ORDER R3-2017-0032
NPDES NO. CA0047364

WASTE DISCHARGE REQUIREMENTS FOR THE CARPINTERIA SANITARY DISTRICT WASTEWATER TREATMENT PLANT 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	Carpinteria Sanitary District
Name of Facility	Carpinteria Sanitary District Wastewater Treatment Plant
	5351 Sixth Street
	Carpinteria, CA 93013
	Santa Barbara County

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Secondary Treated Municipal Wastewater	34.388333º N	119.521667º W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**September 21, 2017**
This Order shall become effective on:	**November 10, 2017**
This Order shall expire on:	**September 20, 2022**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**March 25, 2022**
The U.S. Environmental Protection Agency (U.S. EPA) and the Central Coast Water Board 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 the Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on the date indicated above.

John M. Robertson Digitally signed by John M. Robertson
Date: 2017.09.29 16:32:48 -07'00'

John M. Robertson, Executive Officer

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TABLES

ATTACHMENTS

I. FACILITY INFORMATION

Information describing the Carpinteria Sanitary District Wastewater Treatment Plant (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 (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 (Water Code) commencing with section 13260. This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA 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 locations 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 Parties. The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

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. R3-2011-0003 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 at a location other than Discharge Point 001 (to the Pacific Ocean at 34.388333º N Latitude and 119.521667º W Longitude) and Discharge Point 002 for recycled water use is prohibited.

B. Discharges of any waste in any manner other than as described by this Order are prohibited.

C. The effluent dry weather average monthly rate of discharge from the wastewater treatment facility shall not exceed a monthly average of 2.5 million gallons per day (MGD). Dry weather months are May through October.

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

E. Pipeline discharge of sludge to the ocean is prohibited by federal law. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited by the Water Quality Control Plan for Ocean Waters of California (Ocean Plan). The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.

F. 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.

G. 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 No. 001

1. Final Effluent Limitations – Conventional and Non-Conventional Pollutants

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001A as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Effluent Limitations for Conventional and Non-Conventional Pollutants

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
pH	Standard units	6.0 – 9.0 at all times		
	mg/L	30	45	90
	lbs/day	630	940	1,900
	mg/L	30	45	90
	lbs/day	630	940	1,900
	mg/L	25	40	75[2]
	lbs/day	520	830	1,600
Settleable Solids	mL/L	1.0	1.5	3.0[2]
Turbidity	NTU	75	100	225[2]
Total Coliform	MPN/100 mL	--	23[3]	2,300[2],[3]

[1] The average monthly percent removal for BOD_5 and TSS shall not be less than 85 percent.

[2] Applied as an instantaneous maximum.

[3] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological result for the last 7 days for which analyses have been completed. The number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL at any time.

2. Final Effluent Limitations – Toxic Pollutants

The Discharger shall maintain compliance with the following effluent limitations for toxic pollutants at Discharge Point No. 001, with compliance measured at Monitoring Location M-001A, as described in the attached MRP.

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

Parameter	Units	Effluent Limitation		
		6-Mo Median[1]	Maximum Daily[2]	Instantaneous Maximum
	µg/L	94	376	940
	lbs/day	2	8	20
	µg/L	190	750	5600
	lbs/day	3.9	16	120
	µg/L	2,800	11,000	28,000
	lbs/day	59	240	590
	µg/L	94	376	940
	lbs/day	2.0	7.8	20
	µg/L	0.85	1.7	2.5
	lbs/day	0.018	0.035	0.053
	µg/L	0.19	0.38	0.56
	lbs/day	0.0039	0.0078	0.012
	µg/L	0.38	0.75	1.1
	lbs/day	0.0078	0.016	0.024
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
Chronic Toxicity[5]	TU_c	---	94	---

[1] The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[2] The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan). Compliance with daily maximum effluent limitations from total chlorine residual and chronic toxicity shall be based on daily grab samples.

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

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

[5] Ocean Plan requires chronic toxicity testing if Dm < 100. Since facility Dm=94, acute toxicity testing is not required.

[6] Phenolic compounds (non-chlorinated) are a group of analytes characterized by a benzene ring with at least

one hydroxyl (OH) group.

[7] Chlorinated phenolics are a group of analytes characterized by a benzene ring with at least one hydroxyl (OH) group and at least one chlorine atom.

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

Parameter	Units	Effluent Limitation
		Average Monthly
	µg/L	21,000
	lbs/day	430
	µg/L	410
	lbs/day	8.6
	µg/L	110,000
	lbs/day	2,400
	µg/L	54,000
	lbs/day	1,100
	µg/L	18,000,000
	lbs/day	370,000
	µg/L	480,000
	lbs/day	10,000
	µg/L	3,102,000
	lbs/day	65,000
	µg/L	77,000,000
	lbs/day	1,600,000
	µg/L	21,000
	lbs/day	430
	µg/L	380
	lbs/day	7.8
	µg/L	390,000
	lbs/day	8,000
	µg/L	1,400
	lbs/day	29
	µg/L	5,400
	lbs/day	110
	µg/L	460
	lbs/day	9.6
	µg/L	190
	lbs/day	3.9
	µg/L	8,000,000
	lbs/day	170,000
	µg/L	0.13
	lbs/day	0.0027
	µg/L	51,000,000
	lbs/day	1,100,000

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

Parameter	Units	Effluent Limitation
		Average Monthly
	µg/L	9.4
	lbs/day	0.20
	µg/L	0.0021
	lbs/day	0.000043
	µg/L	550
	lbs/day	12
	µg/L	0.0065
	lbs/day	0.00014
	µg/L	3.1
	lbs/day	0.065
	µg/L	4.2
	lbs/day	0.088
	µg/L	330
	lbs/day	6.9
	µg/L	85
	lbs/day	1.8
	µg/L	0.0022
	lbs/day	0.000045
	µg/L	12,000
	lbs/day	260
	µg/L	0.016
	lbs/day	0.00033
	µg/L	1,700
	lbs/day	35
	µg/L	0. 76
	lbs/day	0.016
	µg/L	2,600
	lbs/day	55
	µg/L	85
	lbs/day	1.8
	µg/L	580
	lbs/day	12
	µg/L	42,000
	lbs/day	880
	µg/L	840
	lbs/day	17
	µg/L	0.0038
	lbs/day	0.000078
	µg/L	240
	lbs/day	5.1

1,2-diphenylhydrazine	µg/L	15
	lbs/day	0.31
	µg/L	0.0047
	lbs/day	0.000098
	µg/L	0.0019
	lbs/day	0.000039
	µg/L	0.020
	lbs/day	0.00041
	µg/L	1,300
	lbs/day	27
	µg/L	240
	lbs/day	4.9
	µg/L	69,000
	lbs/day	1,400
	µg/L	690
	lbs/day	14
	µg/L	36
	lbs/day	0.74
	µg/L	240
	lbs/day	4.9
	µg/L	0.83
	lbs/day	0.017
	µg/L	0.0018
	lbs/day	0.000037
	µg/L	3.7×10^{-7}
	lbs/day	7.6×10^{-9}
	µg/L	220
	lbs/day	4.5
	µg/L	190
	lbs/day	3.9
	µg/L	0.020
	lbs/day	0.00041
	µg/L	2,500
	lbs/day	53
	µg/L	880
	lbs/day	18
	µg/L	27
	lbs/day	0.57
	µg/L	3,400
	lbs/day	71

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

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

[5] 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	---	---

a. **Initial Dilution.** The minimum initial dilution (Dm) of treated effluent at the point of discharge to the Pacific Ocean shall not be less than 93 to 1 (seawater to effluent) at any time.

3. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Discharge Point No. 002

The Discharger plans to pursue an indirect potable reuse water project that will include a multiple barrier advanced water treatment plant, groundwater injection wells, and related infrastructure. The advance water treatment will include reverse osmosis (RO) and advanced oxidation (AO). This Order will be reopened (pursuant to Reopener Provisions in section VI.C.1 of the Order) prior to production of the indirect potable reuse water and after the exact design details of the project are known.

After receiving State Water Resources Control Board's Division of Drinking Water approval, the Discharger intends to design, construct, and operate a treatment facility to produce tertiary-treated wastewater. Water reclamation standards requirements have been added to this permit to allow the Discharger to produce recycled water.

1. Reclamation use of tertiary treated wastewater shall adhere to applicable requirements of CWC sections 13500-13577 (Water Reclamation); California Code of Regulations title 17, sections 7583-7586; title 17 sections 7601-7605; and title 22, sections 60301-60355 (Uniform Statewide Recycling Criteria). Production, distribution and use of recycled water is currently regulated separately under Master Water Reclamation Requirements Order No. 98-052. Specifications related to recycled water production are also included here.

2. Recycled water production shall comply with a title 22 engineering report approved by the Division of Drinking Water that demonstrates or defines compliance with the Uniform Statewide Recycling Criteria (and amendments).

3. Recycled water shall be disinfected tertiary recycled water, as defined by title 22, section 60301.230.

4. Recycled water shall be adequately oxidized, filtered, and disinfected, as defined in title 22.

5. The Discharger shall comply with the following specifications at Discharge Point No. 002 for reclamation of tertiary treated secondary wastewater, with compliance measured at Monitoring Location EFF-002, as described in the attached MRP.

Table 8. Disinfected Tertiary Recycled Water Limitations

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
BOD_5	mg/L	10	20
TSS	mg/L	10	20

6. Recycled water shall not exceed any of the following turbidity limits:

a. An average of 2 NTU within a 24-hour period,

b. 5 NTU more than 5 percent of the time within a 24-hour period, and

c. 10 NTU at any time.

7. The median concentration of total coliform bacteria measured in the disinfected recycled water shall not exceed the following limits:

a. An MPN of 2.2 per 100 mL utilizing the bacteriological results of the last seven days for which analyses have been completed,

b. An MPN of 23 per 100 mL in more than one sample in any 30 day period, and

c. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.

8. Freeboard shall always exceed two feet in all recycled water storage ponds.

9. The Discharger shall discontinue delivery of recycled water to distributors and users during any period in which it has reason to believe that the limits established in this Order are not being met. The delivery of recycled water shall not be resumed until all conditions that caused the limits to be violated have been corrected.

10. Recycled water shall not exceed any maximum contaminant level established pursuant to sections 116275(c)(1) and (d) of the California Health and Safety Code or established by the U.S. Environmental Protection Agency.

11. Recycled water disinfected with chlorine shall have a CT value (chlorine concentration time modal contact time) of not less than 450 mg-min/L at all times with a modal contact time of at least 90 minutes based on a flow of 2.5 MGD in accordance with Section 60301.230 (a),(1). Monthly average flow of chlorinated recycled water shall not exceed 2.5 MGD or the total monthly demand of the users.

12. No impoundment of treated effluent shall occur within 100 feet of any domestic water supply well.

13. Reclaimed water shall be confined to areas of authorized use without discharge to surface waters or drainage ways.

14. Personnel involved in producing, transporting, or using reclaimed water shall be informed of possible health hazards that may result from contact and use of reclaimed water.

15. Spray irrigation of reclaimed water shall be accomplished at a time and in a manner to minimize ponding and contact with the public.

16. Delivery of reclaimed water shall be discontinued when these Reclamation Specifications cannot be met.

17. All reclamation reservoirs and other areas with public access shall be posted, in English and Spanish, to warn the public that reclaimed wastewater is being stored or used.

18. Reclaimed water systems shall be properly labeled and regularly inspected to ensure proper operation, absence of leaks, and absence of illegal connections.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause a violation of the following receiving water limitations, which are based on water quality objectives contained in the Ocean Plan. Compliance with these limitations shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Bacterial Characteristics

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.

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.

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.

2. At all areas where shellfish may be harvested for human consumption, as determined by the Regional 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.

3. Floating particulates and grease and oil shall not be visible on the ocean surface.

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

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

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

7. The dissolved oxygen concentration shall not, at any time, be depressed more than 10 percent from that which occurs naturally.

8. 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.

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

10. The concentrations of substances set forth in Table 1 of the Ocean Plan shall not be increased in marine sediments to levels which would degrade indigenous biota.

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

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

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

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

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

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

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

B. Groundwater Limitations

Activities at the Facility shall not cause exceedance or deviation from the following water quality objectives for groundwater established by the Water Quality Control Plan for the Central Coastal Basin (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Central Coast Region.

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 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.

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 C.F.R. 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 which are 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 C.F.R. parts 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any U.S. EPA-approved, new 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 Table 1 water quality objective.

c. This Order may be reopened and modified as necessary for implementation of a planned indirect potable reuse water recycling project as described in section IV.C of the Order.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

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

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

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

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

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

iii. A schedule to implement these actions.

When monitoring detects effluent toxicity greater than a limitation in this Order, the Discharger shall resample immediately, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Central Coast Water Board Executive Officer (EO) as soon as possible after receiving monitoring results. The EO will determine if it is appropriate to initiate enforcement action, require the Discharger to implement a TRE, or implement other measures. The Discharger shall conduct a TRE considering guidance provided by the U.S. EPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (U.S. EPA documents EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the schedule shown in Table 9.

