/L	332
	lbs/day	14
Toxaphene	ng/L	34.86
	lbs/day	0.0015
Trichloroethylene	mg/L	4.482
	lbs/day	187
1,1,2-trichloroethane	mg/L	1.56
	lbs/day	65
2,4,6-trichlorophenol	µg/L	48.14
	lbs/day	2.01
Vinyl chloride	mg/L	5.976
	lbs/day	249

- [1] Sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor gamma, and oxychlordane.
- [2] Sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.
- [3] Sum of bromoform, bromoethane (methyl bromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.
- [4] Sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,1,2-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[a,h]anthracene, fluorine, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.
- [5] Sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- [6] TCDD equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

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

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

The following receiving water limitations are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined based on monitoring stations specified in the Monitoring and Reporting Program (Attachment E).

1. Bacterial Characteristics

- a. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Central Coast Water Board (i.e., waters designated REC-1), but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column.
 - i. 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site:
 - 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.
 - ii. 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;
 - c) Enterococcus density shall not exceed 104 per 100 ml; and
 - d) Total coliform density shall not exceed 1,000 per 100 ml when the fecal coliform to total coliform ratio exceeds 0.1.
- b. Shellfish Harvesting Standards
- i. At all areas where shellfish may be harvested for human consumption, as determined by the Central Coast Water Board, the following bacterial objectives shall be maintained throughout the water column.
 - (a) The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible on the ocean surface.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- c. Natural light shall not be significantly reduced at any point outside the zone of initial dilution as the result of the discharge of waste.
- d. 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.
- e. Temperature of the receiving water shall not be altered to adversely affect beneficial uses, as set forth in the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not, at any time, be depressed more than 10 percent from that which occurs naturally, or fall below 5.0 mg/L, as the result of the discharge of oxygen demanding waste materials. The mean annual dissolved oxygen concentration shall not be less than 7.0 mg/L.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally and shall be within the range of 7.0 to 8.5 at all times.
- c. The dissolved sulfide concentrations of waters in and near sediments shall not be significantly increased above those present under natural conditions.
- d. The concentrations of substances set forth in Table 1 of the Ocean Plan shall not be increased in marine sediments to those that would degrade indigenous biota.
- e. The concentration of organic materials in marine sediments shall not be increased to that that would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.

4. Biological Characteristics

- a. Marine communities, including vertebrate, and plant species, shall not be degraded.

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

5. Radioactivity

- a. Discharge of radioactive waste shall not degrade marine life.
- b. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

6. General Standards

- a. The discharge shall not cause a violation of any applicable water quality objective (WQO) or standard for receiving waters adopted by the Central Coast Water Board or State Water Board, as required by the CWA and regulations adopted thereunder.
- b. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- c. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

B. Groundwater Limitations

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

- 1. Groundwater shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses.
- 2. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

VI. PROVISIONS

A. Standard Provisions

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

B. Monitoring and Reporting Program (MRP) Requirements

Pursuant to Water Code sections 13267 and 13383, the Discharger shall comply with the 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 CFR part 136, Guidelines Establishing Test Procedures for Analysis of Pollutants.

The Discharger is required to provide 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 or enforcement action, and to protect public health and safety and the environment.

C. Special Provisions

1. Reopener Provisions

- a. This Order may be reopened and modified in accordance with NPDES regulations at 40 CFR parts 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved new state water quality objective.
- b. 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 Notification Requirements

The Discharger shall notify the Central Coast Water Board and USEPA in writing within 14 days of exceedance of a chronic toxicity trigger of 166 TUc. This notification shall describe actions the Discharger has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and a schedule for actions not yet completed or reasons that no action has been taken.

b. Toxicity Reduction Requirements

If the discharge consistently exceeds an effluent limitation for toxicity or an effluent limitation for an Ocean Plan Table 1 water quality objective specified in Section III of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) defined in Attachment A. 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.

As indicated in section V.C of the MRP, when acute toxicity is detected in the effluent above the effluent limitation of 5.25 TUa or chronic toxicity is detected above 166 TUc, the Discharger shall resample immediately, retest, and report the results to the Executive Officer, who will determine whether to initiate an enforcement action, require a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan, or implement other measures.

A TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first step of the TRE consists 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’s 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 in the event that a toxicity effluent limitation established by this Order is exceeded in the discharge. The workplan shall be prepared in accordance with current technical guidance and reference material, including:

- i. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99-022).
- ii. *Toxicity Identification Evaluation, Phase I* (EPA/600/6-91/005F).
- iii. *Methods for Aquatic Toxicity Identification Evaluations, Phase II* (EPA/600/R-92/080).
- iv. *Methods for Aquatic Toxicity Identification Evaluations, Phase III* (EPA/600/R-92/081).

At a minimum, the TRE Workplan shall include:

- i. Actions that will be taken to investigate/identify the causes/sources of toxicity,
- ii. Actions that will be evaluated to mitigate the impact of the discharge, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken), and
- iii. A schedule under which these actions will be implemented.

When monitoring measures toxicity in the effluent above a limitation established by this Order, the Discharger shall resample immediately, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer as soon as possible following receipt of monitoring results, not to exceed 14 days from the conclusion of each test. The Executive Officer will determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures. When the Executive Officer requires the Discharger to conduct a TRE, the TRE shall be conducted giving due consideration to guidance provided by the USEPA’s *Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3* (EPA document Nos. EPA 600/R-91/003, 600/6/91/005F, and 600/R-92/080, and 600/R-92/081, 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 Executive Officer.

Action Step	When Required
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 Executive Officer.

c. Initial Investigation TRE Workplan for Whole Effluent Toxicity

Within 90 days of the permit effective date, the Discharger shall prepare and submit an updated copy of their Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan (1-2 pages) to the Central Coast Water Board for review. This plan shall include steps the Discharger intends to implement if toxicity is measured above a toxicity trigger and should include, at minimum:

- i. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- ii. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.
- iii. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

This workplan is subject to approval and modification by the Central Coast Water Board.

d. Accelerated Toxicity Testing and TRE/TIE Process for Whole Effluent Toxicity

- i. If the toxicity trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the Discharger shall conduct one additional toxicity test using the same species and test method. This test shall begin within 14 days of receipt of test results exceeding the toxicity trigger. If the additional toxicity test does not exceed the toxicity effluent trigger, then the Discharger may return to their regular testing frequency.
- ii. If the toxicity trigger is exceeded and the source of toxicity is not known, then the Discharger shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days of receipt of test results exceeding the toxicity trigger. If none of the additional toxicity tests exceed the toxicity trigger, then the Discharger may return to their regular testing frequency.
- iii. If one of the additional toxicity tests exceeds the toxicity trigger, then the Discharger shall notify the Executive Officer and Director. If the Executive Officer and Director determine that the discharge consistently exceeds the toxicity trigger, then the Discharger shall initiate a TRE using as guidance the USEPA manuals: *Toxicity Reduction Evaluation Guidance for Municipal*

Wastewater Treatment Plants (EPA 833/B-99/002, 1999) or *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPN600/2-88/070, 1989). In conjunction, the Discharger shall develop and implement a detailed TRE Workplan which shall include: further actions undertaken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity, and a schedule for these actions. This Detailed TRE Workplan and schedule are subject to approval and modification by the Central Coast Water Board and USEPA.

- iv. As part of a TRE, the Discharger may initiate a Toxicity Identification Evaluation (TIE) using the same species and test method, and USEPA TIE guidance manuals, to identify the causes of toxicity. The USEPA TIE guidance manuals are: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPN600/6-91/005F, 1992; only chronic toxicity); *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPN600/6-91/003, 1991; only acute toxicity); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPN600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPN600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPN600/R-96-054, 1996).

e. **Water Contact Monitoring (Bacterial Characteristics)**

In accordance with California 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. 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.

3. Best Management Practices and Pollution Prevention

a. **Pollutant Minimization Program**

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

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

- ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

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

- i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
 - ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;
 - iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;
 - iv. Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and
 - v. 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(s);
 - (c) A summary of all actions undertaken pursuant to the control strategy; and
 - (d) A description of actions to be taken in the following year.
- b. The Discharger shall implement best management practices if necessary to control sediment discharges from the unpaved access road used by brine delivery trucks.

4. Construction, Operation and Maintenance Specifications – Not Applicable

5. Special Provisions for Publicly Owned Treatment Works (POTWs)

a. Biosolids Management

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

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

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

- b. **Collection System.** The Discharger is subject to the requirements of, and must comply with, State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, including monitoring and reporting requirements as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order.

6. Climate Change Adaptation

a. Coastal Hazards Monitoring Plan for Sea-Level Rise and Flooding

No later than May 10, 2019, the Discharger shall submit a Coastal Hazards Monitoring Plan that establishes the framework and parameters for: (1) regularly monitoring flood and other coastal hazards at the site and management responses to those hazards both on and off-site (e.g., lagoon management, levee expansion, etc.); (2) identifying how those hazards are affecting the operations of the wastewater treatment plant (WWTP); (3) identifying changes necessary to allow continued appropriate and required function of the WWTP; and (4) identifying flood/hazard 'triggers' to establish when WWTP changes (including potential plant relocation) need to be pursued in response to specific flood/hazard events or flood management activities. At the request of the Discharger, the Central Coast Water Board Executive Officer may provide an extension to the due date for submittal of the Coastal Hazards Monitoring Plan, provided the Discharger demonstrates significant progress has been made on the Coastal Hazards Monitoring Plan and there is good cause for the extension.

b. Life Expectancy Analysis

No later than May 10, 2019, the Discharger shall submit a facility Life Expectancy Analysis. The primary purpose of the analysis is to determine when the WWTP cannot function without substantial investment in new infrastructure and protective measures, at which point it might be appropriate to relocate the existing WWTP. The facility Life Expectancy Analysis shall include information on each component at the WWTP (e.g., headworks, clarifiers, digesters, etc.); the installation date of each component; upgraded component dates and the current condition of that equipment; major upgrade events; the expected lifespan and repair/maintenance and replacement costs of each component based on industry accepted sources, manufacturers' information, and the reports of other municipalities with similarly sized facilities; and the expected remaining years of use for each component and for the overall WWTP. Conclusions must be included regarding the expected point in time when investments in infrastructure (including continued flood protection measures) at the current WWTP location outweigh investing in a relocated plant at a location that is safe from flooding and other coastal hazards. At the request of the Discharger, the Central Coast Water Board Executive Officer may provide an extension to the due date for submittal of the Life Expectancy Analysis, provided the Discharger demonstrates significant progress has been made on the Life Expectancy Analysis and there is good cause for the extension.

c. Coastal Hazards Response Plan

No later than May 10, 2022, the Discharger must submit a Coastal Hazards Response Plan to provide a clear long-term plan for addressing flooding and other coastal hazards, as well as coastal resource impacts at the WWTP over the long-term. The Coastal Hazards Response Plan shall, at minimum, include a detailed cost-benefit analysis comparing the costs and benefits of maintaining the plant at the

present location versus relocating the plant to an area safe from flooding and other coastal hazards over time. The analysis shall include expected costs of purchasing land for a relocated plant, as well as expected costs to: decommission the existing plant and to restore the site to its natural state; upgrade the plant (including a relocated plant) to full tertiary treatment (or better); provide for water recycling (including addressing the potential for joint satellite facilities and/or collaborations with nearby communities for water recycling); and include a timeline of potential major relocation events, including expected timeframes for land acquisition, planning, permitting, design, construction and eventual operation, of a relocated plant. At the request of the Discharger, the Central Coast Water Board Executive Officer may provide an extension to the due date for submittal of the Coastal Hazards Response Plan, provided the Discharger demonstrates significant progress has been made on the Coastal Hazards Response Plan and there is good cause for the extension.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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 Central Coast 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 samples 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.

C. Average Monthly Effluent Limitation (AMEL)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that

calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

ATTACHMENT A – DEFINITIONS

Acute Toxicity

- a. Acute Toxicity (TUa)
Expressed in Toxic Units Acute (TUa)

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

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

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

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

where:

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

Areas of Special Biological Significance (ASBS)

Those areas designated by the State Water Resources Control Board (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)

Sample results that are 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

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

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

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

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

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

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Kelp Beds

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

Mariculture

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.

Method Detection Limit (MDL)

The minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 CFR part 136, Attachment B.

Minimum Level (ML)

The concentration 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)

Those sample results less than the laboratory's MDL.

Ocean Waters

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)

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)

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)

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

The reported ML (also known as the Reporting Level or RL) is the ML (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.

Shellfish

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

Significant Difference

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)

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 Resolutions 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 Equivalentents

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
	1.0
2,3,7,8-tetra CDD	
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)

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.)

