ORDER NO. R3-2014-0012 NPDES NO. CA0047996

WASTE DISCHARGE REQUIREMENTS FOR THE CARMEL AREA WASTEWATER DISTRICT TREATMENT PLANT

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

Table 1. Discharger Information

Table 1. Disonalge information				
Discharger	Carmel Area Wastewater District			
Name of Facility	Carmel Area Wastewater Treatment Plant			
	26900 State Route One			
Facility Address	Carmel, CA 93923			
Monterey County				

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary Treated Wastewater and Reverse Osmosis Concentrate	36 ° 32 ' 00 " N	121 ° 55 ' 43 " W	Pacific Ocean (Carmel Bay)

Table 3. Administrative Information

This Order was adopted by the Central Coast Region Water Quality Control Board on:	May 22, 2014
This Order shall become effective on:	July 11, 2014
This Order shall expire on:	July 10, 2019
The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	January 11, 2019, or 180 days prior to permit expiration date

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

Kenneth A.	Harris Jr.,	Executive	Officer	

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I. FINDINGS

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

- A. Legal Authorities. This Order serves as Waste Discharge Requirements (WDR's) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.
- **B.** Background and Rationale for Requirements. The Central Coast Water Board developed this Order's requirements based on information submitted in the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the Order's waste discharge requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.
- C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections II.B, II.C, and III.B, of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- D. Notification of Interested Parties. The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet accompanying this Order.
- **E. Consideration of Public Comment.** The Central Coast Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order R3-2008-0007 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Coast Water Board from taking enforcement action for past violations of the previous Order.

II. DISCHARGE PROHIBITIONS

- **A.** Discharge of treated wastewater to the Pacific Ocean at a location other than those listed below is prohibited.
 - 1. Carmel Area Wastewater Treatment Plant Ocean Outfall (36° 32' 00" N. Latitude, 121° 55' 43" W. Longitude), and
 - 2. Approved recycled water reuse sites authorized by Order Nos. 93-72 and 94-04 or other sites subsequently permitted.
- **B.** The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.A.7 (Bypass), is prohibited.
- **C.** Discharge of any waste in any manner other than as described by this Order, excluding storm water regulated by General Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities), and excluding the reuse of treated wastewater in accordance with California Water Code sections 13500 13577 (Water Reclamation) and California Code of Regulations title 22, sections 60301 60357 (Water Recycling Criteria), is prohibited.
- **D.** The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- **E.** Discrete point source discharges of sewage in a manner that alters conditions from those occurring naturally in the area of the discharge to Carmel Bay, an Area of Special Biological Significance (ASBS), are prohibited.
- **F.** Federal law prohibits the discharge of sludge by pipeline to the Ocean. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.

III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations - Discharge Point 001

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

Table 4. Effluent Limitations

		Effluent Limitations			
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
POD	mg/L	30	45	90	
BOD₅	lbs/day [1]	750	1,130	2,250	
TSS	mg/L	30	45	90	
133	lbs/day [1]	750	1,130	2,250	
Oil & Grease	mg/L	25	40	75	
	lbs/day [1]	630	1,000	1,880	
Settleable Solids	mL/L/hr	1.0	1.5		3.0
Turbidity	NTUs	75	100		225
pH ^[2]	pH units		6.0 - 9.0	at all times	
Total Coliform Bacteria [3]	MPN/100 mL	230			10,000
Fecal Coliform Bacteria [3], [4]	MPN/100 mL	24,000			49,000
Enterococcus Bacteria [3], [4]	MPN/100 mL	4,300			13,000

^[1] Mass limitations are based on 3.0 MGD maximum effluent flow.

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

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

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

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Cadmium	μg/L	120	490	1,200
Caumum	lbs/day ^[1]	3.1	12	31
Chromium (Hexavalent) [2]	μg/L	240	980	2,400
	lbs/day ^[1]	6.1	24	61
Lead	μg/L	240	980	2,400
Leau	lbs/day ^[1]	6.1	24	61
Mercury	μg/L	4.8	19	49

^[2] Excursions from the effluent limit range are permitted subject to the following limitations (40 C.F.R. 401.17):

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

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

Bacterial effluent limits apply if the Executive Officer concludes from receiving water monitoring that the discharge consistently exceeds the bacteriological single sample maximum (SSM) standards contained within section IV.A.1 of the Order. See Table E-3 for associated monitoring requirements.

^[4] Fecal coliform and Enterococcus bacteria values are based on existing dilution ratio of 121:1 and apply after the last treatment process and at a measurable location before disposal to the ocean outfall.