Table 9. 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 Work Plan.	Within 7 days of notification by the Executive Officer.
Conduct the TRE following the procedures in the Work Plan.	Within the period specified in the Work Plan (not to exceed one year, without an approved Work Plan).
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.

b. Ocean Outfall and Diffuser Monitoring

At least once per year the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions. The outfall inspection will also check for possible external blockage of ports by sand and/or silt deposition. The Discharger shall report all findings and actions, including any observed cracks, breaks, or malfunctions to the Executive Officer in the applicable annual report. The inspection shall be completed under conditions of underwater visibility suitable to observe the outfall and diffuser structure.

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.

iii. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation. Such evidence may include: health advisories for fish consumption; presence of whole effluent toxicity; results of benthic or aquatic organism tissue sampling; sample results from analytical methods more sensitive than methods included in the permit; and the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

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.

4. Construction, Operation and Maintenance Specifications

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

5. Other Special Provisions

a. Discharges of Storm Water. Discharges of storm water from POTWs with a design capacity greater than 1.0 MGD are applicable for coverage under General State Water Board Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Dischargers of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ). This General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The General Permit requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals; an organizational description; legal authority; an operations and maintenance program; design and performance provisions; an overflow emergency response plan; a fats, oils, and greases (FOG) control program; a systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the General Permit requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General Permit. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination. The Sanitary District sewer service area includes the City of Carpinteria and portions of Santa Barbara County and Ventura County. Carpinteria Sanitary District filed a complete application package to the State Water Board dated July 11, 2006, and obtained full enrollment status on August 18, 2006 (Waste Discharge Identification No. 3 SSO 10245).

c. Sanitary Sewer Inspection. The Discharger shall conduct sanitary sewer surveys when so directed by the Central Coast Water Board or the Executive Officer. The

Discharger shall control any controllable discharges identified in a sanitary sewer survey.

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

e. **Biosolids Management**. The handling, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of U.S. EPA regulations at 40 CFR 257,258, 501, and 503, including all monitoring, record keeping, and reporting requirements.

Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination. Sites for solids and sludge treatment and storage shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of such sites from erosion, and to prevent drainage from treatment and storage sites.

The treatment, storage, disposal, or reuse of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited into waters of the State. The Discharger is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with the above rules, whether the Discharger uses or disposes of the biosolids itself, or transfers them to another party for further treatment, use, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must adhere to under these rules.

6. Initial Dilution

a. The minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates shall 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.

b. The effluent limitations of this Order are based on California Ocean Plan criteria and equations as applicable therein, using a minimum initial dilution of 93:1 (seawater:effluent). If the actual dilution ratio is found to be different, then the ratio will be recalculated and this Order revised when and as appropriate.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. General

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the 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.

ATTACHMENT A – DEFINITIONS

Acute Toxicity

a. Acute Toxicity (TU_a)
Expressed in Toxic Units Acute (TU_a)

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

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

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

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

where:

S = percentage survival in 100% waste. If S > 99, TU_a 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 (TU_c)
   Expressed as Toxic Units Chronic (TU_c)

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

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 measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. 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 Equivalents
The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

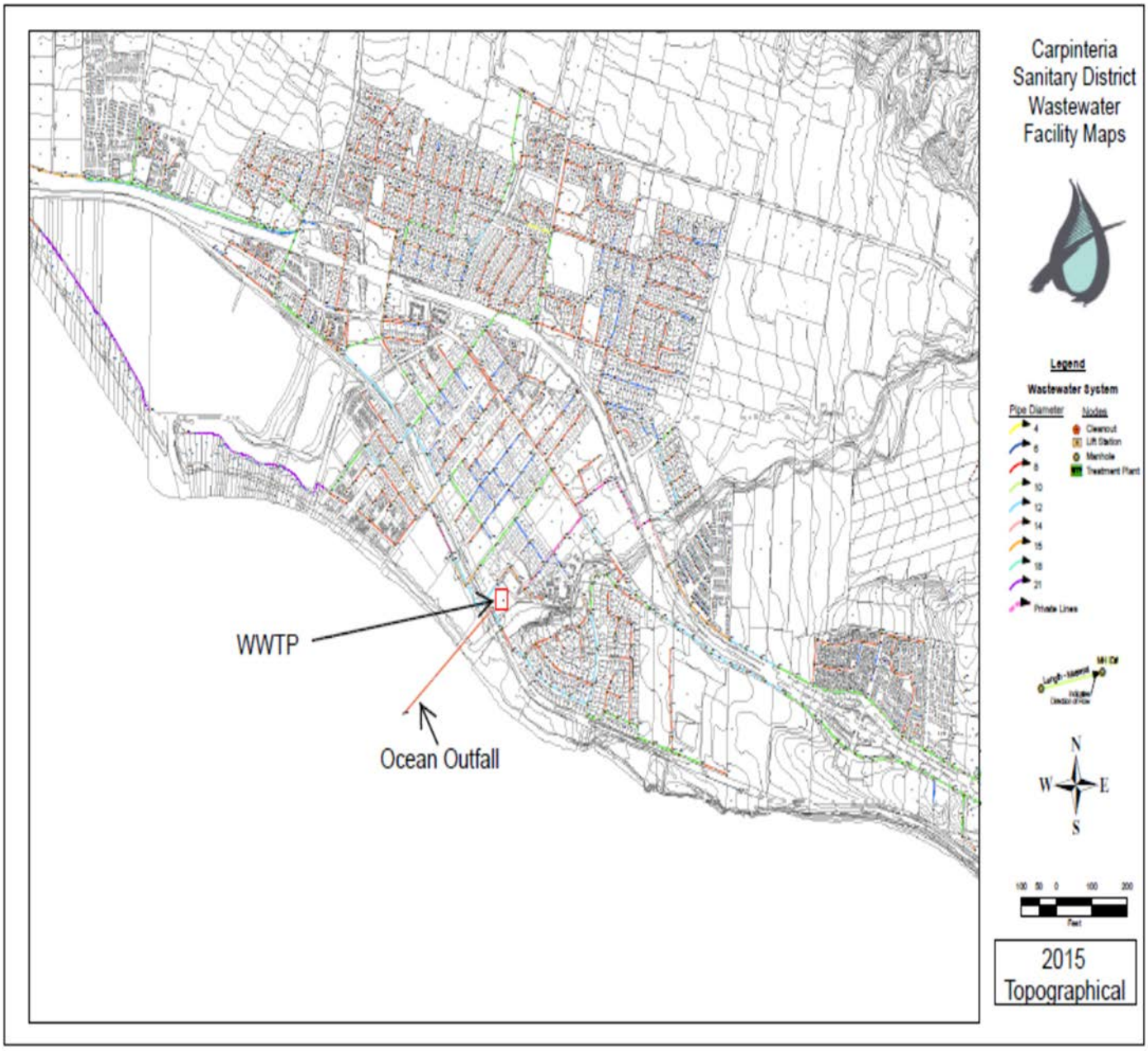
Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Toxicity Reduction Evaluation (TRE)
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.)

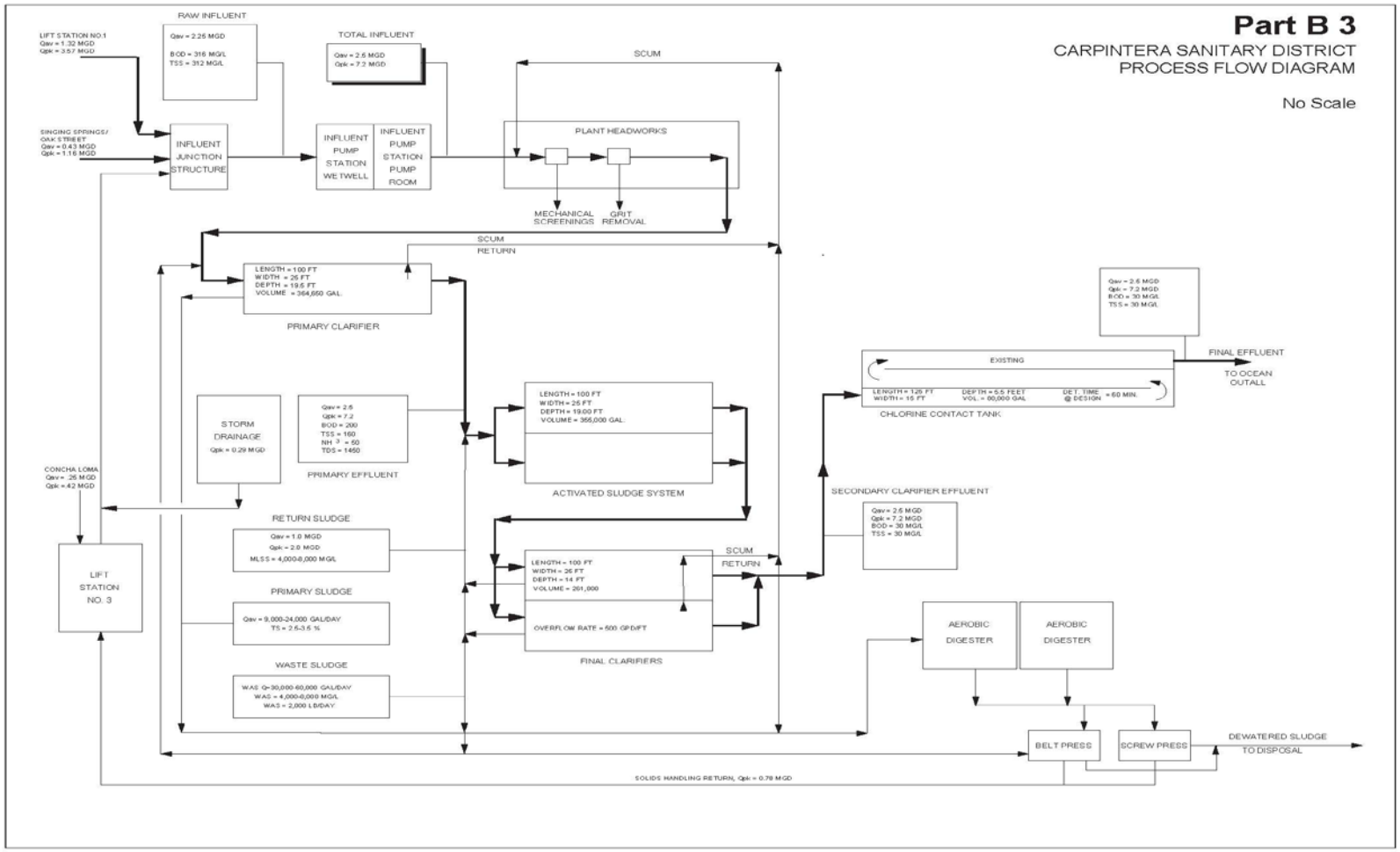
Waste
As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

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 C.F.R. § 122.41(a); Water Code sections 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 and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

The Discharger shall allow the Central Coast Water Board, State Water Board, U.S. EPA, 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 C.F.R. § 122.41(i); Water Code sections 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 C.F.R. § 122.41(i)(1); Water Code sections 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 C.F.R. § 122.41(i)(2); Water Code sections 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 C.F.R. § 122.41(i)(3); Water Code sections 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 C.F.R. § 122.41(i)(4); Water Code sections 13267, 13383.)

G. Bypass

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

4. The 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 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit 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 C.F.R. part 3, 40 C.F.R. § 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 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 C.F.R. part 3, 40 C.F.R. § 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

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

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

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

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

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

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

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

This Order is not transferable to any person except after notice to the 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 C.F.R. §§ 122.41(l)(3), 122.61.)

III. STANDARD PROVISIONS – MONITORING

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

B. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapters N or O. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N or O. 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 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N or O for the measured pollutant or pollutant parameter.

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

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by

this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

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

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

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

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

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

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

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

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Central Coast Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Central Coast Water Board, State Water Board, or U.S. EPA 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 U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Water Code sections 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 U.S. EPA 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 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 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 U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

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

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

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

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the 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 C.F.R. § 122.22(c).)

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

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

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 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. 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 C.F.R. § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board for reporting the results of monitoring, sludge use, or disposal practices. 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 C.F.R. part 3, 40 C.F.R. § 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Coast Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance 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 to the Central Coast Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. § 122.22, and 40 C.F.R. 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 C.F.R. § 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 C.F.R. § 122.41(l)(6)(ii)(A).)

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

3. The 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 C.F.R. § 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 C.F.R. § 122.41(l)(1)):

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

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

3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

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 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

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

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Coast Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 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 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. § 127.2(b). U.S. EPA 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 C.F.R. § 127.2(c)]. U.S. EPA will update and maintain this listing.
(40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

D. 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 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

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 Provisions

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by California Water Code (CWC) section 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. Wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Code of Regulations.

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

a. Violation of any term or condition contained in this order;

b. Obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; 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 C.F.R. 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 supervisory control and data acquisition (SCADA) or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.

13. Production and use of recycled water is subject to the approval of the Central Coast Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Code of Regulations and Chapter 7, Division 7, of the CWC. An engineering report pursuant to section 60323, Title 22, of the California Code of Regulations is required and a waiver or water reclamation requirements from the Central Coast 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 Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP) 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 Wildlife.