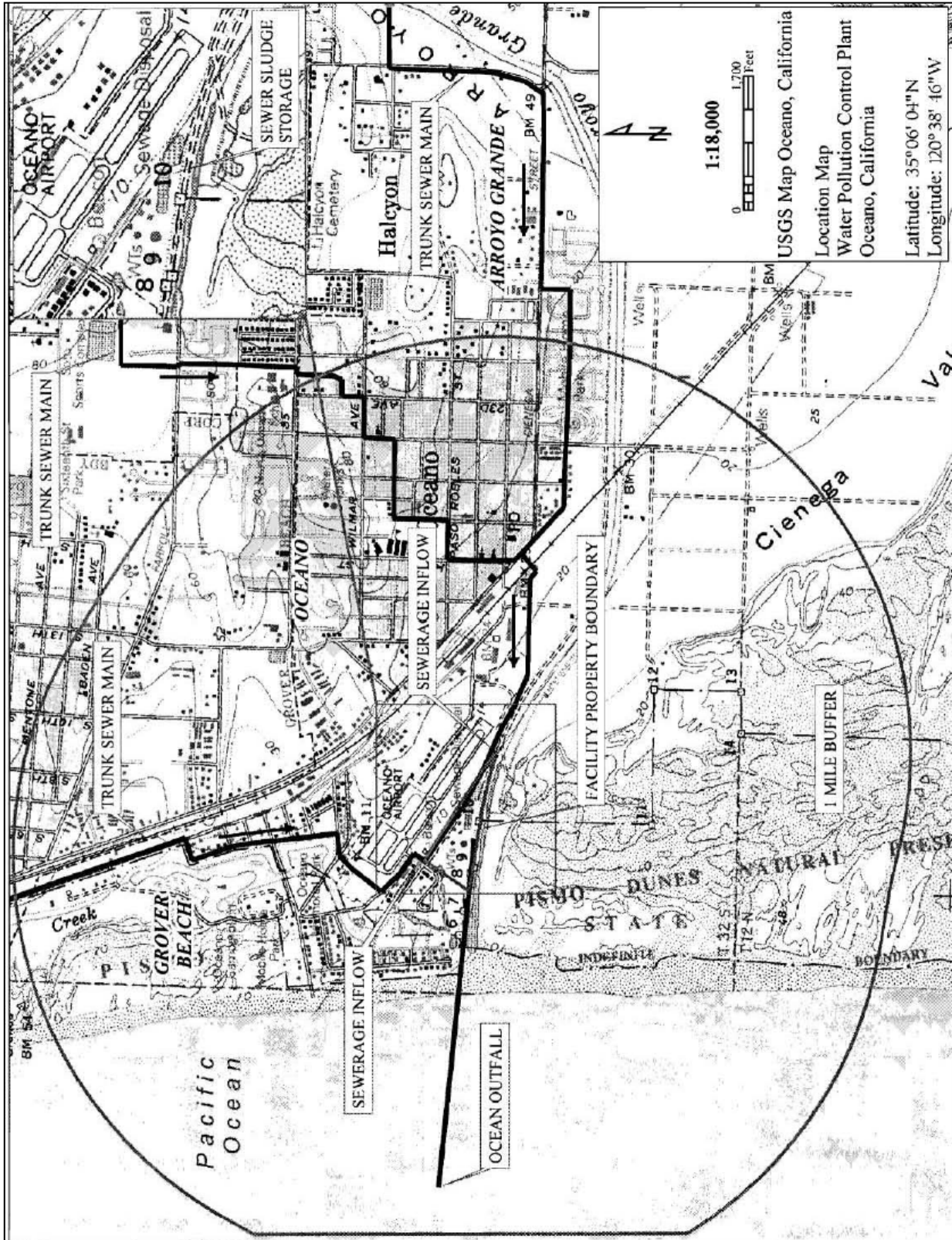
Waste

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

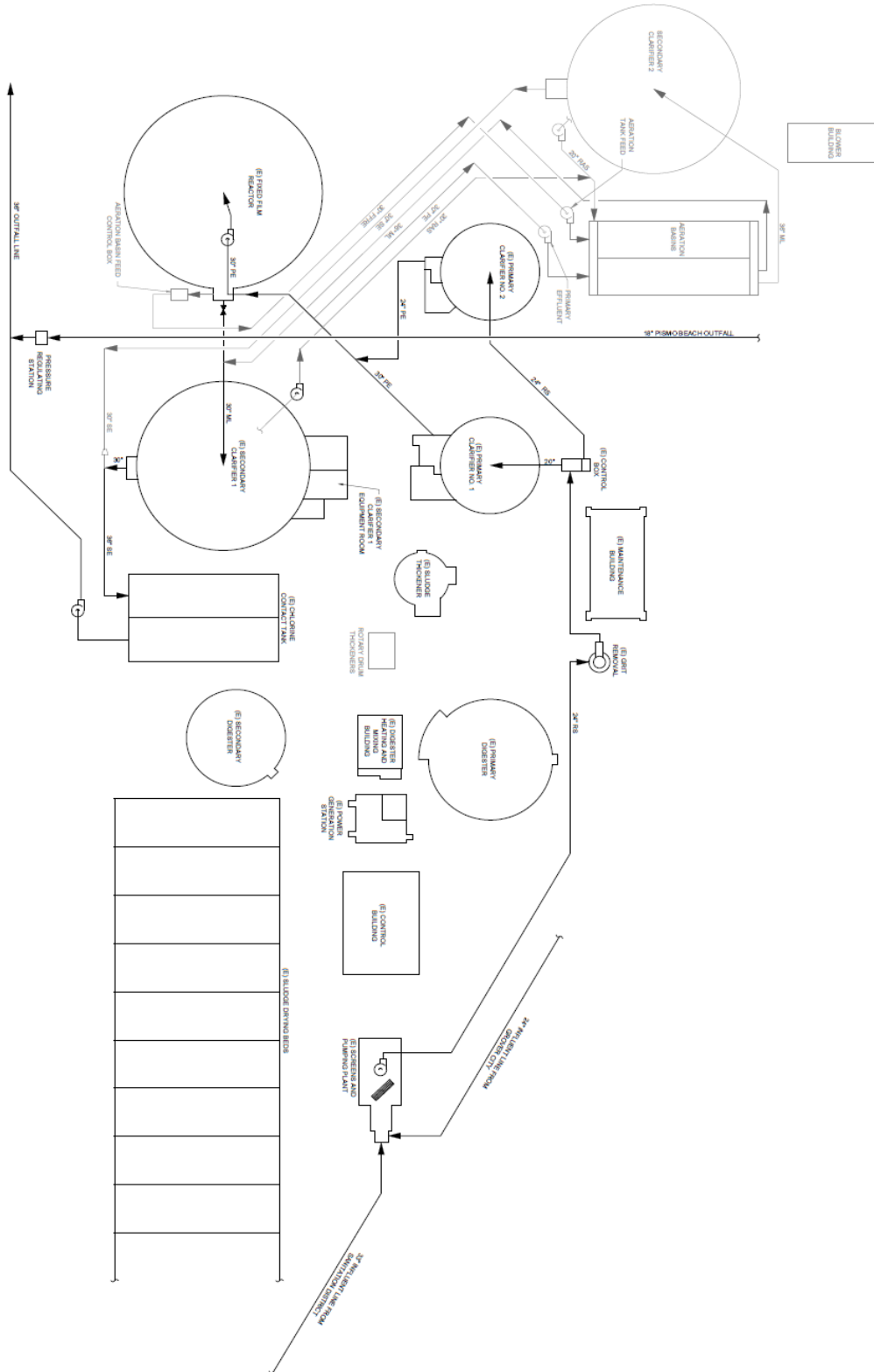
Water Recycling

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 terms, requirements, and 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; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 CFR § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Central Coast Water Board, State Water Board, 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 (33 U.S.C. § 1318(a)(4)(b); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 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 (33 U.S.C. § 1318(a)(4)(b)(i); 40 CFR § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(3); Wat. Code, §§ 13267, 13383); 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. (33 U.S.C. § 1318(a)(4)(b); 40 CFR § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Central Coast Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Central Coast Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three

conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Central Coast Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Central Coast Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

B. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. 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, 13383.)

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, V.B.5, and V.B.6 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).)
6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (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 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Central Coast Water Board or State 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 which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report 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.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Central Coast Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours:
 - 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 on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(ii)(B).)

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).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Central Coast Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's 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. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 CFR part 127. The Central Coast Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (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).)

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 CFR section 127.2(c)]. USEPA will update and maintain this listing. (40 CFR § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Central Coast Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR § 122.42(b)(2).)

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

VIII. CENTRAL COAST WATER BOARD STANDARD PROVISIONS

A. Central Coast Standard Provision – Prohibitions

1. Introduction of “incompatible wastes” to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of “toxic pollutants” in violation of effluent standards and prohibitions established under section 307(a) of the Clean Water Act (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 and “indirect discharger” that:
 - a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,
 - b. Flow through the system to the receiving water untreated; and,
 - c. Cause or “significantly contribute” to a violation of any requirement of this Order, is prohibited.
6. Introduction of “pollutant free” wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

B. Central Coast Standard Provision – Provisions

1. Collection, treatment, and discharge of waste shall not create a 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 in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment plans shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.
6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this order;
 - b. Obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

- c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
 - d. A substantial change in character, location, or volume of the discharge.
7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.
8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
 - a. Promulgation of a new or revised effluent standard or limitation;
 - b. A material change in character, location, or volume of the discharge;
 - c. Access to new information that affects the terms of the permit, including applicable schedules;
 - d. Correction of technical mistakes or mistaken interpretations of law; and,
 - e. Other causes set forth under Sub-part D of 40 CFR part 122.
9. Safeguards shall be provided to 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, operative 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,” or “bypass,” or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered).
 - b. Evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.
10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.
11. 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 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 reclaimed water is subject to the approval of the Central Coast Board. Production and use of reclaimed water shall be in conformance with recycling criteria established in chapter 3, Title 22, of the California Administrative Code and chapter 7, division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water recycling requirements from the Central Coast Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

C. Central Coast Standard Provisions – General Monitoring Requirements

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

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

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services (DHS) 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 (State Water Board) and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the DHS or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:
 - a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
 - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
 - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.
3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.

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

D. Central Coast Standard Provisions – General Reporting Requirements

1. Reports of marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:
 - a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).
 - b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).
 - c. A description of the sampling procedures and preservation sequence used in the survey.
 - d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.
 - e. A brief discussion of the results of the survey. The discussion shall compare data from the control station with data from the outfall stations. All tabulations and computations shall be explained.
2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.
3. The “Discharger” shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.
4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:
 - a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,
 - b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

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

5. All “Dischargers” shall submit reports 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 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 January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:
- Both tabular and graphical summaries of the monitoring data obtained during the previous year.
 - 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.
 - An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
 - A discussion of operator certification and a list of current operating personnel and their grades of certification.
 - 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. Central Coast Standard Provisions – General Pretreatment Provisions

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR chapter 1, subchapter N), shall comply with the appropriate pretreatment standards:
 - a. By the date specified therein;
 - b. Within three years of the effective date specified therein, but in no case later than July 1, 1984; or,
 - c. If a new indirect discharger, upon commencement of discharge.

F. Central Coast Standard Provision – Enforcement

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed \$5,000 per day.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

G. Central Coast Standard Provisions – Definitions (Not otherwise included in Attachment A to this Order)

1. A "composite sample" is a combination of no fewer than eight individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.
2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the

Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)

4. "Duly Authorized Representative" is one where:
 - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
 - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
 - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
6. "Hazardous substance" means any substance designated under 40 CFR part 116 pursuant to Section 311 of the Clean Water Act.
7. "Incompatible wastes" are:
 - a. Wastes which create a fire or explosion hazard in the treatment works;
 - b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;
 - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
 - d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,
 - e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.
8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

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

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

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

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 flow rates over the period of interest.

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

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

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, 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):
$$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{\text{effluent}} / C_{\text{influent}})$$
20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Central Coast Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Central Coast Water Board.
- C.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.
1. *A Guide to Methods and Standards for the Measurement of Water Flow*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
 2. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
 3. *Flow Measurement in Open Channels and Closed Conduits*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22050. Order by NTIS No. PB-273 535/5ST.)
 4. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)
- D.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their

continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F.** Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxic pollutants specified in Table 1 of the California Ocean Plan shall be conducted in accordance with procedures described in the California Ocean Plan and restated in this MRP.
- G.** Monitoring and sampling periods are defined as follows unless otherwise specified in this MRP:

Daily: Midnight through 11:59 PM, or any 24-hour period that reasonably represents a calendar day for purposes of sampling.

Weekly: Sunday through Saturday (Note: For weekly monitoring and sampling periods that start in one monthly reporting period but end in the next, the Discharger may report the weekly data in the monthly monitoring report containing the last day of the weekly period.)

Monthly: 1st day of calendar month through last day of calendar month.