Pollutant	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
	lbs/day ^[1]	0.12	0.49	1.2
Silver	μg/L	66	320	830
Silver	lbs/day ^[1]	1.7	8.1	21
Total Residual Chlorine [3]	μg/L	240	980	7,300
Total Residual Chionne	lbs/day ^[1]	6.1	24	180
Ammonio (oo NI)	μg/L	73,000	290,000	730,000
Ammonia (as N)	lbs/day ^[1]	1,800	7,300	18,000
Acute Toxicity [4]	TUa		3.9	
Chronic Toxicity [4]	TUc		120	
Phenolic Compounds	μg/L	3,700	15,000	37,000
(non-chlorinated)	lbs/day ^[1]	92	370	920
Chlorinated Phenolics	μg/L	120	490	1,200
Chiomiated Friendics	lbs/day ^[1]	3.1	12	31
Endosulfan	μg/L	1.1	2.2	3.3
Endosulian	lbs/day ^[1]	0.027	0.055	0.082
Endrin	μg/L	0.24	0.49	0.73
Enain	lbs/day ^[1]	0.0061	0.012	0.018
НСН	μg/L	0.49	0.98	1.5
ПСП	lbs/day ^[1]	0.012	0.024	0.037
Radioactivity		Not to exceed limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443		

^[1] Mass limitations are based on 3.0 MGD maximum effluent flow.

logy=-0.43(logx)+1.8 where: y = the water quality objective (in $\mu g/L$) to apply when chlorine is being discharged; and

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

Pollutant	Unit	30-day Average
Aproloin	μg/L	27,000
Acrolein	lbs/day ^[1]	670
Pia/2 Chloroothovy/Mothono	μg/L	540
Bis(2-Chloroethoxy)Methane	lbs/day ^[1]	13
Bis(2-Chloroisopropyl)Ether	μg/L	150,000
Bis(2-Cilioroisopropyi)Ether	lbs/day ^[1]	3,700
Chlorobenzene	μg/L	70,000

 $^{^{\}mbox{\scriptsize [2]}}$ The Discharger may at its option meet this objective as a total chromium objective.

Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours shall be determined using the following equation:

x = the duration of uninterrupted chlorine discharge in minutes.

The applicable effluent limitation must then be determined using Equation No. 1 from the Ocean Plan.

^[4] See Attachment A for applicable definitions.

Pollutant	Unit	30-day Average
	lbs/day ^[1]	1700
Di a Distri Dette alata	μg/L	430,000
Di-n-Butyl Phthalate	lbs/day ^[1]	11,000
Dichlorobenzenes	μg/L	620,000
Dichloroberizeries	lbs/day ^[1]	16,000
Diathyl Dhthalata	μg/L	4,000,000
Diethyl Phthalate	lbs/day ^[1]	100,000
Dim othyd Dhth olata	μg/L	100,000,000
Dimethyl Phthalate	lbs/day ^[1]	2,500,000
2 Mathyl 4 6 Dinitrophonal	μg/L	27,000
2-Methyl-4,6-Dinitrophenol	lbs/day ^[1]	670
2.4 Dinitrophonol	μg/L	490
2,4-Dinitrophenol	lbs/day ^[1]	12
Ethi dhaaraa	μg/L	500,000
Ethylbenzene	lbs/day ^[1]	13,000
Fluoranthene	μg/L	1,800
Fluorantherie	lbs/day ^[1]	46
Havashlaraayalanantadiana	μg/L	7,100
Hexachlorocyclopentadiene	lbs/day ^[1]	180
Nittedianana	μg/L	500
Nitrobenzene	lbs/day ^[1]	15
Thallium	μg/L	240
Thailium	lbs/day ^[1]	6.1
Teileretedia	μg/L	0.17
Tributylin	lbs/day ^[1]	0.0043
4.4.4 Trichlandathana	μg/L	66,000,000
1,1,1-Trichloroethane	lbs/day ^[1]	1,600,000

^[1] Mass limitations are based on 3.0 MGD maximum effluent flow.

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

Pollutant	Unit	30-day Average
A am da mituil a	μg/L	12
Acrylonitrile	lbs/day ^[1]	0.31
Aldrin	μg/L	0.0027
Aldrin	lbs/day ^[1]	0.000067
Benzene	μg/L	720
Belizelle	lbs/day ^[1]	18
Benzidine	μg/L	0.0084
Delizidille	lbs/day ^[1]	0.00021
Beryllium	μg/L	4.0

Pollutant	Unit	30-day Average
	lbs/day ^[1]	0.10
Bis(2-Chloroethyl)Ether	μg/L	5.5
	lbs/day ^[1]	0.14
Bis(2-Ethylhexyl)Phthalate	μg/L	430
	lbs/day ^[1]	11
Carbon Tetrachloride	μg/L	110
	lbs/day ^[1]	2.7
Chlordane	μg/L	0.0028
	lbs/day ^[1]	0.000070
DDT (total)	μg/L	0.021
	lbs/day ^[1]	0.00052
1,4 Dichlorobenzene	μg/L	2,200
	lbs/day ^[1]	55
3,3'-Dichlorobenzidine	μg/L	0.99
	lbs/day ^[1]	0.025
1,2-Dichloroethane	μg/L	3,400
	lbs/day ^[1]	85
1,1-Dichloroethylene	μg/L	110
1, 1-Dichioloethylene	lbs/day ^[1]	2.7
Dichloromethane (Methylene	μg/L	55,000
Chloride)	lbs/day ^[1]	1,400
4.2 Diableronrenene	μg/L	1,100
1,3-Dichloropropene	lbs/day ^[1]	27
Dieldrin	μg/L	0.0049
Dielalili	lbs/day ^[1]	0.00012
2,4-Dinitrotoluene	μg/L	320
	lbs/day ^[1]	7.9
1,2-Diphenylhydrazine	μg/L	20
	lbs/day ^[1]	0.49
Halomethanes	μg/L	16,000
Talometraries	lbs/day ^[1]	400
Heptachlor	μg/L	0.0061
- Topidomor	lbs/day ^[1]	0.00015
Heptachlor Epoxide	μg/L	0.0024
	lbs/day ^[2]	0.000061
Hexachlorobenzene	μg/L	0.026
I IEAAUIIUI UUEIIZEIIE	lbs/day ^[1]	0.00064
Hexachlorobutadiene	μg/L	1,700
	lbs/day ^[1]	43
Hexachloroethane	μg/L	310