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 electronic self-monitoring reports (eSMRs) electronically to the:

State Water Resources Control Board's California Integrated Water Quality System (CIWQS) database at http://ciwqs.waterboards.ca.gov/

All other correspondence should be sent electronically to the California Regional Water Quality Control Board, Central Coast Region at centralcoast@waterboards.ca.gov In addition, "Dischargers" with designated major discharges shall submit discharge monitoring reports to U.S. EPA, Region IX's NetDMR database at https://netdmr.epa.gov/netdmr/public/login.htm

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 U.S. EPA. Please also see Federal Standard Provision – Records IV.C.

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

a. Both tabular and graphical summaries of the monitoring data obtained during the previous year.

b. A discussion of the previous year's compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance.

c. An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.

d. A discussion of operator certification and a list of current operating personnel and their grades of certification.

e. The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Provision B.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.

f. A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Section C, General Monitoring Requirements.

g. If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.

h. If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

E. Central Coast Standard Provisions – General Pretreatment Provisions

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 C.F.R. Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 C.F.R. Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:

a. By the date specified therein;

b. 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 (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer. Alternatively, a flow proportioned composite sample may be collected by collecting equal aliquot volumes at variable time intervals.

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

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

4. “Duly Authorized Representative" is one where:

a. the authorization is made in writing by a person described in the signatory paragraph of 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 C.F.R. 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_5, 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:

$$\text{Log Mean} = (C1 \times C2 \times ... \times Cn)^{1/n},$$

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

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

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

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

where “C" (in mg/L) is the measured daily constituent concentration or the average of measured daily constituent concentrations and “Q” (in MGD) is the measured daily 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 the 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.

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

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 C.F.R. Part 122, Appendix A.

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

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

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 C.F.R. 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

CONTENTS

TABLES

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 C.F.R.) 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. 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 State Water Resources Control Board (State Water Board), 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 C.F.R. 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. 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	Monitoring Location Name	Monitoring Location Description
---	M-INF	Influent wastewater prior to treatment and following all significant inputs to the collection system or to the headworks of untreated wastewater, upstream of any in-plant return flows, where representative samples of wastewater influent can be obtained.
001	M-001A	Location where representative sample of effluent discharged through the ocean outfall can be collected, after treatment and before contact with additional wastewaters or the receiving water.
Ocean Sampling Stations (located at the depth of the diffuser midpoint)		
--	RSW-1	500 feet downcoast (eastward along the coastline) from the outfall terminus.
--	RSW-2E	25 feet downcoast (eastward along the coastline) from the outfall terminus.
--	RSW-2W	25 feet upcoast (westward along the coastline) from the outfall terminus.
--	RSW-3	500 feet upcoast (westward along the coastline) from the outfall terminus.
--	RSW-4	2,000 feet downcoast (eastward along the coastline) from the outfall terminus.
Shore Sampling Stations (located in the surf)		
--	RSW-A	1,000 feet downcoast (eastward along the coastline) from the outfall.
--	RSW-B	500 feet downcoast (eastward along the coastline) from the outfall.
--	RSW-C	At the outfall in the surf.
--	RSW-D	500 feet upcoast (westward along the coastline) from the outfall.
--	RSW-E	1,000 feet upcoast (westward along the coastline) from the outfall.
Disinfection Failure Ocean Monitoring Stations		

Discharge Point	Monitoring Location Name	Monitoring Location Description
--	RSW-F	100 feet upstream of coastal currents from the outfall terminus.
--	RSW-G	500 feet downstream of coastal currents from the outfall terminus.

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

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-INF

1. Sampling stations shall be established at each point of inflow to the treatment plant, and shall be isolated from and/or corrected for any in-plant return flows in order to obtain representative samples of the influent. Composite samples may be taken by a proportional-sampling device approved by the Executive Officer, or by grab samples composited in proportion to the flow. In compositing grab samples, the sampling interval shall not exceed one hour. The Discharger may otherwise employ grab samples.
2. The Discharger shall monitor influent at M-INF as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	1/Day
Instantaneous Flow	MGD	Metered	Continuous
Maximum Daily Flow	MGD	Metered	1/Day
Mean Daily Flow	MGD	Calculated	1/Month
	mg/L	24-hr Composite	
	lbs/day[1]	Calculated	
	mg/L	24-hr Composite	
	lbs/day[1]	Calculated	

[1] lbs/day shall be calculated using the following formula:
Lbs/day = 8.34 * Flow (expressed as MGD) * Parameter Concentration (expressed as mg/L)

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001A

1. The Discharger shall monitor treated wastewater at M-001A 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[1]
pH	pH units	Grab	1/Day
Temperature	°F	Grab	1/6 Days
Daily Flow	MGD	Metered	1/Day
Instantaneous Flow	MGD	Metered	1/Day
Maximum Daily Flow	MGD	Metered	1/Month
Mean Daily Flow	MGD	Calculated	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]
Biochemical Oxygen Demand (BOD_5) 5-day @ 20 °C	mg/L	24-hr Composite	1/6 Days
	lbs/day[2]	Calculated	
	mg/L	24-hr Composite	
	lbs/day[2]	Calculated	
Settleable Solids	mL/L	Grab	1/Day
Total Coliform Bacteria[3],[4],[5]	MPN/100mL	Grab	1/2 Days
Fecal Coliform Bacteria[3],[4]	MPN/100mL	Grab	1/2 Days
Total Chlorine Residual[5],[6]	mg/L	Metered	Continuous
Total Chlorine Used	lbs/day	Recorded	1/Day
Oil and Grease	mg/L	Grab	1/6 Days
Turbidity	NTUs	Grab	1/6 Days
Ammonia (as N)	mg/L	Grab	1/Month
Chronic Toxicity[7]	TU_c	24-hr Composite	1/Quarter
Remaining Priority Toxic Pollutants[8]	µg/L	Grab	1/Year[9]

[1] If any constituents are detected at levels exceeding the effluent limitations established in section IV of Order No. R3-2017-0032, a new sample shall be collected and analyzed within one month for those constituents exceeding the applicable limit. Samples shall continue to be collected and analyzed monthly until the constituents no longer exceed the limit for two consecutive months.

[2] lbs/day shall be calculated using the following formula:

Lbs/day = 8.34 * Flow (expressed as MGD) * Parameter Concentration (expressed as mg/L)

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

[4] Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 C.F.R. PART 136 (revised edition of July 1, 2003, or later), unless alternate methods have been approved in advance by U.S. EPA pursuant to 40 C.F.R. PART 136.

[5] Discharger shall notify the Central Coast Water Board (telephone: 805-549-3147), Department of Health Services (telephone: 805-681-4900, and 510-412-4635), and any Mariculture Grower as soon as possible when there is a continuous loss of disinfection of 12 hours or longer or if three consecutive total effluent coliform bacteria tests exceed 2,300 per 100 mL.

[6] The Discharger shall review continuous monitoring data and submit a summary (total chlorine residual daily minimum, maximum, mean) to the Central Coast Water Board with monthly monitoring reports. Grab samples for compliance with effluent limits may be collected at the last accessible measurement location before discharge to the ocean.

[7] Refer to section V of this MRP, Whole Effluent Toxicity Testing Requirements.

[8] Table 1 parameters contained in Section II.D of the Ocean Plan.

[9] Annual sampling for Table 1 Parameters shall be conducted during dry-weather conditions according to the following schedule: September 2018, August 2019, July 2020, June 2021, and May 2022.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity

The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA-821/600/R-95/136; *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA-600-4-01-003; *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.

Chronic Toxicity (TU_c) = 100/NOEL

The no observed effect level (NOEL) is the maximum tested concentration in a medium which does not cause known adverse effects upon chronic exposure in the species in question (i.e., the highest effluent concentration to which organisms are exposed in a chronic test that causes no observable adverse effects on the test 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 2012 Ocean Plan, Appendix III, Standard Monitoring Procedures, the Discharger shall use the critical life stage toxicity tests specified in the table below to measure TU_c. Other species or protocols will be added to the list after the State Water Board review and approval.

Table E-4. Approved Tests – Chronic Toxicity (TUc)

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

[1] First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the Discharger can use a second tier test method following approval by the Regional 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. U.S. EPA Report No. EPA/600/R- 95/136.

b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Pelier, and M.A. Heber. 1994. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to marine and estuarine organisms. U.S. EPA Report No. EPA-600-4-91-003.

c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the 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.

If the effluent is to be discharged to a marine or estuarine system (e.g., salinity values in excess of 1,000 mg/L) originates from a freshwater supply, salinity of the effluent must be increased

with dry ocean salts (e.g., FORTY FATHOMS®) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

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

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.

B. 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 (U.S. EPA) which include the following:

   a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (U.S. EPA, 1992a);

   b. Methods for Aquatic Toxicity Identification Evaluations: Phase 1 Toxicity Characterization Procedures, Second Edition (U.S. EPA, 1991a);

   c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (U.S. EPA, 1993a); and

   d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (U.S. EPA, 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 Mary 27, 2001, U.S. EPA Office of Wastewater Management, Office of Regulatory Enforcement.

C. Toxicity Reporting

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

   a. Toxicity test results,

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

   c. And/or toxicity discharge limitations (or value).

2. Toxicity test results shall be reported according to the appropriate guidance – *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, U.S. EPA Office of Water, EPA-821-R-01-012 (2002) or the latest edition, or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821-R-02-012 (2002) or subsequent editions.

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

4. Within 14 days of receipt of test results exceeding a chronic toxicity discharge limitation, the Discharger shall provide written notification to the Executive Officer of:

   a. Findings of TRE or other investigation to identify the cause(s) or 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 a TRE have not been complete, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS

A. Monitoring Locations EFF-002

1. When producing recycled water, the discharger shall monitor recycled water at location EFF-002 as follows.

Table E-5. Recycled Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MGD	Metered	Continuous
Total Coliform	MPN/100mL	Grab	Daily
Turbidity	NTU	Metered	Continuous
Dissolved Oxygen	Mg/L	Metered	Continuous
Dissolved Sulfides	mg/L	Grab	3/Week
pH	standard units	Grab	1/Day
Chlorine Residual[1]	mg/L	Metered	Continuous

[1] Chlorine monitoring is not required when chlorine is not being used for disinfection. The Discharger shall specify within the Self-Monitoring Report if chlorination took place during the monitoring period.

a. In the event the Producer is unable to comply with the conditions of the water recycling requirements and prohibitions, the Producer shall immediately notify the Central Coast Water Board by telephone and submit a written follow-up report with two weeks of the noncompliance. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps are being taken to prevent the problems from recurring.

b. An annual self-monitoring report shall be submitted to the Central Coast Water Board by January 30 of the following year. The report shall include:

i. A letter transmitting self-monitoring reports should accompany each report. The letter shall include a discussion of violations found during the reporting period and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Producer has previously submitted a report describing corrective actions or a time schedule for implementing corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Producer or the Producer's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

ii. Tabulations of the results of each required analysis by the Producer specified in Table E-5 by date, time, type of sample, and station.

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Receiving Water Monitoring

1. If three consecutive effluent total coliform bacteria tests exceed 2,300 MPN/100 mL, samples of the receiving water shall be collected at Monitoring Locations RSW-A through RSW-E and analyzed as specified in Table E-6:

Table E-6. Shore Sampling

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Coliform[1], [2]	MPN/100 mL	Grab	1/6 Days
Fecal Coliform[1], [2]	MPN/100 mL	Grab	1/6 Days
Enterococcus[1], [2]	MPN/100 mL	Grab	1/6 Days
Visual Observations[1], [3]	--	--	1/6 Days

[1] Monitoring shall continue for a minimum of 30 days and until the effluent bacteria concentrations return to compliance for a minimum of 14-days. The Discharger shall, to the best of its ability, conduct the receiving water sampling during dry weather or at least three days after a significant rain event. The EO may grant a discretionary exception to this sampling requirement during extreme rain events where receiving water sampling is unlikely to provide data representative of the Discharger's effluent. The Discharger shall conduct effluent monitoring for total and fecal coliform daily during such events or the subsequent period of its influence on receiving waters. Once shore station sampling can resume, effluent sampling can return to its normal frequency.

[2] Sample dilutions shall be performed so the range of values extends from 20 to 16,000/100 mL. Detection methods used for total and fecal coliform shall be those presented in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*, or any improved method determined appropriate by the Central Coast Water Board and approved by U.S. EPA. Detection methods used for Enterococcus shall be those presented in U.S. EPA publication EPA 600/4-85/076, Test *Methods for Escherichia and Enterococci in Water by Membrane Filter Procedure*, or any improved method determined appropriate by the Central Coast Water Board and approved U.S. EPA.

[3] Monitoring shall also include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), whether rainfall occurred over the preceding seven days, sea conditions, longshore currents (e.g., direction), and tidal conditions (e.g., high, slack, or low tide). Observations of water discoloration, floating oil and grease, turbidity, odor, materials of sewage origin in the water or on the beach, and temperature (°C) shall be recorded and reported.

2. The Discharger shall monitor for total coliform, fecal coliforms, and enterococcus at receiving water sampling stations RSW-F and RSW-G as identified in MRP section II above, in addition to three shore sampling stations approved by the Executive Officer, for seven days after a continuous loss of disinfection of 12 hours or longer.