Annually: January 1st through December 31st

- H.** The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board
 Quality Assurance Program Officer
 Office of Information Management and Analysis
 1001 I Street, Sacramento, CA 95814

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 Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Influent wastewater prior to treatment and following all significant inputs to the collection system or to the headworks of untreated wastewater and inflow and infiltration.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Location where representative sample of effluent, excluding brine waste, discharged through the ocean outfall can be collected, after treatment and chlorination/dechlorination and before mixing brine waste and the City of Pismo Beach effluent and prior to contact with receiving water. Latitude: 35° 06' 04" N Longitude: 120° 38' 46" W
--	SRF-A	At a location along the shoreline 300 meters south of the outfall in the surf zone.
--	SRF-B	At a location along the shoreline adjacent to the outfall in the surf zone.
--	SRF-C	At a location along the shoreline 300 meters north of the outfall in the surf zone.
--	SRF-D	At a location near the shoreline at the mouth of Arroyo Grande Creek.
--	RSW-001	At a location in the receiving water 300 meters north of the outfall at mid-depth of diffuser.
--	RSW-002N	At a location in the receiving water 20 meters north of the outfall at mid-depth of diffuser.
--	RSW-002S	At a location in the receiving water 20 meters south of the outfall at mid-depth of diffuser.
--	RSW-003	At a location in the receiving water 300 meters south of outfall at mid-depth of diffuser.
--	RSW-004	At a location in the receiving water 1,000 meters south of outfall at mid-depth of diffuser.
--	BRN-001	At a location where a representative sample of brine waste can be collected prior to discharge to the outfall line.

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

- The Discharger shall monitor influent to the facility at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Daily Flow	MGD	Metered	1/Day	[1]
Mean Daily Flow	MGD	Calculated	1/Month	[1]
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	C-24 ^[2]	1/Week	[1]
Total Suspended Solids (TSS)	mg/L	C-24 ^[2]	1/Week	[1]

[1] As required under 40 CFR part 136.

[2] Composite samples may be taken by a proportional sampling devise approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

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

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
BOD ₅	mg/L	C-24	1/Week	[1]
TSS	mg/L	C-24	1/Week	[1]
Settleable Solids	mL/L	Grab	1/Month	[1]
Turbidity	NTUs	Grab	1/Week	[1]
Oil and Grease	mg/L	Grab	1/Month	[1]
Total Chlorine Residual	mg/L	Grab	1/Day	[1]
Chlorine Used	lbs/day	Recorded	1/Day	[1]
Total Coliform Bacteria	MPN/100mL	Grab	1/Week	[1]
Fecal Coliform Bacteria	MPN/100mL	Grab	5/Week	[1]
pH	standard units	Grab	1/Month	[1]
Temperature	° F	Grab	1/Month	[1]
Ammonia (as N)	mg/L	Grab	1/Month	[1]
Acute Toxicity ^[2]	TUa	Grab	1/Permit Term	[1]
Chronic Toxicity ^[2]	TUc	C-24	1/Year (April)	[1]
Ocean Plan Table 1 Pollutants ^[3, 4]	µg/L	C-24	1/Year (April)	[1]

[1] As required under 40 CFR part 136.

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

[3] Ocean Plan Table 1 metals are those metals identified in Table 1 of the Ocean Plan, and include arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, silver, zinc and cyanide.

[4] Those pollutants identified in Table 1 of the Ocean Plan (2015). Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table 1; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Whole Effluent Acute Toxicity – Monitoring Location EFF-001

Compliance with the acute toxicity objective shall be determined using a USEPA approved method protocol as provided in 40 CFR part 136 (*Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, USEPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition).

Acute Toxicity (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 Silversides (*Menidia beryllina*), however

other approved standard marine test species as specified in EPA-821-R-02-012 and as noted in the following table may be used with sufficient justification by the Discharger and approval by the Executive Officer.

Table E-4. Approved Tests – Acute Toxicity

Species	Scientific Name	Effect	Test Duration
Shrimp	<i>Holmesimysis costata</i>	Survival	48 or 96 hours
Shrimp	<i>Mysidopsis bahia</i>	Survival	48 or 96 hours
Silversides	<i>Menidia beryllina</i>	Survival	48 or 96 hours
Sheepshead Minnow	<i>Cyprinodon variegatus</i>	Survival	48 or 96 hours

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) originates from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTH 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 five 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 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), not to exceed 14 days from receipt of failure results. The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements (section VI.C.2 of the Order), or to implement other measures.

B. Whole Effluent Chronic Toxicity – Monitoring Location EFF-001

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-600-4-01-003; *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.

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

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 organism; 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 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 the State Water Board review and approval.

A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. 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. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

Table E-5. Approved Tests – Chronic Toxicity

Species	Effect	Tier ^[1]	Reference ^[2]
Giant Kelp, <i>Macrocystis pyrifera</i>	Percent germination; germ tube length	1	a, c
Red abalone, <i>Haliotis rufesens</i>	Abnormal shell development	1	a, c
Oyster, <i>Crassostrea gigas</i> ; Mussels, <i>Mytilus spp.</i>	Abnormal shell development; percent survival	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; Sand dollar, <i>Dendraster excentricus</i>	Percent normal development; percent fertilization	1	a, c
Shrimp, <i>Holmesimysis costata</i>	Percent survival; growth	1	a, c
Shrimp, <i>Mysidopsis bahia</i>	Percent survival; fecundity	2	b, d
Topsmelt, <i>Atherinops affinis</i>	Larval growth rate; percent survival	1	a, c
Silversides, <i>Menidia beryllina</i>	Larval growth rate; percent survival	2	b, d

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

^[2] Protocol References:

- a. Chapman, G.A., D.L. Denton, and J.M. Lazochak. 1995. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to west coast marine and estuarine organisms. USEPA 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 waters to marine and estuarine organisms. USEPA Report No. EPA-600-4-91-003.

- c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marin Bioassay Project. 96-1WQ.
- d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Neiheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1988. 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 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.

The presence of chronic toxicity at more than 166 TUc shall trigger the Toxicity Reduction Evaluation (TRE) requirement of this Order (section VI.C.2).

C. Accelerated Monitoring Requirements

1. When acute or chronic toxicity is detected in the effluent above an effluent limitation or toxicity trigger established by this Order, and the testing meets all test acceptability criteria, the Discharger shall resample immediately and confirm the effluent toxicity. If the retest results in toxicity greater than the effluent limitation or toxicity trigger, the Discharger shall initiate accelerated monitoring.
2. Accelerated monitoring frequency consists of performing six toxicity tests (one every two weeks) in a twelve-week period following the first failed test result (test results exceed effluent limitation or toxicity trigger), or as otherwise instructed by the Executive Officer. Test results shall be submitted to the Central Coast Water Board within 15 days of the conclusion of each test.
3. Unless otherwise specified by the Executive Officer, if the implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the toxicity trigger (for instance, a temporary plan upset), then only one additional test is necessary. If an exceedance of the toxicity effluent limitation or toxicity trigger is detected in this test, the Discharger shall continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
4. Unless otherwise specified by the Executive Officer, if none of the six accelerated tests indicates exceedances of the toxicity effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

D. Conducting Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE)

1. A TRE shall be implemented by the Discharger as specified by the Executive Officer. A TIE may be required as part of the TRE.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:

- a. *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, (USEPA, 1992a);
 - b. *Methods for Aquatic Toxicity Identification Evaluations: Phase 1 Toxicity Characterization Procedures, Second Edition* (USEPA, 1991a);
 - c. *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity* (USEPA, 1993a); and
 - d. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (USEPA, 1993b).
3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period may result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE includes the following:
- a. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, August 1999, EPA/833B-99/002; and
 - b. *Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program* dated May 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

E. Toxicity Reporting

1. The Discharger shall include a full report of toxicity test results with the regular monthly monitoring report and include the following information.
 - a. Toxicity test results,
 - b. Dates of sample collection and initiation of each toxicity test, and
 - c. And/or toxicity discharge limitations (or value).
2. Toxicity test results shall be reported according to the appropriate guidance – *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, USEPA Office of Water, PA821-R-02-012 (2002) or the latest edition, or EPA-821-R-02-012 (2002) or subsequent editions.
3. If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the monitoring report for the month in which investigations conducted under the TRE workplan occurred.
4. Within 14 days of receipt of a chronic toxicity test result which exceeds 166 TUc or an acute toxicity result which exceeds 5.25 TUa, the Discharger shall provide written notification to the Executive Officer of:
 - a. Findings of the TRE of other investigation to identify the cause(s) of toxicity,
 - b. Actions the Discharger has taken/will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity. When corrective actions, including TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS

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

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Receiving Surface Water Monitoring Requirements

The minimum sampling frequencies for receiving water monitoring are conditionally waived during normal operations. In the event of operational changes, plant upsets, or effluent violations occur that are likely to increase bacterial concentrations in the surf zone, the Discharger shall immediately sample according to Table E-6 below and continue with the minimum sampling frequency as shown until the source of increased bacterial concentration has been resolved.

Table E-6. Receiving Water Monitoring Requirements

Monitoring Location	Parameter	Units	Minimum Sampling Frequency	Required Analytical Test Method
SRF-A, SRF-B, SRF-C, SRF-D	Total and Fecal Coliform Organisms	MPN/100mL	1/Month	--
SRF-A, SRF-B, SRF-C, SRF-D	Surf conditions (narrative)	Narrative	1/Month	--
SRF-D	Current direction, if discernible	Narrative	1/Month	--
SRF-D	If Arroyo Grande Creek is flowing to Ocean	Narrative	1/Month	--
SRF-A, SRF-B, SRF-C	Shellfish Tissue Fecal Coliform Bacteria	MPN/100 g	1/Year	--

B. Benthic Sediment Monitoring

Benthic monitoring shall assess the temporal and spatial occurrence of pollutants in local marine sediments and evaluate the physical and chemical quality of the sediments in relation to the outfall. Sediment monitoring shall be conducted once every three years. One grab sediment sample shall be collected using a 0.1 m² Van Veen grab sampler at each benthic monitoring station. Sampling specified in the following table shall occur in the period from July through October at the ocean bottom directly below stations RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004.

- 1. The Discharger shall monitor benthic sediment at Monitoring Location RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004 as follows:

Table E-7. Benthic Sediment Monitoring Requirements

Parameter	Units	Minimum Sampling Frequency
Sediment particle size	Phi size (% volume)	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Sediment Sulfides at pH 7	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
BOD ₅	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Arsenic	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Cadmium	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Chromium	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Chromium ⁺⁶	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Copper	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Lead	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Nickel	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Mercury	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Silver	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Zinc	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Kjeldahl Nitrogen	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Ammonia	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Nitrate	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Organic Carbon (TOC)	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)

When processing samples for analysis, macrofauna and large remnants greater than 0.25 inches (0.64 cm) should be removed, taking care to avoid contamination.

Sediment samples shall be analyzed according to *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004, 1987) and *Analytical Methods for USEPA Priority Pollutants and 301(h) Pesticides in Estuarine and Marine Sediments* (EPA 503-6-90-004, 1986).

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

Benthic monitoring results shall be included in the Benthic Sediment Monitoring report with a complete discussion of benthic sediment survey results and potential influence of the discharge on sediment conditions in the study area. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patterns observed for raw sediment parameters. The report should also present an analysis of natural variation in sediment conditions, etc., which could influence the validity of study results. The Discharger's sediment results may also be compared with the results of other applicable studies, numerical protective levels, etc., as appropriate.

Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

C. Benthic Community Monitoring

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

1. Collection: At least five benthic samples shall be collected at each of the five ocean monitoring stations (RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004) using a 0.1 m² Van Veen grab sampler.
2. For benthic infauna analyses, each replicate sample shall be passed through a 1 mm screen, and the organisms retained and preserved as appropriate for subsequent identification. It is recommended that sample preservation, sample processing, and data analyses be conducted according to *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004, 1987).
3. Benthic infauna from each replicate sample shall be counted and identified to the lowest possible taxon. For each replicate sample, number of individuals, number of species, and number of individuals per species, and within each major taxonomic group (polychaetes, molluscs, crustaceans, echinoderms, and all other macroinvertebrates) shall be recorded.
4. The report shall include a complete discussion of benthic infaunal survey results and (possible) influence of the outfall on benthic infauna communities in the study area. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patterns. Temporal trends in the number of individuals, number of species, number of individuals per species, and community structure indices, species richness (S), Margalef index (d), Shannon-Wiener index (H'), Brillouin index (h), Simpson's Index (SI), Swartz's dominance, and Infaunal Trophic Index (IT) shall be reported. The annual report should also present an analysis of natural community variation including the effects of different sediment conditions, oceanic seasons, and

water temperatures, etc., that could influence the validity of study results. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

1. The following information shall be submitted with the annual biosolids report. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR part 503.
 - a. Annual biosolids production in dry tons and percent solids.
 - b. A schematic drawing showing biosolids handling facilities (e.g., digesters, lagoons, drying beds, incinerators) and a solids flow diagram.
 - c. A narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if biosolids are digested, report average temperature and retention time of the digesters. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
 - d. A description of disposal methods, including the following information as applicable related to the disposal methods used at the facility. If more than one method is used, include the percentage and tonnage of annual biosolids production disposed by each method.
 - i. For landfill disposal include:
 - (a) The Central Coast Water Board WDR numbers that regulate the landfills used,
 - (b) The present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.
 - ii. For land application include:
 - (a) The location of the site(s),
 - (b) The Central Coast Water Board's WDR numbers that regulate the site(s),
 - (c) The application rate in lbs/acre/year (specify wet or dry), and
 - (d) Subsequent uses of the land.
 - iii. For offsite application by a licensed hauler and composter include:
 - (a) The name, address and USEPA license number of the hauler and composter.
 - e. Copies of analytical data required by other agencies (i.e., USEPA or County Health Department) and licensed disposal facilities (i.e., landfill, land application, or composting facility) for the previous year.
2. A representative sample of residual solids (biosolids) shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal) and shall be analyzed for total concentrations for comparison with TTLC criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the STLC limit for that substance.