The Discharger shall report the results to the Executive Officer within 24 hours after receiving them from the laboratory.

In the event of a malfunction of the Discharger's disinfection process that results in a continuous loss of disinfection of 12 hours or longer (an "Event"), the Discharger shall notify: (i) the State Department of Public Health (DPH); (ii) Santa Barbara County Environmental Health Services Department; (iii) the Central Coast Water Board; and (iv) each certified commercial shellfish grower located offshore of the Santa Barbara Coast as set forth in a list to be provided and updated by DPH. Such notification by the Discharger shall be by telephone and facsimile transmission to the numbers provided to the Discharger by DPH. If the Discharger becomes aware of an Event between the weekday hours of 6:00 a.m. and 5:00 p.m., notification shall be given within four (4) hours of the time that the Discharger becomes aware of the Event. If the Discharger becomes aware of the Event after 5:00 p.m. or on a weekend, notification shall be given by 10:00 a.m. the next business day.

By providing notification of an Event as specified above, the Discharger shall not be deemed to have admitted any liability or concluded that the Event will or may impact any approved commercial shellfish growing areas ("growing area") or require the closure of any growing areas. Any decision or recommendation to close a growing area in response to a notification of an Event by the Discharger shall be made by DPH and/or the affected or potentially affected certified commercial shellfish grower(s). The Discharger shall have no liability (including but not limited to liability for lost sales, profits or interruption of business operations) arising from a decision by DPH or a shellfish grower to close a growing area in response to a notification of an Event.

B. Ocean Sampling Stations – Bottom Sediment at Monitoring Sampling Stations RSW-1 through RSW-4

Benthic sediment monitoring shall be conducted in 2020.

Benthic monitoring shall assess the temporal and spatial occurrence of pollutants in local marine sediments and evaluate the physical and chemical quality of the sediments in relation to the outfall. At all benthic monitoring stations, one grab sample shall be collected using a 0.1 m^3 Van Veen grab sampler.

Sediment samples shall be analyzed according to Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987) and Analytical Methods for EPA Priority Pollutants and 301(h) Pesticides in Estuarine and Marine Sediments (EPA 503-6-90-004, 1986). When processing samples for analysis, macrofauna and large remnants greater than 0.25 inches (0.64 cm) should be removed, taking care to avoid contamination.

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

Benthic monitoring results shall be included in the Annual Report with a complete discussion of benthic sediment survey results and (possible) influence of the discharge on sediment conditions in the study area, if possible. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patters observed for raw sediment parameters. The Annual Report should also present an analysis of natural variation is 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 if available.

Sampling specified in the following table shall occur at the ocean bottom directly below stations RSW-1 through RSW-4.

1. The Discharger shall monitor Bottom Sediment at Monitoring Sampling Stations RSW-1 through RSW-4 as follows:

Table E-7. Bottom Sediment Sampling

Parameter	Units	Sampling Station
Sulfides (at pH 7)	mg/kg	RSW-1, 2E, 2W, 3, 4
Particle size distribution (incl. % retained on #200 sieve)	---	RSW-1, 2E, 2W, 3, 4
Organic matter (volatile solids or TOC)	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Coliform Organisms	MPN/100 g	RSW-1, 2E, 2W, 3, 4
Fecal Coliform Organisms	MPN/100 g	RSW-1, 2E, 2W, 3, 4
BOD_5	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Kjeldahl Nitrogen	mg/kg	RSW-1, 2E, 2W, 3, 4
Arsenic	mg/kg	RSW-1, 2E, 2W, 3, 4
Cadmium	mg/kg	RSW-1, 2E, 2W, 3, 4
Total Chromium	mg/kg	RSW-1, 2E, 2W, 3, 4
Chromium (VI)	mg/kg	RSW-1, 2E, 2W, 3, 4
Copper, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Lead, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Mercury, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Nickel, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Iron, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Silver, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4
Zinc, Total Recoverable	mg/kg	RSW-1, 2E, 2W, 3, 4

C. Ocean Sampling Stations – Benthic Biota at Monitoring Sampling Stations RSW-1 through RSW-4

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

1. At least five benthic samples shall be taken at each of the five ocean monitoring stations (RSW-1, RSW-2E, RSW-2W, RSW-3, and RSW-4) using a 0.1 m^3 Van Veen grab sampler.

2. For benthic infauna analyses, each replicate sample shall be passed through a 1mm screen, and the organisms retained and preserved as appropriate for subsequent identification. It is recommended that sample preservation, sample processing, and data analyses be conducted according to Quality Assurance and Quality Control (QA/QC) for

301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987).

3. Benthic infauna from each replicate sample shall be counted and identified to the lowest possible taxon. For each replicate sample, number of individuals, number of species, and number of individuals per species, and within each major taxonomic group (polychaetes, mollusks, crustaceans, echinoderms, and all other macroinvertebrates) shall be recorded.

4. The Annual Report shall include a complete discussion of benthic infaunal survey results and (possible) influence of the outfall on benthic infaunal communities in the study area. The discussion should be based on graphical, tabular, and/or appropriate statistical analyses of spatial and temporal patterns. Temporal trends in the number of individuals, number of species, number of individuals per species, and community structure indices, species richness (S), Margalef index (d), ShannonWiener index (H'), Brillouin index (h), Simpson's index (SI), Swartz's dominance, and Infaunal Trophic Index (ITI) shall be reported. Statistical analyses shall include multivariate techniques consisting of classification and ordination analysis. The Annual Report should also present an analysis of natural community variation including the effects of different sediment conditions, oceanic seasons, and water temperatures, etc., that could influence the validity of study results. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods, if available.

IX. OTHER MONITORING REQUIREMENTS

A. Ocean Outfall Inspection

At least once per year the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers) to note its structural integrity and any cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions. The month for inspection specified by the Discharger shall be a month of good underwater visibility. This inspection shall include general observations and video records of the outfall pipe/diffuser system and the surrounding ocean bottom in the vicinity of the outfall/diffuser. The inspection shall 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 U.S. EPA with the Annual Report required by Central Coast Water Board Standard Provision D-8.

B. Rainfall Monitoring

Daily rainfall totals (in inches) shall be tabulated on the monitoring report forms next to daily influent flow. The Discharger shall collect rainfall data from a representative gauge station or information source of its choice, subject to the Executive Officer’s approval.

C. Biosolids Monitoring, Notification and Reporting

1. The following information shall be submitted with the Annual Report Required by Central Coast Water Board Standard Provision D-8. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR 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: 1) the Central Coast Water Board's WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.

ii. For land application include: 1) the location of the site(s), 2) the Central Coast Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.

iii. For offsite application by a licensed hauler and composter include: 1) the name, address and U.S. EPA license number of the hauler and composter.

e. Copies of analytical data required by other agencies (i.e. U.S. EPA 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	Min. Analysis Frequency
Quantity	Tons (and yd^3)	Measured	As Transported
Disposal Location	--	--	As Transported
Moisture	%	Composite Sample	Annually (October)[3]
Total Kjeldahl Nitrogen[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Ammonia (as N)[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Nitrate (as N)[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Total Phosphorus[1]	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
pH	pH Units	Composite Sample	Annually (October) [3]
Arsenic	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Cadmium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Chromium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Copper	mg/kg (dry weight)	Composite Sample	Annually (October) [3]

Lead	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Molybdenum	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Mercury	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Nickel	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Selenium	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Silver	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Zinc	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Paint Filter Test (As per SW-846, Method 9095 - **Required only if sludge is disposed in a landfill**)	mg/kg (dry weight)	Composite Sample	Annually (October) [3]
Grease & Oil	mg/kg (dry weight)	Composite Sample	October 2020[2]
Priority Pollutants	mg/kg (dry weight)	Composite Sample	October 2020[2]

[1] Once per year if the District's biosolids are directly land applied without further treatment by another preparer; otherwise, once in October 2020.

[2] Coordinated with effluent sampling

[3] If 290 metric tons or more of biosolids are generated during any 365-day period, the frequency to monitor biosolids for these parameters shall increase to once per quarter.

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.

a. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using U.S. EPA-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.

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

Table E-9. Monitoring Periods and Reporting Schedule

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report	MRP Sections III (Influent), IV (Effluent), and V (Whole Effluent Toxicity)	Monthly	First day of second calendar month following monitoring period
NPDES Monitoring Report	MRP Section IV (Effluent)	Once per permit term	270 days prior to permit expiration
Reclamation Monitoring Report	MRP Section VII (Recycled Water)	Annual	January 30th following calendar year of monitoring
NPDES Monitoring Report	MRP Section VIII (Receiving Water)	Quarterly	First day of second calendar month following monitoring period
NPDES Monitoring Report	MRP Section VIII (Receiving Water)	Annual	February 1st following calendar year of monitoring
NPDES Monitoring Report	MRP Section VIII (Groundwater)	Quarterly	First day of second calendar month following monitoring period
Biosolids Technical Report	MRP Section IX (Biosolids)	Annually	February 19th following calendar year of monitoring
Biosolids Technical Report	MRP Section X (Pond Maintenance)	Annually	January 30th following calendar year of monitoring
Summary Report	Attachment D, Standard Provision, VIII.D.8	Annually	January 30th following calendar year of monitoring
Report of Waste Discharge		One Time	March 31, 2022

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

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

d. 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).

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

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

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

g. 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.

h. Compliance Determination. Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A. For purposes of reporting and administrative enforcement by the Carpinteria Sanitary District Wastewater Treatment Plant 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 Minimum Level (ML).

i. 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:

j. 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.

k. 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.

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

m. 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.

n. 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 U.S. EPA 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 monitoring, TREs, or other data or information that results from the Special Provisions, section VI. C, of the Order. The Discharger shall submit such reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

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 420101001
Discharger	Carpinteria Sanitary District
Name of Facility	Carpinteria Sanitary District WWTP
	5351 Sixth Street
	Carpinteria, CA 93013
	Santa Barbara County
Facility Contact, Title and Phone	Craig Murray, General Manager, (805) 684-7214
Authorized Person to Sign and Submit Reports	Mark Bennett, Operations Manager, (805) 684-7214 x17
Mailing Address	5300 Sixth Street, Carpinteria, CA 93013
Billing Address	Same as mailing address
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Yes, but not required by this Order.
Recycling Requirements	NA
Facility Permitted Flow	2.5 million gallons per day (MGD)
Facility Design Flow	2.5 MGD
Watershed	South Coast Hydrologic Unit
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

A. The Carpinteria Sanitary District (hereinafter Discharger) is the owner and operator of a municipal wastewater treatment plant (hereinafter Facility), a wastewater collection, treatment, and disposal system which provides sewerage service for the City of Carpinteria and portions of Santa Barbara County.

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

B. The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Discharger was previously regulated by Order No. R3-2011-0003 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047364 adopted on February 3, 2011 and expired on March 25, 2016. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order. 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 WDR's and NPDES permit on September 21, 2015.

D. Regulations at 40 C.F.R. § 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

1. **Location and Service Areas.** The Facility is located at 5351 Sixth Street, Carpinteria, CA 93013 in an unincorporated area of Santa Barbara County, CA. The plant site is near the Pacific Coast.

2. **Collection System.** The Discharger owns and operates a wastewater collection, treatment and disposal system to provide sewerage service to the City of Carpinteria and portions of Santa Barbara County and Ventura County, serving a population of approximately 17,100.

3. **Wastewater Treatment.** The treatment at the Facility consists of mechanical screening and grit removal, primary sedimentation, aerated activated sludge tanks, secondary sedimentation, and chlorination followed by effluent discharge.

4. **Biosolids Management.** Biosolids are collected from the primary and secondary clarifiers, then sent to an aerobic digester and belt press thickeners. Biosolids are transported and composted offsite to be sold for agricultural/landscape purposes. The Facility has a dry-weather design capacity of 2.5 MGD. The reported average annual flow rate over the last three years is approximately 1.2 MGD.

B. Discharge Points and Receiving Waters

Secondary treated wastewater is discharged to the Pacific Ocean at Discharge Point No. 001 though a 1,000 foot outfall/diffuser system. The outfall terminates in the Santa Barbara Channel (34.388333º N Latitude, 119.521667º W Longitude) in approximately 25 feet of water. The minimum initial dilution ratio of the outfall/diffuser system is 93:1 (seawater:effluent) and the hydraulic capacity of the outfall is 5.5 MGD.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 (Monitoring Location M-001A) and representative monitoring data from the term of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From March 2011 – To October 2015)		
		Average Monthly	Average Weekly	Instantaneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Instant Max Discharge
pH	s.u.	6.0 – 9.0 at all times			6.27 – 7.96		
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)[1]	mg/L	30	45	90	11.6	15.2	19.6
Total Suspended Solids (TSS)[1]	mg/L	30	45	90	13	23	33
Oil and Grease	mg/L	25	40	75	5.48	14.4	43.6
Settleable Solids	mL/L	1.0	1.5	3.0	0.297	0.63	40
Turbidity	NTU	75	100	225	5.66	8.58	161
Total Coliform	MPN/100 mL	---	23[2]	2,300	---	22[3]	1,300

[1] Mass emission rates for the previous Order were based on the annual monthly average flow of 7.64 MGD.
[2] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological results for the last 7 days for which analyses have been completed, and the number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL.
[3] Value shown is the highest rolling 7-sample median result.

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

Parameter	Units	Effluent Limitation			Monitoring Data From From March 2011 – October 2015		
		6-Month Median	Maximum Daily	Instant Max	Highest 6-Month Median	Highest Maximum Daily	Highest Instant Max
Arsenic, Total Recoverable	µg/L	470	2,700	7,200	1.59	1.59	1.59
Cadmium, Total Recoverable	µg/L	94	380	940	0.101	0.101	0.101
Chromium (VI)	µg/L	190	750	1,900	0.963	0.963	0.963
Copper, Total Recoverable	µg/L	96	940	2,600	18.5	18.5	18.5
Lead, Total Recoverable	µg/L	190	750	1,900	1.23	1.23	1.23
Selenium	µg/L	1,400	5,600	14,000	2.30	2.30	2.30
Silver, Total Recoverable	µg/L	51	250	640	0.16	0.16	0.16
Total Chlorine Residual	µg/L	190	750	5,600	20	3,820	4,040
Acute Toxicity	TU_a	---	3.1	---	0.025	0.025	0.025
Chronic Toxicity	TU_c	---	94	---	18	18	18

Phenolic Compounds (non-chlorinated)	µg/L	2,800	11,000	28,000	<19	<19	<19
Chlorinated Phenolics	µg/L	94	380	940	<0.56	<0.56	<0.56
Endosulfan	µg/L	0.85	1.7	2.5	<2.6	<2.6	<2.6
Endrin	µg/L	0.19	0.38	.056	<2.2	<2.2	<2.2
HCH	µg/L	0.38	0.75	1.1	<11.4	<11.4	<11.4
Radioactivity	pCi/L	[1]			NR	NR	NR

NR = Not Reported

[1]. Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the ct. changes.

Table F-4. Historic Effluent Limitations and Monitoring Data for Non-Carcinogens and Carcinogens

Parameter	Units	Effluent Limitation	Monitoring Data From From March 2011 – October 2015
		Average Monthly	Highest Average Monthly Discharge
Non-Carcinogens			
Acrolein	µg/L	21,000	<4.1
Antimony, Total Recoverable	µg/L	110,000	0.89
Bis(2-chloroethoxy) methane	µg/L	410	<0.56
Bis(2-chloroisopropyl) ether	µg/L	110,000	<0.53
Chlorobenzene	µg/L	54,000	<0.097
Chromium (III)	µg/L	18,000,000	3.12
Di-n-butyl phthalate	µg/L	330,000	<0.66
Dichlorobenzenes	µg/L	480,000	<0.86
Diethyl phthalate	µg/L	3,100,000	<0.53
Dimethyl phthalate	µg/L	77,000,000	<0.43
4,6-dinitro-2-methylphenol	µg/L	21,000	<0.46
2,4-dinitrophenol	µg/L	380	<2.3
Ethylbenzene	µg/L	380,000	<0.45
Fluoranthene	µg/L	1,400	<0.53
Hexachlorocyclopentadiene	µg/L	5,400	<0.49
Nitrobenzene	µg/L	460	<0.65
Thallium	µg/L	190	0.072
Toluene	µg/L	8,000,000	<0.12
Tributyltin	µg/L	0.13	<0.083
1,1,1-trichloroethane	µg/L	51,000,000	<0.19
Carcinogens			
Acrylonitrile	µg/L	9.4	<1.2
Aldrin	µg/L	0.0021	<3.8
Benzene	µg/L	550	<0.13
Benzidine	µg/L	0.0065	<1.8
Beryllium	µg/L	3.1	0.045

Parameter	Units	Effluent Limitation	Monitoring Data From From March 2011 – October 2015
		Average Monthly	Highest Average Monthly Discharge
Bis(2-chloroethyl) ether	µg/L	4.2	<0.52
Bis(2-ethylhexyl) phthalate	µg/L	330	1.2
Carbon tetrachloride	µg/L	85	<0.19
Chlordane	µg/L	0.0022	<0.18
Chlorodibromomethane	µg/L	810	52.9
Chloroform	µg/L	12,000	45.1
DDT	µg/L	0.016	<12.6
1,4-dichlorobenzene	µg/L	1,700	<0.47
3,3-dichlorobenzidine	µg/L	0.76	<0.69
1,2-dichloroethane	µg/L	2,600	<0.11
1,1-dichloroethylene	µg/L	85	<0.12
Dichlorobromomethane	µg/L	580	40
Dichloromethane	µg/L	42,000	0.101
1,3-dichloropropene	µg/L	840	<0.059
Dieldrin	µg/L	0.0038	<4.1
2,4-dinitrotoluene	µg/L	240	<0.56
1,2-diphenylhydrazine	µg/L	15	<0.52
Halomethanes	µg/L	12,000	110.1
Heptachlor	µg/L	0.0047	<4.8
Heptachlor epoxide	µg/L	0.0019	<2.1
Hexachlorobenzene	µg/L	0.020	<0.47
Hexachlorobutadiene	µg/L	1,300	<0.45
Hexachloroethane	µg/L	240	<0.43
Isophorone	µg/L	69,000	<0.53
N-nitrosodimethylamine	µg/L	690	<0.60
N-nitrosodi-n-propylamine	µg/L	36	<0.54
N-nitrosodiphenylamine	µg/L	240	<0.74
PAHs	µg/L	0.83	<2.0
PCBs	µg/L	0.0018	<4.39
TCDD equivalents	µg/L	0.00000037	<2.9
1,1,2,2-tetrachloroethane	µg/L	220	<0.31
Tetrachloroethylene	µg/L	190	<0.17
Toxaphene	µg/L	0.020	<0.28
Trichloroethylene	µg/L	2,500	<0.18
1,1,2-trichloroethane	µg/L	880	<0.078
2,4,6-trichlorophenol	µg/L	27	<0.90
Vinyl chloride	µg/L	3,400	<0.15

D. Compliance Summary

The Discharger reported violations discussed further in the table below.

Table F-5. Compliance Summary

Violation Date	Violation	Discharge Point No.	Effluent Limit	Reported Value
4/1/2011	Acute and Chronic Toxicity was not sampled for.	---	---	---
7/18/2011	Lab Error. Trivalent Chromium and Hexavalent Chromium were not analyzed due to laboratory error. However, total Chromium was reported.	---	---	---
12/27/2011	Settleable Solids Daily Maximum limit is 3.0 mL/L and reported value was 40 mL/L at M-001A.	M-001A	3.0 mL/L	40 mL/L
12/31/2011	Settleable Solids Weekly Average limit is 1.5 mL/L and reported value was 5.9 mL/L at M-001A.	M-001A	1.5 mL/L	5.9 mL/L
12/31/2011	Settleable Solids Monthly Average limit is 1.0 mL/L and reported value was 1.5 mL/L at M-001A.	M-001A	1.0 mL/L	1.5 mL/L
10/3/2012	At 4:08 a.m. the facility's disinfection system malfunctioned. It was restored to full operability the same day at 9:45 a.m. Air-locked chemical feed pump suspected cause of malfunction. District estimates the volume of fully treated, but non-disinfected effluent discharged during this event to be 281,250 gallons.	---	---	---
1/3/2013	Chlorine, Total Residual Instantaneous Maximum limit is 5,600 µg/L and reported value was 10,400 µg/L.	M-001A	5,600 µg/L	10,400 µg/L
1/7/2013	Chlorine, Total Residual Instantaneous Maximum limit is 5,600 µg/L and reported value was 7,800 µg/L.	M-001A	5,600 µg/L	7,800 µg/L

E. Planned Changes

This facility may implement changes during the upcoming permit term. The Discharger plans to pursue an indirect potable reuse water project that will include a multiple barrier advanced water treatment plant, groundwater injection wells, and related infrastructure. The advance water treatment will include reverse osmosis (RO) and advanced oxidation (AO). This Order will be reopened (pursuant to Reopener Provisions in section VI.C.1 of the Order) prior to production of the indirect potable reuse water and after the exact design details of the project are known.

The Carpinteria Valley Recycled Water Facilities Plan was released in April 2016. Recycled water that meets Title 22 criteria will be produced at the Carpinteria Wastewater Treatment Plant (WWTP) possibly by the end of 2019. (http://www.carpinteria.ca.us/PDFs/pw_Recycled%20Water%20Facilities%20FINAL%20REPORT2016.pdf). The State Water Board Division of Drinking Water (DDW) will review, comment, and accept Carpinteria Sanitary District's Title 22 Engineering Report sometime in the future. Water Reclamation requirements have been added to this permit to allow the Discharger to produce recycled water after receiving DDW approval.

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 U.S. EPA 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 has adopted the Water Quality Control Plan for the Central Coastal Basin (hereinafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Plan for Ocean Waters of California* (the Ocean Plan).

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.

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

   The Ocean Plan defines elevated temperature wastes as:

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

3. **California Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, and 2012. The State Water Board adopted the latest amendment on October 16, 2012, and it became effective on August 19, 2013. 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-6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses

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 C.F.R. § 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("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 the U.S. Code of Federal Regulations (C.F.R) at 40 C.F.R. § 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.

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 U.S. EPA approved the State's 2012 303(d) list of impaired water bodies on July 30, 2015. The 2012 303(d) list identifies the Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) as impaired for Fecal Coliform. A TMDL for Fecal Coliform was listed as "expected to be approved" in 2011.

E. Other Plans, Policies and Regulations

1. **Storm Water Management**. 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).** This General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The General Permit requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals; an organizational description; legal authority; an operations and maintenance program; design and performance provisions; an overflow emergency response plan; a fats, oils, and greases (FOG) control program; a systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the General Permit requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General Permit. Reporting shall occur through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination. Carpinteria Sanitary District filed a complete application package to the State Water Board dated July 11, 2006, and obtained full enrollment status on August 18, 2006 (Waste Discharge Identification No. 3 SSO 10245).

3. **Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. Because the Discharger is planning to produce recycled water, the Discharger prepared a draft Carpinteria Valley Recycled Water Facilities Plan in December 2015, which includes salt and nutrient management for the Carpinteria Groundwater Basin. The Discharger is considering using recycled water for municipal and agricultural irrigation, groundwater aquifer recharge, and a barrier to prevent seawater intrusion into the Carpinteria Groundwater Basin.

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 C.F.R. § 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. § 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 to the Pacific Ocean at a location other than as described by the Order at 34.388333º N Latitude, 119.521667º W Longitude is prohibited). This prohibition is retained from the previous permit.
2. **Discharge Prohibition III.B** (Discharges in a manner, except as described by the Order, are prohibited). Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by to the Central Coast Water Board during the process of permit reissuance.
3. **Discharge Prohibition III.C** (The dry weather average monthly rate of discharge from the wastewater treatment facility shall not exceed 2.5 MGD.) This prohibition reflects the current design treatment capacity of the Facility and ensures that the influent flow will not exceed the Facility's hydraulic and treatment capacity.
4. **Discharge Prohibition III.D** (Discharges of radiological, chemical, or biological warfare agent or high level radioactive waste to the Ocean is prohibited). This prohibition restates a discharge prohibition established in section III. H of the Ocean Plan.
5. **Discharge Prohibition III.E** (Federal law prohibits the discharge of sludge by pipeline the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.) This prohibition reflects the prohibition in section III.H of the Ocean Plan.
6. **Discharge Prohibition III.F** (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 C.F.R. 122.41 (m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order.
7. **Discharge Prohibition III.G** (Materials and substances that are prohibited). This prohibition is based on the requirements of the Ocean Plan.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. § 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. Where U.S. EPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402(a)(1) and U.S. EPA regulations at 40 C.F.R. § 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 C.F.R. § 125.3.

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

a. **BOD and TSS**. Federal Regulations, 40 C.F.R. 133, establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD_5 and TSS. A daily maximum effluent limitation for BOD_5 and TSS is also included in the Order for the secondary treated wastewater to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. In addition, 40 C.F.R. 133.102, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. The technology-based effluent limitations established for secondary treated wastewater in 40 C.F.R. 133 are applicable to the wastewater discharged from the Facility.

b. **pH.** Federal Regulations, 40 C.F.R. 133, also establish technology-based effluent limitations for pH for secondary treated wastewater. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. The technology-based effluent limitations established for secondary treated wastewater in 40 C.F.R. 133 are applicable to the wastewater discharged from the Facility.

c. **Flow.** The Facility was designed to provide a secondary level of treatment for up to an average dry weather design flow of 2.5 MGD. Therefore, this Order contains an average monthly discharge flow effluent limit of 2.5 MGD for the Facility.

d. **Ocean Plan Effluent Limitations**. Table 2 of the Ocean Plan establishes technology-based requirements, applicable to POTWs and industrial discharges for which Effluent Limitations Guidelines (ELGs) have not been established. The Table 2 Ocean Plan effluent limitations are summarized below:

Table F-7. Table 2 Effluent Limitations

Parameter	Units	Monthly Average	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L	25	40	75
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225

Table 2 of the Ocean Plan establishes effluent limitations for pH, which require pH to be within 6.0 and 9.0 pH units at all times. Further, Table 2 establishes a 75 percent minimum removal requirement for suspended solids, unless the effluent limitation is less than 60 mg/L. However, as discussed in section IV.B.1.a above, a percent

removal of 85% is required for the secondary treated wastewater from the Facility. Therefore, this Order establishes effluent limitations for TSS and BOD_5 based on secondary treatment standards in 40 C.F.R. 133

e. **Total Coliform Effluent Limitations**. The average weekly total coliform limitation (23 MPN/100 mL) and the maximum daily total coliform limitation (2300 MPN/100 mL) are based on the 1980 California Department of Health Services *Uniform Guidelines for Sewage Disinfection.*

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2. Applicable Technology-Based Effluent Limitations

Title 40 C.F.R. 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 C.F.R. 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 C.F.R. 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 and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass-based effluent limitations were calculated based upon the permitted average daily discharge flow of the POTW of 2.5 MGD.