Table E-8. Biosolids Monitoring Requirements

Parameter	Units	Sample Type	Minimum Frequency of Sampling/Analysis
Quantity Removed	tons or yards ^[1]	Measured	During Removal
Location of Reuse/Disposal	site	--	During Removal
Moisture Content	percent	Grab	Once Per Quarter (4/Year)
Total Kjeldahl Nitrogen	mg/kg	Grab	Once Per Quarter (4/Year)
Ammonia (as N)	mg/kg	Grab	Once Per Quarter (4/Year)
Nitrate (as N)	mg/kg	Grab	Once Per Quarter (4/Year)
Total Phosphorus	mg/kg	Grab	Once Per Quarter (4/Year)
pH	standard units	Grab	Once Per Quarter (4/Year)
Oil and Grease	mg/kg	Grab	Once Per Quarter (4/Year)
Arsenic	mg/kg	Grab	Once Per Quarter (4/Year)
Boron	mg/kg	Grab	Once Per Quarter (4/Year)
Cadmium	mg/kg	Grab	Once Per Quarter (4/Year)
Copper	mg/kg	Grab	Once Per Quarter (4/Year)
Chromium	mg/kg	Grab	Once Per Quarter (4/Year)
Lead	mg/kg	Grab	Once Per Quarter (4/Year)
Nickel	mg/kg	Grab	Once Per Quarter (4/Year)
Mercury	mg/kg	Grab	Once Per Quarter (4/Year)
Molybdenum	mg/kg	Grab	Once Per Quarter (4/Year)
Selenium	mg/kg	Grab	Once Per Quarter (4/Year)
Zinc	mg/kg	Grab	Once Per Quarter (4/Year)

^[1] Total sample (including solids and any liquid portion) to be analyzed and results reported as mg/kg based on the dry weight of the sample

B. Pretreatment

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 EPA has identified under Section 307(a) of the Act which are known or are suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR part 136. Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent samples.

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

C. Ocean Outfall and Diffuser Inspection

The Discharger shall conduct an inspection of the outfall pipe/diffuser system every three years (2019 and 2022 and additional years if the permit is administratively extended) to ensure the proper operation and structural integrity of the system. This inspection shall include general observations and photographic records of the outfall pipe/diffuser system and the surrounding ocean bottom in the vicinity of the outfall/diffuser. The inspection shall be conducted along the outfall pipe/diffuser system from landfall to its ocean terminus. A report detailing inspection results shall be submitted to the Central Coast Water Board and USEPA as described in Table E-10.

D. Brine Monitoring

Monitoring of brine wastes accepted for discharge by the District shall include the following components.

1. Brine wastes shall be characterized as follows at Monitoring Location BRN-001. Results of chemical monitoring shall be reported to the Central Coast Water Board on Discharge Monitoring Reports. Any significant changes in brine characteristics (from those presented in the Discharger's Brine Management Plan) or potential impacts to combined effluent quality shall be summarized.

Table E-9. Brine Monitoring Requirements (BRN-001)

Parameter	Units	Sample Type	Minimum Frequency of Sampling/Analysis
Electrical Conductivity	µmhos/cm	Grab	1/Week
pH	Standard units	Grab	1/Week
Ocean Plan Metals ^[1]	µg/L	Grab	1/Year ^[2]

^[1] Ocean Plan Table 1 metals are identified in Table 1 of the Ocean Plan and include arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, silver, zinc, and cyanide.

^[2] Metals analysis shall be conducted on one representative sample per hauler per year.

2. The Discharger shall evaluate potential interferences and develop an updated Brine Monitoring Plan to evaluate final effluent compliance after mixing with treated wastewater. If additional monitoring, beyond that described in Table E-9 above, is warranted to demonstrate the compliance of mixed effluent-brine with effluent limitations of this Order, Discharger shall specify those parameters and frequencies. If flow weighted-averages are appropriate, Discharger shall specify the manner and methods of those parameter's calculations. An updated Brine Monitoring Plan shall be submitted by **August 1, 2019**.
3. The Discharger shall maintain logs that describe and document brine wastes accepted by the treatment plant. Logs shall record, at a minimum, the following information and copies of logs shall be submitted to the Central Coast Water Board corresponding effluent sampling period and reports.
 - a. Date and time of receipt of each truckload;
 - b. Initials of District personnel present at the time of receipt of each truckload;
 - c. Volume of brine waste on each truckload, owner of each truckload, and a brief description of each truckload (e.g., potable water softener regeneration waste, industrial process demineralizer regeneration waste, reverse osmosis brine, etc.)

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 electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-10. Monitoring Periods and Reporting Schedule

SMR Name	Permit Section for Monitoring & Sampling Data Included in this Report	SMR Submittal Frequencies	SMR Due Date
Updated TRE Workplan	Order Section VI.C.2.c (page 15)	Once per permit	August 1, 2019
Updated Brine Monitoring Plan	MRP Section IX.D.2 (page E-15)	Once per permit	August 1, 2019
NPDES Monitoring Report – Monthly	MRP Sections III (Influent), IV (Effluent), IX.D (Brine) and VIII.A (Receiving Water), as needed	Monthly	First day of second calendar month following period of sampling (first report due June 1, 2019)
NPDES Monitoring Report - Annual	MRP Section IV.A (Effluent; Chronic Toxicity, Ocean Plan Table B) and Section IX.B (Influent, Effluent, Biosolids; Priority Pollutants)	Annually	January 30 th , the year following sampling
Biosolids Monitoring Report	MRP Section IX.A	Annually	January 30 th , the year following sampling
NPDES Summary Report	Attachment D, Standard Provisions (page D-13)	Annually	January 30 th , the year following
Outfall and Diffuser Inspection Report	MRP Section IX.C	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)	April 1 st , the year following inspections
Benthic Sediment Monitoring	MRP Section VIII.B	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)	April 1 st , the year following sampling

SMR Name	Permit Section for Monitoring & Sampling Data Included in this Report	SMR Submittal Frequencies	SMR Due Date
Acute Toxicity	MRP Section IV.A (effluent)	Once per permit	January 30 th , the year following 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 CFR part 136.

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

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

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

- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. Compliance Determination. Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Central Coast Water Board and State Water Board, 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 ML.
 6. 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:
 - a. 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.

- b. 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.
7. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

1. DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at:
<http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring>.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, BMPs, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C of the Order. The Discharger shall submit reports addressing coastal hazards as required in Special Provisions – VI.C.6. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II.B 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 400111001
Discharger	South San Luis Obispo County Sanitation District
Name of Facility	Wastewater Treatment Facility
Facility Address	1600 Aloha Place
	Oceano, CA 93445-9735
	San Luis Obispo County
Facility Contact, Title and Phone	Jerome Mychal Jones Jr., Chief Plant Operator, (805) 489 - 6666
Authorized Person to Sign and Submit Reports	SAME
Mailing Address	1600 Aloha Place, Oceano, CA 93445-9735
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	No
Recycling Requirements	No
Facility Permitted Flow	5.0 MGD
Facility Design Flow	5.0 MGD
Watershed	Arroyo Grande Creek
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

- A. The South San Luis Obispo County Sanitation District (hereinafter Discharger) operates a wastewater collection, treatment, and disposal facility, which provides service to the cities of Arroyo Grande and Grover Beach and the Oceano Community Services District. The cities of Arroyo Grande and Grover Beach and the Oceano Community Services District retain ownership and direct responsibility for wastewater collection and transport systems up to the point of discharge into interceptors owned and operated by the Discharger.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable

federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B.** The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Discharger was previously regulated by Order No. R3-2009-0046 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048003, which was adopted on October 23, 2009, and expired on October 23, 2014. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.
- 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 April 22, 2014. The application was deemed complete on April 22, 2014.
- D.** Regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

The District's wastewater treatment system currently serves a population of approximately 38,000 from the cities of Arroyo Grande and Grover Beach and the Oceano Community Services District. Residential, commercial, and industrial wastewater is conveyed to the South San Luis Obispo County Sanitation District wastewater treatment facility, which has a design dry weather treatment capacity of 5.0 MGD (monthly average flow) and a peak wet weather treatment capacity of 9.0 MGD.

Wastewater is mechanically screened and pumped to two identical primary clarifiers - one constructed in 1965 and the other in 1990. Each primary clarifier is 55 feet in diameter with a side wall depth of 9 feet, thereby providing a combined volume of 320,625 gallons. At average flow rates, the combined overflow rate from the clarifiers is 610 gallons per day per square foot (GPD/SF) with a detention time of 2.65 hours.

Secondary treatment is achieved via a single fixed film reactor which was constructed in 1986. The reactor is 117 feet in diameter with a plastic media depth of 12 feet. In the late 1990s, the District determined that proliferation of snails and filter flies within the media was causing a significant decline in reactor performance. This situation has been addressed by altering (slowing) the speed of the wastewater distribution arm above the reactor media as needed. The change in distribution of wastewater causes a slight flushing effect. Two to three times per year, pH of wastewater entering the reactor is also elevated, causing some direct toxicity to snails and filter flies and their larval stages and causing an increase in ammonia present in the more toxic unionized form. pH is subsequently lowered using citric acid following the reactor.

The secondary clarifier, which follows the fixed film reactor in the treatment scheme, was constructed in 1986 and is 97 feet in diameter with a side wall depth of 12 feet, thereby providing a total volume of 665,000 gallons. At average flows, the overflow rate from the clarifier is approximately 393 GPD/SF with a detention time of 5.5 hours. Secondary treated wastewater is chlorinated within a chlorine contact chamber and subsequently dechlorinated prior to discharge through the ocean outfall line, which is a joint outfall also accommodating discharges from the municipal wastewater treatment plant of the City of Pismo Beach. The combined discharge occurs approximately 4,400 feet offshore at a depth of 55 feet. The

wastewater treatment plant accepts small volumes of brines, which are introduced to the plant outfall following chlorination/dechlorination steps. In 2008, the Facility accepted approximately 325,000 gallons of water softener regenerant brine waste from one hauler. Sludge/biosolids are anaerobically digested, dewatered via a centrifuge and/or drying beds, and hauled offsite to a composting facility. The Facility’s one centrifuge was installed in September 2011.

B. Discharge Points and Receiving Waters

Discharge from the Facility to the Pacific Ocean occurs through Discharge Point 001. The discharge occurs through a 4400-foot outfall/diffuser system that terminates at a depth of approximately 55 feet in the Pacific Ocean at 35° 06' 04" N. latitude and 120° 38' 46" W. longitude. Discharges through Discharge Point No. 001 consist of secondary treated wastewater and/or brine wastes, as described above. The minimum probable initial dilution for Discharge Point No. 001 is 165 to 1, a figure that has been used by Central Coast Water Board staff to determine the need for water quality based effluent limitations, and, if necessary, to calculate those limitations.

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

Effluent limitations contained in Order No. R3-2009-0046 for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) and representative monitoring data from the term of Order No. R3-2009-0046 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From September 2012 – September 2017)		
		Avg. Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	40	60	90	39.9	56.1	88
	lbs/day ^[1]	1,668	2,502	3,753	743	1,178	1,835
Total Suspended Solids (TSS)	mg/L	40	60	90	56.9	41.4	480
	lbs/day ^[1]	1,668	2,502	3,753	1,020	1,132	1,293
Settleable Solids	mL/L	1.0	1.5	3.0	NA	NA	0.2
Turbidity	NTU	75	100	225	35.8	NA	57.8
Oil and Grease	mg/L	25	40	75	NA	NA	8.4
	lbs/day ^[1]	1,042	1,668	3,127	NA	NA	NA
Fecal Coliform Bacteria	MPN/100 mL	--	200 ^[2]	2,000	NA	240	160,000
pH	standard units	6.0 – 9.0 at all times			6.98 – 8.19		

^[1] Mass based effluent limitations were calculated using the following formula:
lbs/day = pollutant concentration (mg/L) * Design flow (5.0 MGD) * conversion factor (8.34)

^[2] 7-sample median

Table F-3. Historic Effluent Limitations and Monitoring Data, Protection of Marine Aquatic Life