The following tables summarize technology-based effluent limitations established by the Order.

Table F-8. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
pH	s.u.	6.0 – 9.0 at all times		
	mg/L	30	45	90
	lbs/day	630	940	1,900
	mg/L	30	45	90
	lbs/day	630	940	1,900
	mg/L	25	40	75[2]
	lbs/day	520	830	1,600
Settleable Solids	mL/L	1.0	1.5	3.0[2]
Turbidity	NTU	75	100	225[2]
Total Coliform	MPN/100 mL	--	23[3]	2,300[2],[3]

[1] The average monthly percent removal for BOD_5 and TSS shall not be less than 85 percent.

[2] Applied as an instantaneous maximum.

[3] The median number of total coliform organisms in effluent shall not exceed 23 MPN/100 mL, as determined by the bacteriological result for the last 7 days for which analyses have been completed. The number of total coliform organisms in any sample shall not exceed 2,300 MPN/100 mL at any time.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 C.F.R. part 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of 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 California Ocean Plan.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses for ocean waters of the Central Coast Region are established by the Basin Plan and 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 C.F.R. § 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 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, when possible, the one-sided, upper 95 percent confidence bound for the 95th percentile (UCB) of each Table 1 pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of the three following endpoints:

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

Endpoint 2 - There is no "reasonable potential." An effluent limitation is not required for the pollutant. Appendix III (Ocean Plan) effluent

monitoring is not required for the pollutant; the Central Coast Board, however, may require occasional monitoring for the pollutant or for whole effluent toxicity as appropriate.

Endpoint 3 - The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in Appendix III, 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 monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to an excursion above a Table 1 water quality objective.

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

http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/trirev/stakeholder050505/rpcalc22_setup.zip

The calculator (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: the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303(d) status of the receiving water, the presence of threatened or endangered species or their critical habitat, or other information.

b. Second Path

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

c. Third Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the 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 one-sided, upper 95 percent confidence bound for the 95th percentile (UCB) of each pollutant concentration is 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 UCB 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 M_L (the mean of the natural log of transformed data) and S_L (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.

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

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than three detected and quantified values, or when the effluent data set contains three or more detected and quantified values but the number of censored values accounts for 80 percent or more of the total of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable WQO, 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, (i.e., 16 or more conclusive non-exceedances of the WQO) the pollutant has no reasonable potential to exceed the WQO. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limits in the expiring permit are retained.

An RPA was conducted using effluent monitoring data reported for March 2011 to October 2015. The implementation provisions for Table 1 in Section III.C of the Ocean Plan specify that the minimum initial dilution is the lowest average initial dilution within any single month of the year. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. Dilution estimates shall 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. Order No. R3-2011-0003 established the minimum initial dilution factor (Dm) for the discharge to be 93 to 1 (seawater to effluent). This Dm of 93:1 is retained from the current Order and applied to the WQBELs established herein.

A summary of the RPA results is provided below. As shown in the table, due to insufficient data, the RPA frequently leads to Endpoint 3 meaning that the RPA inconclusive. In these circumstances, the Ocean Plan requires that existing effluent limitations for those pollutants (for which the RPA is inconclusive) remain in the reissued permit. The Endpoint 3 constituents included cyanide, chlorinated phenolics, dichlorobromomethane, and non-chlorinated phenolics, which were Endpoint 2 in the previous 2011 permit.

When the RPA lead to Endpoint 2 meaning there is no reasonable potential for that pollutant, the limit has been removed for this permit term. Endpoint 2 was concluded for acute toxicity, ammonia, antimony, arsenic, cadmium, chlorodibromomethane, chloroform, chromium (VI), copper, halomethanes, lead, mercury, nickel, selenium, silver, and zinc. Five of these constituents (ammonia, copper, mercury, nickel, and zinc) also did not exhibit reasonable potential in the previous 2011 permit.

Where RPA Endpoint 1 resulted, reasonable potential to exceed water quality objectives has been determined and effluent limitations must be established in the Order. Endpoint 1 was concluded for chronic toxicity and total chlorine residual.

Table F-9. RPA Results

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
Objectives for Protection of Marine Aquatic Life								
Arsenic, Total Recoverable	5	0	0.952 - 1.59	2.98 - 2.99	2.99	8	2	Background conc. Cs = 3 µg/L.
Cadmium, Total Recoverable	5	0	0.058 - 0.101	0.000617 - 0.00107	0.00241	1	2	
Chromium (VI)	5	1	<0.012 - 0.963	<0.000128 - 0.0102	0.0689	2	2	
Copper, Total Recoverable	5	0	9.77 - 18.5	2.08 - 2.16	2.27	3	2	Background conc. Cs = 2 µg/L.
Lead, Total Recoverable	5	0	0.133 - 1.23	0.00142 - 0.0131	0.174	2	2	
Mercury, Total Recoverable	5	0	0.00515 - 0.0141	0.000549 - 0.000645	0.00075	0.04	2	Background conc. Cs = 0.0005 µg/L.
Nickel, Total Recoverable	5	0	4.65 - 8.99	0.0495 - 0.0956	0.187	5	2	
Selenium, Total Recoverable	5	0	1.16 - 2.3	0.0123 - 0.0245	0.0504	15	2	
Silver, Total Recoverable	5	0	0.029 - 0.16	0.158 - 0.160	0.162	0.7	2	Background conc. Cs = 0.16 µg/L.
Zinc, Total Recoverable	5	0	44.6 - 78.3	8.39 - 8.75	9.19	20	2	Background conc. Cs = 8 µg/L.
Cyanide, Total	5	3	<1 - 2.04	<0.0106 - 0.0217	---	1	3	5 conclusive non-exceedances.
Total Chlorine, Residual	1281	0	10 -20	0.106 - 0.213	0.271	2 (6-Month Median)	2	Using 6-month (180-day) median values.

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
Total Chlorine, Residual	1589	0	0.05 - 3820	0.000532 - 40.64	6.74	8 (Daily Max.)	1	Using daily maximum values. 7 observations after complete mixing exceed the WQO of 8 µg/L.
Total Chlorine, Residual	1656	0	0.01 - 4040	0.000106 - 42.98	7	60 (Instant. Max.)	2	Using instantaneous maximum values.
Ammonia (as N)	51	19	<21 - 4360	<0.223 - 46.4	23.5	600	2	
Acute Toxicity	17	0	0.025 - 0.025	0.00243 - 0.00243	---	0.3	2	TU_a units. Used Dm = 93/10 = 9.3. 17 conclusive non-exceedances.
Chronic Toxicity	16	0	1 - 17.86	0.0106 - 0.190	0.978	1	1	TU_c units. BPJ to keep a chronic toxicity limitation.
Non-Chlorinated Phenolic Compounds	5	5	<0.88 - <19	<0.00936 - <0.202	---	30	3	5 conclusive non-exceedances.
Chlorinated Phenolic Compounds	5	5	<0.56 - <0.56	<0.00596 - <0.00596	---	1	3	5 conclusive non-exceedances.
Endosulfan	5	5	<0.0021 - <2.6	<0.000022 - <0.0277	---	0.009	3	4 conclusive non-exceedances.
Endrin	5	5	<0.0013 - <2.2	<0.000014 - <0.0234	---	0.002	3	4 conclusive non-exceedances.
HCH	5	5	<0.0083 - <11.4	<0.000088 - <0.121	---	0.004	3	4 conclusive non-exceedances.
Radioactivity	---	---	---	---	---	---	---	---
Objectives for Protection of Human Health – Non-Carcinogens								
Acrolein	5	5	<1.6 - <4.1	<0.0170 - <0.0436	---	220	3	5 conclusive non-exceedances.
Antimony	5	0	0.5 - 0.89	0.00532 - 0.00947	0.0171	1200	2	
Bis(2-chloroethoxy) Methane	5	5	<0.54 - <0.56	<0.00575 - <0.00596	---	4.4	3	5 conclusive non-exceedances.

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
Bis(2-chloroisopropyl) ether	5	5	<0.41 - <0.53	<0.00436 - <0.00564	---	1200	3	5 conclusive non-exceedances.
Chlorobenzene	5	5	<0.023 - <0.097	<0.000245 - <0.00103	---	570	3	5 conclusive non-exceedances.
Chromium (III)	3	1	<0.028 - 3.12	<0.000298 - 0.0332	---	190000	3	3 conclusive non-exceedances.
Di-n-butyl Phthalate	5	5	<0.35 - <0.66	<0.00372 - <0.00702	---	3500	3	5 conclusive non-exceedances.
Dichlorobenzenes	5	5	<0.42 - <0.86	<0.00447 - <0.00915	---	5100	3	5 conclusive non-exceedances.
Diethyl Phthalate	5	5	<0.34 - <0.53	<0.00362 - <0.00564	---	33000	3	5 conclusive non-exceedances.
Dimethyl Phthalate	5	5	<0.31 - <0.43	<0.00330 - <0.00457	---	820000	3	5 conclusive non-exceedances.
4,6-dinitro-2-methylphenol	5	5	<0.43 - <0.46	<0.00457 - <0.00489	---	220	3	5 conclusive non-exceedances.
2,4-dinitrophenol	5	5	<0.22 - <2.3	<0.00234 - <0.0245	---	4	3	5 conclusive non-exceedances.
Ethylbenzene	5	5	<0.017 - <0.45	<0.000181 - <0.00479	---	4100	3	5 conclusive non-exceedances.
Fluoranthene	5	5	<0.44 - <0.53	<0.00468 - <0.00564	---	15	3	5 conclusive non-exceedances.
Hexachlorocyclopentadiene	5	5	<0.24 - <0.49	<0.00255 - <0.00521	---	58	3	5 conclusive non-exceedances.
Nitrobenzene	5	5	<0.47 - <0.65	<0.00500 - <0.00692	---	4.9	3	5 conclusive non-exceedances.
Thallium	5	4	<0.014 - 0.072	<0.000149 - 0.000766	---	2	3	5 conclusive non-exceedances.
Toluene	5	5	<0.018 - <0.12	<0.000191 - <0.00128	---	85000	3	5 conclusive non-exceedances.
Tributyltin	5	5	<0.02 - <0.083	<0.000213 - <0.000883	---	0.0014	3	5 conclusive non-exceedances.

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
1,1,1-trichloroethane	5	5	<0.072 - <0.19	<0.000766 - <0.00202	---	540000	3	5 conclusive non-exceedances.
Objectives for Protection of Human Health – Carcinogens								
Acrylonitrile	5	5	<0.45 - <1.2	<0.00479 - <0.0128	---	0.1	3	5 conclusive non-exceedances.
Aldrin	5	5	<0.00091 - <3.8	<0.000010 - <0.0404	---	0.000022	3	3 conclusive non-exceedances.
Benzene	5	5	<0.04 - <0.13	<0.000426 - <0.00138	---	5.9	3	5 conclusive non-exceedances.
Benzidine	5	5	<1.8 - <1.8	<0.0191 - <0.0191	---	0.000069	3	0 conclusive non-exceedances.
Beryllium	5	4	<0.043 - 0.045	<0.000457 - 0.000479	---	0.033	3	5 conclusive non-exceedances.
Bis(2-chloroethyl) Ether	5	5	<0.41 - <0.52	<0.00436 - <0.00553	---	0.045	3	5 conclusive non-exceedances.
Bis(2-ethlyhexyl) Phthalate	5	4	<0.41 - 1.2	<0.00436 - 0.0128	---	3.5	3	5 conclusive non-exceedances.
Carbon Tetrachloride	5	5	<0.025 - <0.19	<0.000266 - <0.00202	---	0.9	3	5 conclusive non-exceedances.
Chlordane	5	5	<0.0036 - <0.18	<0.000038 - <0.00192	---	0.000023	3	0 conclusive non-exceedances.
Chlorodibromomethane	5	1	<0.041 - 52.9	<0.000436 - 0.563	1.89	8.6	2	
Chloroform	5	0	14.7 - 45.1	0.156 - 0.480	1.41	130	2	
DDT	5	5	<0.00778 - <12.6	<0.000083 - <0.134	---	0.00017	3	3 conclusive non-exceedances.
1,4-dichlorobenzene	5	5	<0.034 - <0.47	<0.000362 - <0.00500	---	18	3	5 conclusive non-exceedances.
3,3'-dichlorobenzidine	5	5	<0.43 - <0.69	<0.00457 - <0.00734	---	0.0081	3	5 conclusive non-exceedances.
1,2-dichloroethane	5	5	<0.036 - <0.11	<0.000383 - <0.00117	---	28	3	5 conclusive non-exceedances.