Parameter	Units	Effluent Limitation			Monitoring Data (From June 2010– To April 2014)
		6-Month Median	Maximum Daily	Instant Max	Highest Instant Max
Ammonia (as N)	mg/L	99.6	398.4	996	26
	lbs/day	4,153	16,613	41,533	NA
Arsenic	mg/L	0.83	4.82	12.79	2
	lbs/day	35	201	533	NA
Cadmium	mg/L	0.17	0.66	1.66	0.2
	lbs/day	6.9	28	69	NA
Chromium (Hex)	mg/L	0.33	1.33	3.32	<10
	lbs/day	14	55	138	NA
Copper	mg/L	0.17	1.66	4.65	36
	lbs/day	7.0	69	194	NA
Lead	µg/L	0.33	1.33	3.32	1.3
	lbs/day	14	55	138	NA
Mercury	µg/L	6.56	26.48	66.32	0.06
	lbs/day	0.27	1.1	2.8	NA
Nickel	mg/L	0.83	3.32	8.30	6
	lbs/day	35	138	346	NA
Selenium	mg/L	2.49	9.96	24.90	<2
	lbs/day	104	415	1,038	NA
Silver	mg/L	0.090	0.44	1.14	<1
	lbs/day	3.7	18	47	NA
Zinc	mg/L	2.00	11.96	31.88	50
	lbs/day	83	499	1,329	NA
Cyanide	µg/L	0.17	0.66	1.66	<4
	lbs/day	6.9	28	69	NA
Total Chlorine Residual	µg/L	0.33	1.33	9.96	32,000
	lbs/day	14	55	415	NA
Acute Toxicity	TUa	--	5.25	--	NA
Chronic Toxicity	TUc	--	166	--	178
Phenolic Compounds (non-chlorinated)	µg/L	4.98	19.92	49.80	<1
	lbs/day	208	831	2,177	NA
Phenolic Compounds (chlorinated)	mg/L	0.17	0.66	1.66	<2
	lbs/day	6.9	28	69	NA
Endosulfan	µg/L	1.49	2.99	4.48	<0.05
	lbs/day	0.062	0.12	0.19	NA
Endrin	µg/L	0.33	0.66	1.00	<0.005
	lbs/day	0.014	0.028	0.042	NA
HCH	µg/L	0.66	1.33	1.99	<0.005
	lbs/day	0.028	0.055	0.083	NA

Parameter	Units	Effluent Limitation			Monitoring Data (From June 2010– To April 2014)
		6-Month Median	Maximum Daily	Instant Max	Highest Instant Max
Radioactivity	pCi/L	[1]			NA

Table F-4. Historic Effluent Limitations and Monitoring Data, Protection of Human Health

Parameter	Units	Effluent Limitation	Monitoring Data (From September 2012 – September 2017)
		Average Monthly	Highest Average Monthly Discharge
Non- Carcinogens			
Acrolein	µg/L	36.52	9
	lbs/day	1,523	NA
Antimony	µg/L	199.2	1
	lbs/day	8,307	NA
Bis(2-chloroethoxy) methane	µg/L	0.730	<1
	lbs/day	30	NA
Bis(2-chloroisopropyl) ether	µg/L	199.2	<1
	lbs/day	8,307	NA
Chlorobenzene	µg/L	94.62	<0.5
	lbs/day	3,946	NA
Chromium (III)	mg/L	31.54	1
	lbs/day	1,315,218	NA
Di-n-butyl phthalate	µg/L	581	<2
	lbs/day	24,228	NA
Dichlorobenzenes	µg/L	846.6	<0.5
	lbs/day	35,303	NA
Diethyl phthalate	mg/L	5.478	<1
	lbs/day	228,433	NA
Dimethyl phthalate	mg/L	136.12	<1
	lbs/day	5,676,204	NA
4,6-dinitro-2-methylphenol	µg/L	36.52	NA
	lbs/day	1,523	NA
2,4-dinitrophenol	µg/L	0.664	<5
	lbs/day	28	NA
Ethylbenzene	µg/L	680.6	<0.5
	lbs/day	28,381	NA
Fluoranthene	µg/L	2.49	<1
	lbs/day	104	NA
Hexachlorocyclopentadiene	µg/L	9.628	<1
	lbs/day	401	NA

Parameter	Units	Effluent Limitation	Monitoring Data (From September 2012 – September 2017)
		Average Monthly	Highest Average Monthly Discharge
Nitrobenzene	µg/L	0.813	<1
	lbs/day	34	NA
Thallium	µg/L	0.332	<0.2
	lbs/day	14	NA
Toluene	µg/L	14.11	2.3
	lbs/day	588,387	NA
Tributyltin	ng/L	232	0.0021
	lbs/day	0.0097	NA
1,1,1-trichloroethane	g/L	89.64	<0.5
	lbs/day	3,737,988	NA
Carcinogens			
Acrylonitrile	µg/L	16.6	<2
	lbs/day	0.69	NA
Aldrin	ng/L	3.652	<0.005
	lbs/day	0.00015	NA
Benzene	µg/L	979.4	<0.5
	lbs/day	41	NA
Benzidine	ng/L	11.454	<2
	lbs/day	0.00048	NA
Beryllium	µg/L	5.478	<0.2
	lbs/day	0.23	NA
Bis(2-chloroethyl) ether	µg/L	7.47	<1
	lbs/day	0.31	NA
Bis(2-ethylhexyl) phthalate	µg/L	581	12
	lbs/day	24	NA
Carbon tetrachloride	µg/L	149.4	<0.5
	lbs/day	6.2	NA
Chlordane	ng/L	3.818	<0.005
	lbs/day	0.00016	NA
Chlorodibromomethane	mg/L	1.428	NA
	lbs/day	60	NA
Chloroform	µg/L	21.580	7
	lbs/day	900	NA
DDT	ng/L	28.22	<0.005
	lbs/day	0.0012	NA
1,4-dichlorobenzene	mg/L	2.988	<0.5
	lbs/day	125	NA
3,3-dichlorobenzidine	µg/L	1.345	<2
	lbs/day	0.056	NA
1,2-dichloroethane	mg/L	4.648	<0.5
	lbs/day	194	NA

Parameter	Units	Effluent Limitation	Monitoring Data (From September 2012 – September 2017)
		Average Monthly	Highest Average Monthly Discharge
1,1-dichloroethylene	µg/L	149.4	<0.5
	lbs/day	6.2	NA
Dichlorobromomethane	mg/L	1.029	<0.5
	lbs/day	43	NA
Dichloromethane	mg/L	74.7	<2
	lbs/day	3115	NA
1,3-dichloropropene	mg/L	1.477	NA
	lbs/day	62	NA
Dieldrin	ng/L	6.64	<0.005
	lbs/day	0.00028	NA
2,4-dinitrotoluene	µg/L	431.6	<1
	lbs/day	18	NA
1,2-diphenylhydrazine	µg/L	26.56	<1
	lbs/day	1.1	NA
Halomethanes	µg/L	21.58	0.7
	lbs/day	900	NA
Heptachlor	ng/L	8.3	<0.005
	lbs/day	0.00035	NA
Heptachlor epoxide	ng/L	3.32	<0.005
	lbs/day	0.00014	NA
Hexachlorobenzene	µg/L	34.86	<1
	lbs/day	0.0015	NA
Hexachlorobutadiene	mg/L	2.324	<1
	lbs/day	97	NA
Hexachloroethane	µg/L	415	<1
	lbs/day	17	NA
Isophorone	mg/L	121.18	<1
	lbs/day	5,053	NA
N-nitrosodimethylamine	mg/L	1.212	<2
	lbs/day	51	NA
N-nitrosodi-n-propylamine	µg/L	63.08	<1
	lbs/day	2.6	NA
N-nitrosodiphenylamine	µg/L	415	<1
	lbs/day	17	NA
PAHs	µg/L	1.461	<1
	lbs/day	0.061	NA
PCBs	ng/L	3.154	<0.5
	lbs/day	0.00013	NA
TCDD equivalents	pg/L	0.6474	1 x 10 ⁻⁶
	lbs/day	0.000000027	NA
1,1,2,2-tetrachloroethane	µg/L	381.8	<0.5

Parameter	Units	Effluent Limitation	Monitoring Data (From September 2012 – September 2017)
		Average Monthly	Highest Average Monthly Discharge
Tetrachloroethylene	lbs/day	16	NA
	µg/L	332	<0.5
Toxaphene	lbs/day	14	NA
	ng/L	34.86	<0.5
Trichloroethylene	lbs/day	0.0015	NA
	mg/L	4.482	<0.5
1,1,2-trichloroethane	lbs/day	187	NA
	µg/L	1.56	<0.5
2,4,6-trichlorophenol	lbs/day	65	NA
	µg/L	48.14	<1
Vinyl chloride	lbs/day	2.01	NA
	µg/L	5.976	<0.5
	lbs/day	249	NA

D. Compliance Summary

The Discharger violated numeric effluent limitations during the term of Order No. R3-2009-0046. The following table summarizes the violations of effluent limitations based on data collected from September 2012 through September 2017. The majority of the violations are related to issues with an overworked secondary treatment system. The Discharger is actively pursuing a redundancy project that will enable it to maintain the secondary treatment process. The expectation is that by adding redundancy to the secondary treatment process, the Discharger will be better able to control biological sloughing from the fixed-film bioreactor and therefore reduce disinfection and total suspended solids violations. Additionally, the Discharger has improved the disinfection system monitoring to provide for better control of chlorine dosing. These improvements have decreased the incidence of fecal coliform violations in recent Facility operations. Please see the Planned Changes section below for additional details on the redundancy project.

Table F-5. Compliance Summary

Violation Description	Date of Violation
Fecal Coliform Daily Maximum limit is 2,000 MPN/100 mL and reported value was 3,500 MPN/100 mL.	9/12/2012
Fecal Coliform Daily Maximum limit is 2,000 MPN/100 mL and reported value was 50,000 MPN/100 mL.	9/28/2012
Fecal Coliform Daily Maximum limit is 2,000 MPN/100 mL and reported value was 160,000 MPN/100 mL.	10/24/2012
Fecal Coliform Daily Maximum limit is 2,000 MPN/100 mL and reported value was 24,000 MPN/100 mL.	3/16/2013
Chronic Toxicity (Species 3) Daily Maximum limit is 166 TUc and reported value was 178 TUc.	4/8/2013

Violation Description	Date of Violation
Chlorine, Total Residual Instantaneous Maximum limit is 9.96 mg/L and reported value was 13.5 mg/L.	3/12/2014
Fecal Coliform Seven Sample Median limit is 200 MPN/100 mL and reported value was 240 MPN/100 mL.	9/5/2014
Fecal Coliform Seven Sample Median limit is 200 MPN/100 mL and reported value was 220 MPN/100 mL.	9/26/2014
Total Suspended Solids (TSS) Weekly Average limit is 60.0 mg/L and reported value was 61.4 mg/L.	7/4/2015
Total Suspended Solids (TSS) Monthly Average limit is 40 mg/L and reported value was 57 mg/L.	7/31/2015
Fecal Coliform Single Sample Maximum limit is 2000 MPN/100 mL and reported value was 5400 MPN/100 mL.	7/31/2015
Total Suspended Solids (TSS) Weekly Average limit is 60 mg/L and reported value was 63.6 mg/L.	7/31/2015
Fecal Coliform Daily Maximum limit is 2000 MPN/100 mL and reported value was 5400 MPN/100 mL.	12/3/2015
Total Suspended Solids (TSS) Monthly Average (Mean) limit is 40 mg/L and reported value was 44 mg/L.	5/31/2016
Total Suspended Solids (TSS) 30-Day Average limit is 40 mg/L and reported value was 45 mg/L.	6/30/2016
Chlorine, Total Residual Instantaneous Maximum limit is 9.96 mg/L and reported value was 32.0 mg/L.	5/3/2017

E. Planned Changes

The Discharger has a planned project to address the lack of redundancy in its secondary treatment processes. Currently, the existing treatment plant cannot meet effluent limits at the permitted design flow if the fixed film reactor or secondary clarifiers are out of service because there is no backup, or redundant, system for either process. To address this issue, previous Order No. R3-2009-0046 anticipated the addition of redundancy infrastructure to be installed so that critical components can be removed from service for routine maintenance or repairs or be shut down in case of mechanical failure or emergency, without risking violation of effluent permit limits. The addition of redundancy infrastructure does not add capacity to handle higher flows than currently permitted, and no additional treatment capacity is intended to be pursued by the District based on current plans and policies adopted by the member agencies and within the service area. The Discharger obtained a conditional Coastal Development Permit (CDP) for these Facility improvements on May 10, 2017. On September 17, 2018, the Discharger completed 60% engineering design plans for the project. The Discharger is analyzing the updated project costs, working on finalizing project design, and complying with the CDP. The projected construction start is fall 2019 with completion estimated to be May 2022.

The California Coastal Commission’s senior coastal engineer and sea level rise team concluded, as part of the CDP process, that the Facility is already impacted by flooding and that flooding impacts to the Facility are likely to become even more frequent in the future at this location. Based on that finding, the Commission approved a limited 30-year temporary authorization for the

Facility location, with two 10-year reevaluation requirements. To better understand flooding and sea level rise impacts over time and to inform the 10-year reevaluations as part of the 30-year authorization, the Discharger was required to submit a Coastal Hazards Monitoring Plan by November 10, 2017. The Discharger initiated that process with contractor Environmental Science Associates in June 2017. However, the Discharger had staff changes at critical positions (Chief Plant Operator and District Administrator) during the same time and failed to complete the required submittal. The Discharger is aware of the oversight and working to complete the submittal by mid-November 2018.

The city of Pismo Beach began pursuing a project, called Central Coast Blue, to recycle treated wastewater to meet the requirements for indirect potable reuse. This recycled water would be injected into portions of the basin to provide for both continued pumping of groundwater and protection from saltwater intrusion into local supply wells. Pismo Beach and the Discharger are working cooperatively to complete preliminary engineering for the project's design parameters and feasibility. Currently, the Facility is envisioned to be the future location for the advanced wastewater treatment processes related to the project. Central Coast Blue has received a planning study grant and Pismo Beach has applied for additional grant funding through Proposition 1.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order serves as WDRs 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 USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

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

1. **Water Quality Control Plan.** The Central Coast Water Board adopted a Water Quality Control Plan for the Central Coast Basin (hereinafter Basin Plan) on September 27, 2017 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and other Receiving Waters addressed through the plan. Requirements in this Order implement the Basin Plan.

Beneficial uses applicable to the Pacific Ocean are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean (Pt San Luis to Pt Sal)	Water Contact (REC-1) Non-Contact Recreation (REC-2) Industrial Supply (IND) Navigation (NAV) Marine Habitat (MAR) Shellfish Harvesting (SHELL) Commercial and Sport Fishing (COMM) Rare, Threatened, or Endangered Species (RARE) Wildlife Habitat (WILD)

2. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains the following temperature objective for existing discharges to enclosed bays and coastal waters of California which is applicable to this Discharger.

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

The Ocean Plan defines elevated temperature wastes as:

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

Requirements of this Order implement the Thermal Plan.

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, 2012, and 2015. The State Water Board adopted the latest amendment on May 6, 2015, and it became effective on January 28, 2016. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the state to be protected as summarized below:

Table F-7. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
Outfall 001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

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

4. **Antidegradation Policy.** Federal regulation 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution 68-16 (“Statement of Policy with Respect to Maintaining High

Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality 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 provision of section 131.12 and State Water Board Resolution 68-16.

5. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.
6. **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.
7. **Sewage Sludge and Biosolids.** This Order does not authorize any act that results in violation of requirements administered by USEPA to implement 40 CFR part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 CFR part 503 that are under USEPA's enforcement authority.

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

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

The USEPA approved the State's 2014/2016 303(d) list of impaired water bodies on April 6, 2018. The 2014/2016 303(d) list does not identify impairments within the vicinity of the discharge.

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 2014-0057-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).** The 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 Discharger is covered under the General Permit and must comply with its requirements.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

1. **Discharge Prohibition III.A.** (Discharge of treated wastewater at a location different from that described in this Order is prohibited). This prohibition is similar to the previous Order and is based on 40 CFR section 122.21(a), duty to apply, and CWC Section 13260, which requires filing a ROWD before discharges can occur.
2. **Discharge Prohibition III.B.** (Discharges of any waste in any manner other than as described by this Order are prohibited.) Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by the Central Coast Water Board during the process of permit reissuance.
3. **Discharge Prohibition III.C.** (The average dry weather monthly rate of discharge to the Pacific Ocean shall not exceed 5.0 MGD.) This flow limitation is retained from the previous permit and reflects the design treatment capacity of the Facility. The prohibition ensures that the influent flow will not exceed the treatment plant's design capacity.
4. **Discharge Prohibition III.D.** (Wastes shall not be discharged to State Water Quality Protection Areas.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
5. **Discharge Prohibition III.E.** (The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste to the Ocean is prohibited.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
6. **Discharge Prohibition III.F.** (The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge or digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
7. **Discharge Prohibition III.G.** (The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of

untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited.) The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR section 122.41 (m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order.

8. **Discharge Prohibition III.H.** (Materials and substances that are prohibited). This prohibition is based on the requirements of the Ocean Plan. This prohibition was previously applied as an effluent limitation in Order R3-2009-0046 and is retained in this Order as a discharge prohibition.

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

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

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

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH.

Table F-8. Secondary Treatment Requirements

Parameter	Units	30-Day Average	7-Day Average
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅) ¹	mg/L	30	45
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C (CBOD ₅) ²	mg/L	25	40
Total Suspended Solids (TSS) ¹	mg/L	30	45
pH	standard units	6.0 – 9.0	

[1] The 30-day average percent removal for BOD₅ and TSS shall not be less than 85 percent.

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

Following publication of the secondary treatment regulations, legislative history indicates that Congress was concerned that USEPA had not “sanctioned” the use of certain biological treatment techniques that were effective in achieving significant reductions in BOD₅ and TSS for secondary treatment. Therefore, to prevent unnecessary construction of costly new facilities, Congress included language in the 1981 amendment to the Construction Grants statutes [Section 23 of Pub. L. 97-147] that required USEPA to provide allowance for alternative biological treatment technologies such as trickling filters or waste stabilization ponds. In response to this requirement, the definition of secondary treatment was modified on September 20, 1984 and June 3, 1985, and published in the revised secondary treatment regulations contained in 40 CFR section 133.105. These regulations allow alternative limitations for facilities using trickling filters and waste stabilization ponds that meet the requirements for “equivalent to secondary treatment.” These “equivalent to secondary treatment” limitations are up to 45 mg/L (monthly average) and up to 65 mg/L (weekly average) for BOD₅ and TSS.

Therefore, POTWs that use trickling filters, identified in 40 CFR section 133.103, as the principal process for secondary treatment and whose operation and maintenance data indicate that the BOD₅ and TSS values specified in the equivalent-to-secondary regulations cannot be achieved, can qualify to have their minimum levels of effluent quality for BOD₅ and TSS adjusted upwards.

In order to be eligible for equivalent-to-secondary limitations, a POTW must meet all of the following criteria:

- a. The principal treatment process must be either a trickling filter or waste stabilization pond.
- b. The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of 30 mg/L BOD₅ and TSS.
- c. Water quality is not adversely affected by the discharge. (40 CFR § 133.101(g).)

The Facility's fixed film reactor is considered to be a trickling filter treatment unit. The Facility exceeds 30 mg/L BOD₅ in 49 percent of samples, and exceeds 30 mg/L TSS in 61 percent of samples based on monitoring data reported for November 2013 through September 2017. In addition, the Central Coast Water Board finds the receiving water outside of the authorized regulatory mixing zone has not been adversely affected by the discharge. Therefore, the Central Coast Water Board finds the Facility to be eligible for equivalent-to-secondary limitations.

2. Applicable Technology-Based Effluent Limitations

In the 1980s, the Central Coast Water Board adopted maximum alternate permit limits for BOD₅ and suspended solids of 45 mg/L (30-day average) and 65 mg/L (7-day average) as a temporary measure until plant performance data were available as a basis for setting limits. The minimum allowable removal efficiency of 75% was incorporated into the Discharger's permit at that time consistent with the California Ocean Plan. In 1994, the Discharger's permit was reissued with alternate BOD₅, and TSS limits of 45, and 40 mg/L, respectively, and suspended solids removal efficiency of 80%.

During design of the existing treatment facilities, USEPA indicated that trickling filters on the Central Coast of California should be capable of meeting BOD₅ and TSS limits of 35 mg/L (30-day average); however, the Central Coast Water Board determined that due

to the length, depth and design of the outfall structure, limits of 40 mg/L would be acceptable at that time. Based upon performance of other trickling filter facilities, Discharger performance, and USEPA expectations regarding trickling filters, limits of 40 mg/L for BOD₅ and TSS were included in the previous Order. These limits are retained in Order and are achievable by the Facility without impacts to water quality. The following table summarizes technology-based effluent limitations established in this Order.

Table F-9. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ¹	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
TSS ¹	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Oil and Grease	mg/L	25	40	75
	lbs/day	1,042	1,668	3,127
pH	standard units	6.0 – 9.0		

^[1] The 30-day average percent removal for BOD₅ and TSS shall not be less than 80 percent.

^[2] At the option of the permitting authority, effluent limitations for CBOD₅ may be substituted for those limitations specified for BOD₅.

All technology-based limitations are retained from the previous permit. Mass-based limitations for BOD₅, TSS, and oil and grease are based on a discharge rate of 5.0 MGD, the design treatment capacity of the Facility.

The treatment works as a whole provides significant biological treatment such that a minimum 65 percent reduction of BOD₅ is consistently attained (30-day average). In addition to the secondary treatment standards established in 40 CFR part 133, the State Water Board, in Table 2 of the Ocean Plan, has supplemented these technology-based requirements with additional requirements for conventional pollutants (settleable matter, oil and grease), which are applicable to the Facility. The Ocean Plan requirements are discussed in section IV.B.2 of this Fact Sheet.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy

interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses of ocean waters of the Central Coast Region are established by the Basin Plan and California Ocean Plan and are described in section III.C.1 and III.C.3, respectively, of the Fact Sheet. The water quality objectives (WQOs) from the California Ocean Plan are incorporated as receiving water limitations into this Order.

Water quality objectives applicable to ocean waters of the Central Coast region include water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. In addition, Table 1 of the California Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR section 122.44(d)(1) and in accordance with procedures established by the California Ocean Plan, 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 California 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 95th 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 California Ocean Plan Appendix III is required.

Endpoint 2 - There is no "reasonable potential." An effluent limitation is not required for the pollutant. California Ocean Plan Appendix III effluent monitoring is not required for the pollutant. However, the Central Coast Water Board 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 California Ocean Plan Appendix III is required. An existing effluent limitation for the pollutant shall remain in the permit; otherwise, the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to an excursion above a Table B water quality objective.

The State Water Board has developed a reasonable potential calculator (RPcalc 2.2), which is available at:

http://www.swrcb.ca.gov/water_issues/programs/ocean/docs/trirev/stakeholder050505/rp_calc22_setup.zip

RPcalc 2.2 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 facility or discharge type; solids loading, lack of dilution; history of compliance problems; potential toxic effects; fish tissue data; CWA section 303(d) status of the receiving water; 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 three 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 log-normally. If the 95th percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

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

- i. 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 ML (the mean of the natural log of transformed data) and SL (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.
- ii. 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

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than three detected and quantified values or when the effluent data set contains three or more detected and quantified values but the number of censored values accounts

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

An RPA was conducted using effluent data reported from monitoring events from September 2012 to September 2017. The effluent data were obtained from electronic self-monitoring data posted to the State Water Board's CWIQS database, discharge monitoring data posted to USEPA's Integrated Compliance Information System, and laboratory reports included in the report of waste discharge.

The following tables present results of the RPA, performed in accordance with procedures described by the California Ocean Plan, for parameters that were detected in effluent and which possessed effluent limitations in the existing Order. The maximum effluent concentration, number of samples considered in the analysis, the applicable WQO, and the RPA endpoint for each pollutant is identified. As shown in the following table, the RPA commonly led to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as not detected (ND). 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 limitations will be retained.

Table F-10. RPA Results for Discharges to the Pacific Ocean from Discharge Point 001