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
1,1-dichloroethylene	5	5	<0.036 - <0.12	<0.000383 - <0.00128	---	0.9	3	5 conclusive non-exceedances.
Dichlorobromomethane	1	0	40 - 40	0.426 - 0.426	---	6.2	3	1 conclusive non-exceedance.
Dichloromethane (Methylene Chloride)	5	3	<0.03 - 0.101	<0.000319 - 0.00107	---	450	3	5 conclusive non-exceedances.
1,3-dichloropropene	5	5	<0.032 - <0.059	<0.000340 - <0.000628	---	8.9	3	5 conclusive non-exceedances.
Dieldrin	5	5	<0.0015 - <4.1	<0.000016 - <0.0436	---	0.00004	3	3 conclusive non-exceedances.
2,4-dinitrotoluene	5	5	<0.49 - <0.56	<0.00521 - <0.00596	---	2.6	3	5 conclusive non-exceedances.
1,2-diphenylhydrazine	5	5	<0.47 - <0.52	<0.00500 - <0.00553	---	0.16	3	5 conclusive non-exceedances.
Halomethanes	5	0	16 - 110.1	0.170 - 1.17	14.9	130	2	
Heptachlor	5	5	<0.0018 - <4.8	<0.000019 - <0.0511	---	0.00005	3	3 conclusive non-exceedances.
Heptachlor Epoxide	5	5	<0.00077 - <2.1	<0.000008 - <0.0223	---	0.00002	3	3 conclusive non-exceedances.
Hexachlorobenzene	5	5	<0.39 - <0.47	<0.00415 - <0.00500	---	0.00021	3	0 conclusive non-exceedances.
Hexachlorobutadiene	5	5	<0.37 - <0.45	<0.00394 - <0.00479	---	14	3	5 conclusive non-exceedances.
Hexachloroethane	5	5	<0.38 - <0.43	<0.00404 - <0.00457	---	2.5	3	5 conclusive non-exceedances.
Isophorone	5	5	<0.41 - <0.53	<0.00436 - <0.00564	---	730	3	5 conclusive non-exceedances.
N-nitrosodimethylamine	5	5	<0.47 - <0.6	<0.00500 - <0.00638	---	7.3	3	5 conclusive non-exceedances.
N-nitrosodi-N-propylamine	5	5	<0.53 - <0.54	<0.00564 - <0.00575	---	0.38	3	5 conclusive non-exceedances.

Parameter	N[1]	Number of Non-Detects	Effluent Conc. Range Before Dilution (µg/L)	Effluent Conc. Range After Dilution (µg/L)	UCB After Dilution (µg/L)	Ocean Plan WQO (µg/L)	RPA End point [2]	Comment
N-nitrosodiphenylamine	5	5	<0.5 - <0.74	<0.00532 - <0.00787	---	2.5	3	5 conclusive non-exceedances.
PAHs	5	4	<0.02 - <2	<0.000213 - <0.0213	---	0.0088	3	4 conclusive non-exceedances.
PCBs	5	5	<0.688 - <4.39	<0.00732 - <0.0467	---	0.000019	3	0 conclusive non-exceedances.
TCDD equivalents	5	5	<0.000943 - <2.9	<0.000010 - <0.0309	---	3.9E-09	3	0 conclusive non-exceedances.
1,1,2,2-tetrachloroethane	5	5	<0.085 - <0.3095	<0.000904 - <0.00329	---	2.3	3	5 conclusive non-exceedances.
Tetrachloroethylene (Tetrachloroethene)	5	5	<0.038 - <0.17	<0.000404 - <0.00181	---	2	3	5 conclusive non-exceedances.
Toxaphene	5	5	<0.18 - <0.28	<0.00192 - <0.00298	---	0.00021	3	0 conclusive non-exceedances.
Trichloroethylene	5	5	<0.034 - <0.18	<0.000362 - <0.00192	---	27	3	5 conclusive non-exceedances.
1,1,2-trichloroethane	5	5	<0.035 - <0.078	<0.000372 - <0.000830	---	9.4	3	5 conclusive non-exceedances.
2,4,6-trichlorophenol	5	5	<0.47 - <0.9	<0.00500 - <0.00957	---	0.29	3	5 conclusive non-exceedances.
Vinyl Chloride	5	5	<0.055 - <0.15	<0.000585 - <0.00160	---	36	3	5 conclusive non-exceedances.

[1] Number of data points available for the RPA.

[2] Endpoint 1 – RP determined, limit required, monitoring required.

Endpoint 2 – Discharger determined not to have RP, monitoring may be established.

Endpoint 3 – RPA was inconclusive, carry over previous limits if applicable, establish monitoring.

4. WQBEL Calculations

Based on results of the RPA, the Central Coast Water Board is establishing WQBELs for chronic toxicity and total chlorine residual based on a conclusion of Endpoint 1. An Endpoint 2 was concluded for acute toxicity, ammonia, antimony, arsenic, cadmium, chlorodibromomethane, chloroform, chromium (VI), copper, halomethanes, lead, mercury, nickel, selenium, silver, and zinc. Effluent limitations are not required for pollutants resulting in an Endpoint 2. All other California Ocean Plan Table 1 pollutants

resulted in an Endpoint 3; therefore, the limits for these pollutants are retained in this Order.

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

$C_e = C_o + D_m (C_o – C_s)$

Where

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

C_s = background seawater concentration (µg/L)

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater (here, D_m = 93)

For this Facility, the D_m of 93 is unchanged from Order No. R3-2011-0003. As site-specific water quality data are not available, in accordance with Table 1 implementing procedures, Cs equals zero for all pollutants, except the following.

Table F-10. Background Concentrations (C_s) – California Ocean Plan (Table 3)

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

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

Table F-11. Water Quality Objectives (C_o) – California Ocean Plan (Table 1) Objectives for Protection of Aquatic Life

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/L	8	32	80
Cadmium	µg/L	1	4	10
Chromium (VI)	µg/L	2	8	20
Copper	µg/L	3	12	30
Lead	µg/L	2	8	20
Mercury	µg/L	0.04	0.16	0.4
Nickel	µg/L	5	20	50
Selenium	µg/L	15	60	150
Silver	µg/L	0.7	2.8	7
Zinc	µg/L	20	80	200
Cyanide	µg/L	1	4	10
Total Chlorine Residual	µg/L	2	8	60
Ammonia	µg/L	600	2,400	6,000
Acute Toxicity	TU_a	---	0.3	---

Pollutant	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Chronic Toxicity	**TU_c**	---	1	---
Non-Chlorinated Phenolic Compounds	µg/L	30	120	300
Chlorinated Phenolics	µg/L	1	4	10
Endosulfan	µg/L	0.009	0.018	0.027
Endrin	µg/L	0.002	0.004	0.006
HCH	µg/L	0.004	0.008	0.012
Radioactivity	µg/L	---	---	---

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

Pollutant	Units	6-Month Median
Non-Carcinogens		
Acrolein	µg/L	220
Antimony	µg/L	1,200
Bis(2-Chloroethoxy)Methane	µg/L	4.4
Bis(2-Chloroisopropyl)Ether	µg/L	1,200
Chlorobenzene	µg/L	570
Chromium (III)	µg/L	190,000
Di-n-Butyl Phthalate	µg/L	3,500
Dichlorobenzenes	µg/L	5,100
Diethyl Phthalate	µg/L	33,000
Dimethyl Phthalate	µg/L	820,000
2-Methyl-4,6-Dinitrophenol	µg/L	220
2,4-Dinitrophenol	µg/L	4
Ethylbenzene	µg/L	4,100
Fluoranthene	µg/L	15
Hexachlorocyclopentadiene	µg/L	58
Nitrobenzene	µg/L	4.9
Thallium	µg/L	2
Toluene	µg/L	85,000
Tributyltin	µg/L	0.0014
1,1,1-Trichloroethane	µg/L	540,000
Carcinogens		
Acrylonitrile	µg/L	0.1
Aldrin	µg/L	0.000022
Benzene	µg/L	5.9
Benzidine	µg/L	0.000069
Beryllium	µg/L	0.033
Bis(2-Chloroethyl)Ether	µg/L	0.045
Bis(2-Ethylhexyl)Phthalate	µg/L	3.5

Pollutant	Units	6-Month Median
Carbon Tetrachloride	µg/L	0.9
Chlordane	µg/L	0.000023
Chlorodibromomethane	µg/L	8.6
Chloroform	µg/L	130
DDT (total)	µg/L	0.00017
1,4 Dichlorobenzene	µg/L	18
3,3'-Dichlorobenzidine	µg/L	0.0081
1,2-Dichloroethane	µg/L	28
1,1-Dichloroethylene	µg/L	0.9
Dichlorobromomethane	µg/L	6.2
Methylene Chloride	µg/L	450
1,3-Dichloropropylene	µg/L	8.9
Dieldrin	µg/L	0.00004
2,4-Dinitrotoluene	µg/L	2.6
1,2-Diphenylhydrazine	µg/L	0.16
Halomethanes	µg/L	130
Heptachlor	µg/L	0.00005
Heptachlor Epoxide	µg/L	0.00002
Hexachlorobenzene	µg/L	0.00021
Hexachlorobutadiene	µg/L	14
Hexachloroethane	µg/L	2.5
Isophorone	µg/L	730
N-Nitrosodimethylamine	µg/L	7.3
N-Nitrosodi-n-Propylamine	µg/L	0.038
N-Nitrosodiphenylamine	µg/L	2.5
PAHs (total)	µg/L	0.0088
PCBs	µg/L	0.000019
TCDD Equivalents	µg/L	0.0000000039
1,1,2,2-Tetrachloroethane	µg/L	2.3
Tetrachloroethylene	µg/L	2
Toxaphene	µg/L	0.00021
Trichloroethylene	µg/L	27
1,1,2-Trichloroethane	µg/L	9.4
2,4,6-Trichlorophenol	µg/L	0.29
Vinyl Chloride	µg/L	36

Effluent limitations are calculated using the equation $C_e = C_o + D_m (Co – C_s)$ as outlined above. For example, the effluent limitations for copper are calculated as follows (all limits calculated are expressed with two significant digits).

<u>Copper</u>

C_e = 3+93 (3–2) = 100 µg/L (6-Month Median)

C_e = 12+93 (12–2) = 1,100 µg/L (Daily Maximum)

C_e = 30+93 (30–2) = 3,400 µg/L (Instantaneous Maximum)

Chronic Toxicity

$C_e = 1 + 93 (1 - 0) = 90\ TU_c$ (Daily Maximum)

Acute Toxicity

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

$C_e = C_o + (0.1)\ Dm\ (Co)$

Where C_o equals 0.3 and Dm equals 93, the effluent limitation for acute toxicity is 3.1 TU_a.

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

Parameter	Units	Effluent Limitation		
		6-Mo Median[1]	Maximum Daily[2]	Instantaneous Maximum
	µg/L	94	376	940
	lbs/day	2	8	20
	µg/L	190	750	5600
	lbs/day	3.9	16	120
	µg/L	2,800	11,000	28,000
	lbs/day	59	240	590
	µg/L	94	380	940
	lbs/day	2.0	7.8	20
	µg/L	0.85	1.7	2.5
	lbs/day	0.018	0.035	0.053
	µg/L	0.19	0.38	0.56
	lbs/day	0.0039	0.0078	0.012
	µg/L	0.38	0.75	1.1
	lbs/day	0.0078	0.016	0.024
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
Chronic Toxicity[5]	TU_c	---	94	---

[1] The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

[2] The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as Ce and the observed flow rate Q in millions of gallons per day (each variable referring to Equation 3 of the Ocean Plan).

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

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

[5] Ocean Plan requires chronic toxicity testing if Dm < 100. Since facility Dm=94, acute toxicity testing is not required.

[6] Phenolic compounds (non-chlorinated) are a group of analytes characterized by a benzene ring with at least one hydroxyl (OH) group.

[7] Chlorinated phenolics are a group of analytes characterized by a benzene ring with at least one hydroxyl (OH) group and at least one chlorine atom.