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Objectives for Protection of Marine Aquatic Life					
Arsenic	8	3	1	2	Endpoint 3 – RPA is inconclusive.
Cadmium	1	3	2	0.2	Endpoint 3 – RPA is inconclusive.
Chromium (Hexavalent)	2	2	2	<10	Endpoint 3 – RPA is inconclusive.
Copper	3	3	0	36	Endpoint 2 – Effluent limitation not required.
Lead	2	3	0	1.3	Endpoint 2 – Effluent limitation not required.
Mercury	0.04	3	2	0.06	Endpoint 3 – RPA is inconclusive and Effluent limitation is not necessary.
Nickel	5	3	0	6	Endpoint 2 – Effluent limitation not required.
Selenium	15	3	3	<2	Endpoint 3 – RPA is inconclusive.
Silver	0.7	3	3	<1	Endpoint 3 – RPA is inconclusive.
Zinc	20	3	0	50	Endpoint 2 – Effluent limitation not required.
Cyanide	1	3	3	<4	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Total Chlorine Residual	2	1,916	1,214	32,000	Endpoint 1 – Effluent limitation is necessary.
Ammonia (as N)	600	5	0	26,000	Endpoint 1 – Effluent limitation is necessary.
Acute Toxicity	0.3	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Chronic Toxicity	1	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Phenolic Compounds (non-chlorinated)	30	7	7	<1	Endpoint 3 – RPA is inconclusive.
Chlorinated Phenolics	1	4	4	<2	Endpoint 3 – RPA is inconclusive.
Endosulfan	0.009	3	3	<0.05	Endpoint 3 – RPA is inconclusive.
Endrin	0.002	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
HCH	0.004	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
Radioactivity	⁵	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Objectives for Protection of Human Health – Non-Carcinogens					
Acrolein	220	4	3	9	Endpoint 3 – RPA is inconclusive.
Antimony	1,200	3	2	1	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroethoxy) Methane	4.4	4	4	<1	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroisopropyl) ether	1,200	4	4	<1	Endpoint 3 – RPA is inconclusive.
Chlorobenzene	570	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Chromium (III)	190,000	3	2	1	Endpoint 3 – RPA is inconclusive.
Di-n-butyl Phthalate	3,500	4	4	<2	Endpoint 3 – RPA is inconclusive.
Dichlorobenzenes	5,100	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Diethyl Phthalate	33,000	4	4	<1	Endpoint 3 – RPA is inconclusive.
Dimethyl Phthalate	820,000	4	4	<1	Endpoint 3 – RPA is inconclusive.
4,6-dinitro-2-methylphenol	220	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
2,4-dinitrophenol	4	4	4	<5	Endpoint 3 – RPA is inconclusive.
Ethylbenzene	4,100	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Fluoranthene	15	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachlorocyclopentadiene	58	4	4	<1	Endpoint 3 – RPA is inconclusive.
Nitrobenzene	4.9	4	4	<1	Endpoint 3 – RPA is inconclusive.
Thallium	2	3	3	<0.2	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Toluene	85,000	4	2	2.3	Endpoint 3 – RPA is inconclusive.
Tributyltin	0.0014	4	3	0.0021	Endpoint 3 – RPA is inconclusive.
1,1,1-trichloroethane	540,000	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Objectives for Protection of Human Health - Carcinogens					
Acrylonitrile	0.1	4	4	<2	Endpoint 3 – RPA is inconclusive.
Aldrin	0.000022	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
Benzene	5.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Benzidine	0.000069	4	4	<2	Endpoint 3 – RPA is inconclusive.
Beryllium	0.033	3	3	<0.2	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroethyl) Ether	0.045	4	4	<1	Endpoint 3 – RPA is inconclusive.
Bis(2-ethylhexyl) Phthalate	3.5	4	3	12	Endpoint 3 – RPA is inconclusive.
Carbon Tetrachloride	0.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Chlordane	0.000023	3	3	<0.005	Endpoint 3 – RPA is inconclusive.
Chlorodibromomethane	8.6	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Chloroform	130	4	1	7	Endpoint 3 – RPA is inconclusive.
DDT	0.00017	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
1,4-dichlorobenzene	18	8	8	<0.5	Endpoint 3 – RPA is inconclusive.
3,3'-dichlorobenzidine	0.0081	4	4	<2	Endpoint 3 – RPA is inconclusive.
1,2-dichloroethane	28	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
1,1-dichloroethylene	0.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Dichlorobromomethane	6.2	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Dichloromethane	450	4	4	<2	Endpoint 3 – RPA is inconclusive.
1,3-dichloropropene	8.9	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Dieldrin	0.00004	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
2,4-dinitrotoluene	2.6	4	4	<1	Endpoint 3 – RPA is inconclusive.
1,2-diphenylhydrazine	0.16	4	4	<1	Endpoint 3 – RPA is inconclusive.
Halomethanes	130	4	3	0.7	Endpoint 3 – RPA is inconclusive.
Heptachlor	0.00005	7	7	<0.005	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Heptachlor Epoxide	0.00002	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
Hexachlorobenzene	0.00021	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachlorobutadiene	14	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachloroethane	2.5	4	4	<1	Endpoint 3 – RPA is inconclusive.
Isophorone	730	4	4	<1	Endpoint 3 – RPA is inconclusive.
N-nitrosodimethylamine	7.3	4	4	<2	Endpoint 3 – RPA is inconclusive.
N-nitrosodi-N-propylamine	0.38	4	4	<1	Endpoint 3 – RPA is inconclusive.
N-nitrosodiphenylamine	2.5	4	4	<1	Endpoint 3 – RPA is inconclusive.
PAHs	0.0088	4	4	<1	Endpoint 3 – RPA is inconclusive.
PCBs	0.000019	3	3	<0.5	Endpoint 3 – RPA is inconclusive.
TCDD equivalents	3.9 x 10 ⁻⁹	3	0	1 x 10 ⁻⁶	Endpoint 1 – Effluent limitation is necessary.
1,1,2,2-tetrachloroethane	2.3	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Tetrachloroethylene	2	1	1	<0.5	Endpoint 3 – RPA is inconclusive.
Toxaphene	0.00021	3	3	<0.5	Endpoint 3 – RPA is inconclusive.
Trichloroethylene	27	1	1	<0.5	Endpoint 3 – RPA is inconclusive.
1,1,2-trichloroethane	9.4	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
2,4,6-trichlorophenol	0.29	4	4	<1	Endpoint 3 – RPA is inconclusive.
Vinyl Chloride	36	4	4	<0.5	Endpoint 3 – RPA is inconclusive.

[1] NA indicates that effluent data are not available.

[2] "<" indicates that the pollutant was not detected, and the reported value represents the method detection limit.

[3] Minimum probable initial dilution for this Discharger is 165:1.

[4] Effluent data used for this RPA were collected from September 2012 to September 2017.

[5] 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

4. WQBEL Calculations

Table 1 of the Ocean Plan includes water quality objectives for the protection of marine aquatic life and these objectives are used to establish effluent limits for discharges from this Facility.

The Ocean Plan considers the "minimum probable initial dilution" in determining effluent limitations for toxic pollutants. 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 the purposes of the Ocean Plan, minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates must be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial

dilution process flow across the discharge structure. This Order retains a dilution credit of 165:1, established in the previous permit, for use in calculating WQBELs.

The following equation from Section III.C.4.a. of the Ocean Plan was used to calculate all concentration-based, effluent limitations.

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

Where:

C_e = the effluent concentration limit, $\mu\text{g/L}$

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

C_s = background seawater concentration, $\mu\text{g/L}$

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater.

Table 1 of the Ocean Plan establishes background concentrations for some pollutants to be used when determining reasonable potential (represented as " C_s "). In accordance with Table 1 implementing procedures, C_s equals zero for all pollutants not established in Table 3. The background concentrations provided in Table 3 are summarized below

Table F-11. Background Concentrations (C_s) – California Ocean Plan (Table 3)

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

For all other California Ocean Plan Table 1 parameters, $C_s=0$

As an example, effluent limitations for copper are determined as follows:

Water quality objectives from the Ocean Plan for copper are:

Table F-12. Example Parameter Water Quality Objectives

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Copper	$\mu\text{g/L}$	3	12	30

Using the equation, $C_e = C_o + D_m (C_o - C_s)$, effluent limitations are calculated as follows.

Copper

$$C_e = 3 + 165 (3 - 2) = 168 \text{ (6-Month Median)}$$

$$C_e = 12 + 165 (12 - 2) = 1,662 \text{ (Daily Maximum)}$$

$$C_e = 30 + 165 (30 - 2) = 4,650 \text{ (Instantaneous Maximum)}$$

Based on the implementing procedures described above, effluent limitations and performance goals have been calculated for all Table B pollutants from the California Ocean Plan and incorporated into this Order.

40 CFR 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water. Mass-based effluent limitations were computed based on the maximum daily flow rate (5.0 MGD)

Mass-based effluent limitations were calculated using the following equation:

$$\text{lbs/day} = \text{permitted flow (MGD)} \times \text{pollutant concentration (mg/L)} \times 8.34$$

5. Indicator Bacteria

This Order includes effluent limitations for fecal coliform bacteria which are retained from Order No. R3-2009-0046. Fecal coliform effluent limitations are necessary in order to ensure discharges from the Facility are not causing or contributing to an exceedance of water quality objectives.

6. Whole Effluent Toxicity (WET)

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

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

The Discharger must also maintain a toxicity reduction evaluation 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, require the Discharger to implement a toxicity reduction evaluation, or to implement other measures.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits for discharges to waters that are in attainment. 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. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for which a definitive finding of no reasonable potential was made (i.e., Endpoint 2). Consistent with the California Ocean Plan, effluent limitations are not required for pollutants resulting in an Endpoint 2. The results of this RPA analysis has shown that copper, lead, nickel and zinc have Endpoint 2 and therefore their effluent limitations have been removed. Under CWA section 303(d)(4)(B), a limitation based on a TMDL, waste load allocation, other water quality standard, or any other permitting standard may only be relaxed where the action is consistent with the state anti-degradation policy. As described below, the removal of the effluent limitations for these constituents is consistent with the state anti-degradation policy and meets the backsliding exception under CWA section 402(o)(1)/303(d)(4)(B).

2. Antidegradation Policies

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

Removal of the final effluent limitations for copper, lead, nickel, and zinc is consistent with the State’s antidegradation policy because the discharge remains in compliance with existing water quality objectives for the Pacific Ocean. The Order’s limitations and conditions ensure maintenance of the existing quality of receiving waters. Therefore, provisions of the Order are consistent with applicable antidegradation policy expressed by NPDES regulations at 40 CFR section 131.12 and State Water Board Resolution 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 BOD₅, TSS, oil and grease, turbidity, pH, and settleable solids. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

4. Summary of Final Effluent Limitations – Discharge Point No. 001

Table F-13. Final Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ^[1]	mg/L	40	60	90
	lbs/day ^[2]	1,668	2,502	3,753
TSS ^[1]	mg/L	40	60	90
	lbs/day ^[2]	1,668	2,502	3,753
Settleable Solids	ml/L/hr	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Oil and Grease	mg/L	25	40	75
	lbs/day ^[2]	1,042	1,668	3,127

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Fecal Coliform Bacteria	MPN/100 mL	--	200	2,000
pH	standard units	6.0 – 9.0 at all times		

^[1] The average monthly percent removal for BOD₅ and TSS shall not be less than 80 percent.

^[2] Mass based effluent limitations were calculated using the following formula:
lbs/day = pollutant concentration (mg/L) * Design flow (5.0 MGD) * conversion factor (8.34)

a. Percent Removal

The average monthly percent removal of BOD₅ and TSS shall not be less than 80 percent.

b. Initial Dilution

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

Table F-14. Final Effluent Limitations, Protection of Marine Aquatic Life

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
Arsenic	µg/L	0.83	4.82	12.79
	lbs/day	35	201	533
Cadmium	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Chromium (Hex)	µg/L	0.33	1.33	3.32
	lbs/day	14	55	138
Mercury	µg/L	6.56	26.48	66.32
	lbs/day	0.27	1.1	2.8
Selenium	µg/L	2.49	9.96	24.90
	lbs/day	104	415	1,038
Silver	µg/L	0.090	0.44	1.14
	lbs/day	3.7	18	47
Cyanide ^[4]	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Total Chlorine Residual	µg/L	0.33	1.33	9.96
	lbs/day	14	55	415
Ammonia (as N)	µg/L	99.6	398.4	996
	lbs/day	4,153	16,613	41,533
Acute Toxicity	TUa	--	5.25	--
Chronic Toxicity	TUc	--	166	--
Phenolic Compounds (non-chlorinated)	µg/L	4.98	19.92	49.80
	lbs/day	208	831	2,177
Phenolic Compounds (chlorinated)	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Endosulfan	µg/L	1.49	2.99	4.48
	lbs/day	0.062	0.12	0.19
Endrin	µg/L	0.33	0.66	1.00

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
	lbs/day	0.014	0.028	0.042
HCH	µg/L	0.66	1.33	1.99
	lbs/day	0.028	0.055	0.083
Radioactivity		[5]		

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

[2] The daily maximum shall apply to flow weighted 24-hour composite samples. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate, Q , in MGD.

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

[4] If a Discharger can demonstrate to the satisfaction of the Central Coast Water Board (subject to USEPA 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 metals 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.

[5] 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.

Table F-15. Final Effluent Limitations – Protection of Human Health – Non-Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrolein	µg/L	36.52
	lbs/day	1,523
Antimony	µg/L	199.2
	lbs/day	8,307
Bis(2-chloroethoxy) methane	µg/L	0.730
	lbs/day	30
Bis(2-chloroisopropyl) ether	µg/L	199.2
	lbs/day	8,307
Chlorobenzene	µg/L	94.62
	lbs/day	3,946
Chromium (III)	µg/L	31.54
	lbs/day	1,315,218
Di-n-butyl phthalate	µg/L	581
	lbs/day	24,228
Dichlorobenzenes ^[1]	µg/L	846.6
	lbs/day	35,303
Diethyl phthalate	µg/L	5.478
	lbs/day	228,433
Dimethyl phthalate	µg/L	136.12
	lbs/day	5,676,204

Parameter	Units	Effluent Limitation
		30-day Average
4,6-dinitro-2-methylphenol	µg/L	36.52
	lbs/day	1,523
2,4-dinitrophenol	µg/L	0.664
	lbs/day	28
Ethylbenzene	µg/L	680.6
	lbs/day	28,381
Fluoranthene	µg/L	2.49
	lbs/day	104
Hexachlorocyclopentadiene	µg/L	9.628
	lbs/day	401
Nitrobenzene	µg/L	0.813
	lbs/day	34
Thallium	µg/L	0.332
	lbs/day	14
Toluene	µg/L	14.11
	lbs/day	588,387
Tributyltin	µg/L	232
	lbs/day	0.0097
1,1,1-trichloroethane	µg/L	89.64
	lbs/day	3,737,988

^[2] Sum of 1,2- and 1,3-dichlorobenzene.