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

Parameter	Units	Effluent Limitation
		30-day Average
	µg/L	21,000
	lbs/day	430
	µg/L	410
	lbs/day	8.6
	µg/L	110,000
	lbs/day	2,400
	µg/L	54,000
	lbs/day	1,100
	µg/L	18,000,000
	lbs/day	370,000
	µg/L	330,000
	lbs/day	6,900
	µg/L	480,000
	lbs/day	10,000
	µg/L	3,102,000
	lbs/day	65,000
	µg/L	77,000,000
	lbs/day	1,600,000
	µg/L	21,000
	lbs/day	430
	µg/L	380
	lbs/day	7.8
	µg/L	390,000
	lbs/day	8,000
	µg/L	1,400
	lbs/day	29
	µg/L	5,400
	lbs/day	110
	µg/L	460
	lbs/day	9.6
	µg/L	190
	lbs/day	3.9
	µg/L	8,000,000
	lbs/day	170,000

Parameter	Units	Effluent Limitation
		30-day Average
Tributyltin	µg/L	0.13
	lbs/day	0.0027
	µg/L	51,000,000
	lbs/day	1,100,000

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

Parameter	Units	Effluent Limitation
		30-day Average
	µg/L	9.4
	lbs/day	0.20
	µg/L	0.0021
	lbs/day	0.000043
	µg/L	550
	lbs/day	12
	µg/L	0.0065
	lbs/day	0.00014
	µg/L	3.1
	lbs/day	0.065
	µg/L	4.2
	lbs/day	0.088
	µg/L	330
	lbs/day	6.9
	µg/L	85
	lbs/day	1.8
	µg/L	0.0022
	lbs/day	0.000045
	µg/L	0.016
	lbs/day	0.00033
	µg/L	1,700
	lbs/day	35
	µg/L	0.76
	lbs/day	0.016
	µg/L	2,600
	lbs/day	55
	µg/L	85
	lbs/day	1.8
	µg/L	580
	lbs/day	12
	µg/L	42,000
	lbs/day	880
	µg/L	840

Parameter	Units	Effluent Limitation
		30-day Average
	lbs/day	17
	µg/L	0.0038
	lbs/day	0.000078
	µg/L	240
	lbs/day	5.1
	µg/L	15
	lbs/day	0.31
	µg/L	0.0047
	lbs/day	0.000098
	µg/L	0.0019
	lbs/day	0.000039
	µg/L	0.020
	lbs/day	0.00041
	µg/L	1,300
	lbs/day	27
	µg/L	240
	lbs/day	4.9
	µg/L	69,000
	lbs/day	1,400
	µg/L	690
	lbs/day	14
	µg/L	36
	lbs/day	0.74
	µg/L	240
	lbs/day	4.9
	µg/L	0.83
	lbs/day	0.017
	µg/L	0.0018
	lbs/day	0.000037
	µg/L	3.7×10^{-7}
	lbs/day	7.6×10^{-9}
	µg/L	220
	lbs/day	4.5
	µg/L	190
	lbs/day	3.9
	µg/L	0.020
	lbs/day	0.00041
	µg/L	2,500
	lbs/day	53
	µg/L	880

Parameter	Units	Effluent Limitation
		30-day Average
	lbs/day	18
	µg/L	27
	lbs/day	0.57
	µg/L	3,400
	lbs/day	71

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

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

[5] 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	--	--

5. Whole Effluent Toxicity (WET)

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

The Basin Plan requires that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic organisms in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge or for another control water.

Central Coast Water Board staff have determined that treated wastewater from the Facility has no reasonable potential to cause or contribute to acute 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.

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

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

1. Anti-Backsliding Requirements

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

The Order retains effluent limitations established by the previous Order for pH, BOD_5, TSS, oil and grease, settleable solids, turbidity, and total coliform. The Order also retains effluent limitations from the previous Order for California Ocean Plan Table 1 pollutants for which reasonable potential was determined and where the results of the RPA were inconclusive. The California Ocean Plan was amended in 2012 to include a procedure for determining "reasonable potential" by characterization of effluent monitoring data.

The elimination of WQBELs for acute toxicity, antimony, arsenic, cadmium, chlorodibromomethane, chloroform, chromium (VI), halomethanes, lead, selenium, and silver is consistent with the exception to the CWA's anti-backsliding requirements expressed at section 402(0)(2)(B)(i) of the Act, which allows a reissued permit to include less stringent limitations when "information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods), and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. In these circumstances, less stringent limitations (here, the removal or elimination of limitations) are based on new data, which was generated during the term of previous permit, and which demonstrates no reasonable potential for discharges from the Facility to cause or contribute to exceedances of applicable water quality standards.

2. Antidegradation Policies

The Order does not authorize increases in discharge rates or pollutant loadings. 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 C.F.R. 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 pH, BOD_5, TSS, oil and grease, settleable solids, turbidity, and total coliform. 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.

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

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not applicable

G. Recycling Specifications

The Order does not address use of reclaimed wastewater except to require compliance with applicable State and local requirements regarding the production and use of reclaimed wastewater, including those requirements established by the Department of Public Health at title 22, sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria. This facility may recycle water in the future as described in section II.E of this Fact Sheet.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater

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

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. 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 C.F.R. § 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. §s 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

The Order may be modified in accordance with the requirements set forth at 40 C.F.R. §s 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 U.S. EPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The requirement to maintain a toxicity reduction work plan is retained from Order R3-2011-0003. When toxicity monitoring measures acute or 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.

3. Best Management Practices and Pollution Prevention

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

4. Construction, Operation, and Maintenance Specification

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

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

a. Pretreatment

Pretreatment requirements for POTWs are contained within 40 C.F.R. Part 403. Per 40 C.F.R. 403.8, any POTW or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards will be required to establish a POTW pretreatment program. The Discharger is not required to develop a pretreatment program at this time because its design flow is less than 5 MGD (design flow = 2.5 MGD).

The Central Coast Water Board may require that a POTW with a design flow less of 5 MGD or less develop a pretreatment program if the Central Coast Water Board finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent interference with the POTW or pass through. The Central Coast Water Board has no information indicating these conditions exist at the Facility, and therefore does not require the Discharger to develop a pretreatment program.

6. Other Special Provisions

a. Discharges of Storm Water

This Order does not address discharges of storm water from the treatment and disposal site, except to require coverage by and compliance with applicable provisions of General Permit CAS000001 - *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*.

b. Sanitary Sewer Systems

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

7. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. §s 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 Carpinteria Sanitary District Wastewater Treatment Plant 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 BOD_5 and TSS is required to determine compliance with the Order’s 85 percent removal requirement for those pollutants. Influent monitoring has been carried over from Order No. R3-2011-0003.

B. Effluent Monitoring

Effluent monitoring requirements of the previous permit for Discharge Point 001 (the Ocean outfall) have been 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. The Central Coast Water Board staff have determined that treated wastewater from the Facility has a reasonable potential to cause or contribute to chronic toxicity in the discharge.

D. Reclaimed Water Monitoring

Monitoring requirements related to producing recycled water are included in this order for the first time.

E. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is carried over from Order No. R3-2011-0003 as necessary to determine compliance with receiving water limitations and for the protection of public health. Benthic sediment and benthic biota monitoring of the receiving water has been established in the Order to establish a baseline of the current conditions surrounding the diffuser for future permitting efforts.

2. Groundwater – Not Applicable

F. Other Monitoring Requirements

1. Biosolids Monitoring

Biosolids monitoring requirements have been retained from the previous order and are based on the requirements of 40 CFR Part 503.

2. Rainfall Monitoring.

The Order retains the requirement of Order No. R3-2011-0003 to report daily rainfall totals alongside Facility flow measurement to facilitate the evaluation of the influence of inflow and infiltration on wastewater flows received at the Facility.

3. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), U.S. EPA requires major and selected minor permittees under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by U.S. EPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study. Thus, it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to U.S. EPA's DMR-QA Coordinator and Quality Assurance Manager.

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board will consider the issuance of WDRs that will serve as an NPDES permit for the Carpinteria Sanitary District Wastewater Treatment Plant. As a step in the WDR adoption process, the Central Coast Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. The Notice of Public Hearing, which indicates the availability of the Draft Waste Discharge Requirements and describes the public comment procedures, was published in the Coastal View News on June 29, 2017. Coastal View News is printed and published weekly in the County of Santa Barbara, and has been adjudged a newspaper of general circulation by the Superior Court of the County of Santa Barbara (Case Number 21046). The Notice of Public Hearing was publicly posted at the Carpinteria Sanitary District administrative office, located at 5300 Sixth Street in Carpinteria and uploaded to the District's web page at www.carpsan.com. The Notice was also publicly posted at the City Hall office of the City of Carpinteria.

The public had 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 are invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Central Coast Water Board at 895 Aerovista Place, Suite 101 San Luis Obispo, CA 93401.

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments were due at the Central Coast Water Board office by 5:00 p.m. on July 23, 2017. Central Coast Water Board staff received two comment letters (Attachments 2 and 3) during the public comment period, which closed on July 23, 2017.

Comment Letter Number	Name	Affiliation
1	Hillary Hauser, Executive Director	Heal the Ocean
2	Craig Murray, P.E., General Manager	Carpinteria Sanitary District

Below are substantive comments and staff responses. The comment number corresponds to the comment letter in the above table.

Comment 1a - Commenter requests that the NPDES permit include language allowing for, and facilitating, the Indirect Potable Reuse (IPR) project. Commenter requests that the Board insert language now, to cover the planned improvements/changes at the treatment plant and a "reopener provision" that would allow modification of the permit when the time comes, for

the Carpinteria Sanitary District to move forward with its treatment plant facilities upgrade for IPR. The Title 22 section of the NPDES Permit should have provisions - now - that allow for and facilitate the upgrade to the treatment plant.

Response 1a – New language was added to the permit to allow the production of recycled water that meets Title 22 criteria. Many of the details of the final IPR project at the treatment plant are not available for the September 2017 permit reissuance; therefore, a reopener clause is included in the proposed permit. Before full implementation of the final IRP project, the Discharger must also obtain an individual waste discharge requirements permit for aquifer replenishment/extraction activities and enroll in the State Water Resources Control Board's statewide Recycled Water General Permit (2014-0090-DWQ).

Comment 2a - Draft Order No. R3-2017-0032 includes Recycling Specifications, a newly defined point of discharge, and various other provisions and references to a future recycled water project. However, the provisions and references are to a conventional Title 22 project geared towards surface irrigation. Much of the newly incorporated language in the order and attachments is inapplicable to the project actually being developed.

Response 2a – Water Board staff is aware that the standard Title 22 provisions in the draft permit may not be applicable to the future indirect potable reuse project. A reopener clause is included in the permit.

Comment 2b - Effluent limits for Phenolic Compounds and Chlorinated Phenolics were removed in 2011 based on the reasonable potential analysis (RPA). It is unclear why they were added back as monitoring did not show any measurable concentrations.

Response 2b – Water Board staff followed the Ocean Plan Appendix VI RPA procedures. The RPA for both Phenolic and Chorinated Phenolics is inconclusive (Endpoint 3) because the sample sizes are small and contain 100% nondetected values. Using March 2011 to October 2015 data, the RPA showed five conclusive non-exceedances of the Ocean Plan water quality objective for Non-Chlorinated Phenolics and five conclusive non-exceedances of the Ocean Plan water quality objective for Chlorinated Phenolics. Under the Ocean Plan RPA procedure, an effluent limitation is not required (Endpoint 2) when 16 or more conclusive non-exceedances of the objective are observed in the data.

The previous 2011 permit conclusion of Endpoint 2 for Chlorinated and Non-chlorinated phenolics was based on larger sample sizes (N = 15 and 16, respectively) with not more than 46% non-detected values.

Comment 2c - Phenolic and Chorinated Phenolic compounds should be defined in the order or the MRP.

Response 2c – Definitions for these compounds were obtained from the State Water Board's Division of Water Quality and inserted into the proposed permit as footnotes to Table 5.

Comment 2d - The specificity in newly added standard provisions (VIII.B.11 and VIII.B.12) are inappropriate and beyond the jurisdictional scope of the Central Coast Water Board. These provision should be modified or deleted.

Response 2d - These provision express the Central Coast Water Board's desire that facilities conduct proper maintenance of mechanical and electrical equipment and be in compliance with

industry-accepted standards for plumbing, electrical, and mechanical codes. These standard provision items are part of the 2012 Updated Standard Provisions for NDPES Permits as requested by the Board during the December 2012 board meeting (http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2012/december/Item_15/index.shtml). No change to the permit was made in regard to this comment.

Comment 2e – The basis for the following requirement in section VI.C.5.d of the draft permit is unclear: "Additional Connections. The Central Coast Water Board must approve any additional connections outside the Sanitary District sewer service area to the effluent sewer main." Does this include extension of service through out-of-agency service agreements authorized by The Local Agency Formation Commission (LAFCO)?

Response 2e – The basis for the requirement in permit section VI.C.5.d is Standard Provision V.F.3. (see page D-8). This type of requirement is necessary to assure the Discharger will not increase capacity in a manner that will result in violations of the permit. Yes, this includes extension of service authorized by LAFCO. Water Board staff agree that LAFCO would need to authorize such expansion. This requirement to notify the board is already included in the Central Coast Water Board's Standard Provisions and is incorporated by reference. Consequently, Water Board staff deleted the requirement in permit section V1.C.5.d.

C. Public Hearing

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

Date:	September 21, 2017
Time:	9:00 a.m.
Location:	Santa Barbara County Planning and Development Hearing Room 123 E. Anapamu Street Santa Barbara, CA 93101

Interested persons were invited to attend the public hearing and provide testimony to the Central Coast Water Board pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing. No public provided comments during the meeting and the WDRs were approved on the consent calendar.

D. Reconsideration of Waste Discharge Requirements

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be received by the State Water Board at the following address within 30 calendar days of the Regional Water Board's action:

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

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 Steve Saiz at (805) 549-3879 or by email at steve.saiz@waterboards.ca.gov or Sheila Soderberg at (805) 549-3592 or by email at Sheila.soderberg@waterboards.ca.gov.