Table F-16. Final Effluent Limitations – Protection of Human Health – Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrylonitrile	µg/L	16.6
	lbs/day	0.69
Aldrin	µg/L	3.652
	lbs/day	0.00015
Benzene	µg/L	979.4
	lbs/day	41
Benzidine	µg/L	11.454
	lbs/day	0.00048
Beryllium	µg/L	5.478
	lbs/day	0.23
Bis(2-chloroethyl) ether	µg/L	7.47
	lbs/day	0.31
Bis(2-ethylhexyl) phthalate	µg/L	581
	lbs/day	24
Carbon tetrachloride	µg/L	149.4
	lbs/day	6.2
Chlordane ^[1]	µg/L	3.818
	lbs/day	0.00016
Chlorodibromomethane	µg/L	1.428

Parameter	Units	Effluent Limitation
		30-day Average
	lbs/day	60
DDT ^[2]	µg/L	28.22
	lbs/day	0.0012
1,4-dichlorobenzene	µg/L	2.988
	lbs/day	125
3,3'-dichlorobenzidine	µg/L	1.345
	lbs/day	0.056
1,2-dichloroethane	µg/L	4.648
	lbs/day	194
1,1-dichloroethylene	µg/L	149.4
	lbs/day	6.2
Dichlorobromomethane	µg/L	1.029
	lbs/day	43
Dichloromethane	µg/L	74.7
	lbs/day	3115
1,3-dichloropropene	µg/L	1.477
	lbs/day	62
Dieldrin	µg/L	6.64
	lbs/day	0.00028
2,4-dinitrotoluene	µg/L	431.6
	lbs/day	18
1,2-diphenylhydrazine	µg/L	26.56
	lbs/day	1.1
Halomethanes ^[3]	µg/L	21.58
	lbs/day	900
Heptachlor	µg/L	8.3
	lbs/day	0.00035
Heptachlor epoxide	µg/L	3.32
	lbs/day	0.00014
Hexachlorobenzene	µg/L	34.86
	lbs/day	0.0015
Hexachlorobutadiene	µg/L	2.324
	lbs/day	97
Hexachloroethane	µg/L	415
	lbs/day	17
Isophorone	µg/L	121.18
	lbs/day	5053
N-nitrosodimethylamine	µg/L	1.212
	lbs/day	51
N-nitrosodi-n-propylamine	µg/L	63.08
	lbs/day	2.6
N-nitrosodiphenylamine	µg/L	415
	lbs/day	17

Parameter	Units	Effluent Limitation
		30-day Average
PAHs ^[4]	µg/L	1.461
	lbs/day	0.061
PCBs ^[5]	µg/L	3.154
	lbs/day	0.00013
TCDD equivalents ^[6]	µg/L	0.6474
	lbs/day	0.000000027
1,1,2,2-tetrachloroethane	µg/L	381.8
	lbs/day	16
Tetrachloroethylene	µg/L	332
	lbs/day	14
Toxaphene	µg/L	34.86
	lbs/day	0.0015
Trichloroethylene	µg/L	4.482
	lbs/day	187
1,1,2-trichloroethane	µg/L	1.56
	lbs/day	65
2,4,6-trichlorophenol	µg/L	48.14
	lbs/day	2.01
Vinyl chloride	µg/L	5.976
	lbs/day	249

- [1] Sum of chlorodane-alpha, chlorodane-gamma, chlorodene-alpha, chlorodene-gamma, nonachlor-alpha, nonachlor gamma, and oxychlorodane.
- [2] Sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.
- [3] Sum of bromoform, bromoethane (methylbromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.
- [4] Sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,1,2-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[a,h]anthracene, fluorine, ideno[1,2,3-cd]pyrene, phenanthrene, and pyrene.
- [5] Sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- [6] TCDD equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

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

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan contains numeric and narrative water quality objectives applicable to the coastal waters of California. Water quality objectives include an objective to maintain the high-quality waters pursuant to federal regulations (section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Ocean Plan.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 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. Monitoring and Reporting Program (MRP) Requirements

The Discharger is required to provide 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 or enforcement action, and to protect public health and safety and the environment.

C. Special Provisions

1. Reopener Provisions

The Order may be modified in accordance with the requirements set forth at 40 CFR sections 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 USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The requirements in section VI.C.2.a through d of the Order address requirements necessary to ensure compliance with Ocean Plan objectives for toxicity. The requirement to maintain a toxicity reduction work plan is established in this Order. When toxicity monitoring measures chronic toxicity in the effluent above the limitation established by this 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 requirements or whether other measures are warranted. The toxicity reduction requirements in section VI.C.2.a-d are retained from the previous Order.

b. **Water Contact Monitoring (Bacterial Characteristics)**

The requirement for repeat water-contact bacteriological monitoring is established in this Order in accordance with California Ocean Plan section III.D.1.b for exceedance of a single sample maximum bacteria standard contained within section IV.A.1 of this Order.

3. Best Management Practices and Pollution Prevention

a. **Pollutant Minimization Program**

The 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 Ocean Plan PMP language is included to provide guidance in the event that a PMP must be developed and implemented by the Discharger.

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

5. Special Provisions for Publicly Owned Treatment Works (POTWs)

a. **Biosolids Management**

Provisions regarding sludge handling and disposal ensure that such activity will comply with all applicable regulations. 40 CFR part 503 sets forth USEPA's final rule for the use and disposal of biosolids, or sewage sludge, and governs the final use or disposal of biosolids. The intent of this federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.

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

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

b. **Collection System**

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on

August 6, 2013. The General Order requires public agencies that own or operate sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions.

The General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive, and therefore, more stringent than the requirements under federal standard provisions. The Discharger and public agencies that are discharging wastewater into the facility's collection system were required to obtain enrollment for regulation under the General Order by December 1, 2006.

6. Climate Change Adaptation

The Central Coast Water Board is addressing the threat of climate change, sea-level rise, and flooding by including provisions in new orders that ensure mitigation and adaptation strategies are implemented. These provisions also include a requirement to evaluate wastewater recycling as part of a requirement to conduct a facility Life Expectancy Analysis. In the case of this Order, the Discharger is located in an area that is increasingly susceptible to sea-level rise and flooding hazards. Flooding may cause a discharge of wastewater similar to the discharge that occurred in 2010 when floodwaters entered an electrical conduit leading to pump motor control circuitry and caused the Discharger's influent pumps to fail. Failure of the influent pumps resulted in a 1,139,825-gallon sanitary sewer overflow that was discharged into waters of the United States including Meadow Creek, Oceano Lagoon, and the Pacific Ocean. To address the threat of flood and sea-level rise, this Order requires the submission of reports and planning documents consistent with the requirements of Coastal Development Permit No. 3-16-0233.

7. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

In addition to influent flow monitoring, monitoring for BOD₅ and TSS is required to determine compliance with the Order's 80 percent removal requirement for these pollutants. Influent monitoring requirements have been retained from the previous Order.

B. Effluent Monitoring

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements from Order R3-2009-0046 for Discharge Point No. 001 are retained in this Order.

C. Whole Effluent Toxicity Testing Requirements

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

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is necessary to determine compliance with receiving water limitations and evaluate compliance with applicable water quality objectives and criteria. Receiving water monitoring requirements from Order R3-2009-0046 for Discharge Point 001 are retained in this Order.

Shoreline water monitoring and shellfish tissue bacterial monitoring specified in section VIII.A of the MRP have been conditionally waived unless operational changes, plant upsets or effluent violations occur, then the listed receiving water monitoring must resume.

Benthic sediment and biota monitoring requirements are retained from the previous permit. The benthic sediment monitoring is conducted jointly with the City of Pismo Beach Wastewater Treatment Facility. The Central Coast Water Board has imposed identical requirements in this Order and the City of Pismo Beach Order so that such monitoring can be coordinated between the two agencies, minimizing redundant effort and expense.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

1. **Biosolids/Sludge Monitoring.** Biosolids monitoring is required in this Order. The date of sampling is not specified so that the Discharger may coordinate with pretreatment monitoring requirements.
2. **Pretreatment Monitoring.** Pretreatment monitoring requirements are retained from the previous Order.
3. **Outfall Inspection.** The Order retains the requirement of the previous permit to conduct triennial visual inspections of the outfall and diffuser system and provide reports of those inspections to the Central Coast Water Board regarding the system's physical integrity.
4. **Brine Monitoring.** The MRP has retained separate monitoring requirements for the discharge of brine waste from the previous order. The Discharger requested that brine monitoring be conducted separately from secondary effluent monitoring, because the brine waste is mixed with the secondary effluent discharge after the final effluent monitoring location (EFF-001). The addition of the brine waste at a point before this final monitoring location interferes with numerous effluent testing results. The Central Coast Water Board is requiring the Discharger to develop an updated Brine Monitoring Plan to evaluate final effluent compliance after mixing with treated wastewater in light of these interferences. The requirements also retain logs that describe and quantify brine waste on an annual basis are established by the MRP to better characterize the composition of final combined effluent.

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board is considering the issuance of WDRs that will serve as an NPDES permit for the Facility. As a step in the WDR adoption process, the Central Coast Water Board staff has developed tentative WDRs and encourages public participation in the WDR adoption process.

A. Notification of Interested Persons

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through publication in the local newspaper and posting to Discharger's and Central Coast Water Board's website.

The public has access to the agenda and any changes in dates and locations through the Central Coast Water Board's website at:

<http://www.waterboards.ca.gov/centralcoast/>

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person, by email, or by mail to the Executive Office at the Central Coast Water Board at:

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments were due to the Central Coast Water Board office by 5:00 p.m. on **November 30, 2018.**

The Central Coast Water Board received written comments from the Surfrider Foundation on November 26, 2018, and from the Culligan San Paso Company on November 29, 2018. Central Coast Water Board staff's responses to comments are provided below.

1. The Surfrider Foundation expressed concern regarding the discharge of textile microplastic in effluent and requested the following: "Please add a process for SSLCSD [South San Luis Obispo County Sanitation District] to sample and report microplastic discharge to their ocean outfall as a requirement of the Order. Based on the results of the accumulated data, a future Order might require SSLOCSD to upgrade to tertiary treatment."

Staff response: Staff acknowledges that microplastic pollution is an emerging concern that should be addressed. On September 20, 2018, SB 1263 was signed into law and tasks the Ocean Protection Council with developing a statewide microplastics strategy that will increase understanding of the scale and risks of microplastic materials in the marine environment and identify proposed solutions to address the impacts of microplastic materials. The statewide microplastics strategy will be submitted to the Legislature on or before December 31, 2021, along with recommended policy changes needed to implement the strategy. Findings and recommended policy changes proposed by the strategy should be incorporated into future orders to address microplastic pollution. Central Coast Water Board staff recommends that microplastic requirements be based on statewide efforts, rather than prematurely incorporated into various individual permits. In addition, at this time an analytical method for the detection and quantification of microplastic pollution has not been approved by U.S. EPA. Requiring

testing for microplastics will be more appropriate once an accepted method of sampling is developed.

2. The Surfrider Foundation is also concerned with the increasing quantity of brine waste being discharged through the SSLOCSO ocean outfall.

Staff response: The Discharger requires brine suppliers to sample their brine waste to determine the concentration of pollutants as limited by this Order. The Discharger specifies that the maximum allowable concentrations of these pollutants in brine waste is equal to final effluent limitations listed in section IV.D.4. This ensures that brine waste does not cause the Discharger to violate the conditions of this Order. Furthermore, the final effluent stream is diluted at a 1:165 ratio at the ocean outfall, and the brine is diluted in the effluent stream at approximately a 1:9 ratio. This means the brine waste is diluted at a 1:1,485 ratio by the time it is discharged through the ocean outfall. Given that the brine waste meets the same standards as treated effluent and that the brine is highly diluted upon discharge, brine waste does not pose a threat to water quality even if the quantity of brine waste being discharged increases.

3. The Surfrider Foundation requested that brine deliveries should be sampled by district employees rather than brine delivery truck drivers and that brine should be sequestered and mixed prior to discharge.

Staff response: Samples are taken from the brine delivery trucks under the supervision of district employees. This prevents tampering with samples. Samples are then analyzed by the Discharger's state-certified laboratory prior to discharge to ensure brine waste meets acceptance criteria. The current procedure is sufficient to ensure appropriate sampling and analysis.

4. The Surfrider Foundation is concerned about increased truck traffic from brine delivery trucks and said that traffic along an unpaved access road to the plant could negatively impact the Arroyo Grande Creek watershed.

Staff response: Staff acknowledges that while it is possible that increased truck traffic could negatively impact Arroyo Grande Creek, no evidence has been provided that the unpaved road poses a water quality threat. However, staff has added language to section VI.C.3.b of the order requiring implementation of best management practices if necessary to control sediment discharges from the road. If evidence of a water quality problem is presented to staff, the new requirement will provide staff with the means to work with the Discharger to address the problem.

5. The Culligan San Paso Company provided comments expressing support for the brine discharge program.

Staff response: Comment noted and entered into the record.

After the close of public comment, staff added section VI.C.6 to the draft order. This section includes requirements to analyze and report on potential impacts to the facility from sea-level rise and flooding. Staff also made minor changes to language addressing anti-backsliding and biosolids monitoring. In addition, staff added a requirement for implementation of best management practices if necessary to control sediment discharges from the unpaved road to the WWTP.

C. Public Hearing

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

Date: January 31-February 1, 2019
Time: 9:00 am
Location: Central Coast Water Board Office
895 Aerovista Place, Suite 101, San Luis Obispo

Interested persons are invited to attend. At the public hearing, the Central Coast Water Board will hear testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony is requested in writing.

D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m. within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received 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 Phil Hammer at (805) 549-3882 or phillip.hammer@waterboards.ca.gov.