Pollutant	Unit	30-day Average
	lbs/day ^[1]	7.6
Isophorone	μg/L	89,000
	lbs/day ^[1]	2,200
N-Nitrosodimethylamine	μg/L	890
	lbs/day ^[1]	22
N-Nitrosodi-n-Propylamine	μg/L	46
	lbs/day ^[1]	1.2
NI Nitrae adiph any demine	μg/L	310
N-Nitrosodiphenylamine	lbs/day ^[1]	7.6
PAHs (total)	μg/L	1.1
	lbs/day ^[1]	0.027
PCBs	μg/L	0.0023
PCBS	lbs/day ^[1]	0.000058
TCDD Facilitationts	μg/L	4.8E-07
TCDD Equivalents	lbs/day ^[1]	1.2E-08
4.4.0.0 Teles able to all a	μg/L	280
1,1,2,2-Tetrachloroethane	lbs/day ^[1]	7.00
Tatrachlaroothylana	μg/L	240
Tetrachloroethylene	lbs/day ^[1]	6.1
Toyonhono	μg/L	0.026
Toxaphene	lbs/day ^[1]	0.00064
Trichloroethylene	μg/L	3,300
Themoroethylene	lbs/day ^[1]	82
4.4.0 Triablements are	μg/L	1,100
1,1,2-Trichloroethane	lbs/day ^[1]	29
2,4,6-Trichlorophenol	μg/L	35
	lbs/day ^[1]	0.89
Vinyl Chloride	μg/L	4,400
	lbs/day ^[1]	110

Mass limitations are based on 3.0 MGD maximum effluent flow.

- **c. Percent Removal:** The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.
- **d. Initial Dilution:** The minimum initial dilution of treated effluent at the point of discharge to Carmel Bay shall not be less than 121 to 1 (seawater to effluent) at any time.
- **e. Dry Weather Flow:** Effluent daily dry weather flow shall not exceed a monthly average of 3.0 MGD.
- 2. Interim Effluent Limitations Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

The Discharger shall comply with applicable state and local requirements regarding the production and use of reclaimed wastewater, including requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria).

IV. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The following receiving water limitations are based on water quality objectives (Water-Contact Standards) contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined from samples collected at stations representative of the area as defined below.

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

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

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

Single Sample maximum;

- a. Total coliform density shall not exceed 10,000 per 100 mL;
- b. Fecal coliform density shall not exceed 400 per 100 mL; and
- c. Enterococcus density shall not exceed 104 per 100 mL.
- d. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1
- At all areas where shellfish may be harvested for human consumption, as determined by the Central Coast Water Board, the following bacteriological objectives shall be maintained throughout the water column:
 - a. The median total coliform density shall not exceed 70 organisms per 100 mL, and in not more than 10 percent of samples shall coliform density exceed 230 organisms per 100 mL.
- 3. Floating particulates and grease and oil shall not be visible.

- The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- 5. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- 6. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- 7. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen-demanding waste.
- 8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- 9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- 10. The concentration of substances set forth in Chapter IV, Table 1 of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.
- 11. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- 12. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
- 13. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Table 1 of the Ocean Plan.
- 14. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
- 15. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- 16. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- 17. Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations

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

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

V. PROVISIONS

A. Standard Provisions

- The Discharger shall comply with all Standard Provisions included in Attachment D
 of this Order.
- 2. The Discharger shall comply with the following provisions:

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

B. Monitoring and Reporting Program (MRP) Requirements

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

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

C. Special Provisions

1. Reopener Provisions

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

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

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

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

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

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

- i. Actions proposed to investigate/identify the causes/sources of toxicity,
- ii. Actions proposed to mitigate the discharge's adverse effects, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken), and
- iii. A schedule to implement these actions.

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

Table 8. Toxicity Reduction Evaluation—Schedule

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

b. Water Contact Monitoring (Bacterial Characteristics)

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

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

(This requirement is also footnoted in Table E-7 of section VIII.A of Monitoring and Reporting Program No. R3-2013-0012)

c. Area of Special Biological Significance (ASBS) Discharge Evaluation

Paragraph 2 of State Water Resources Control Board Resolution No. 84-78 requires yearly monitoring and a comprehensive study every ten years to evaluate the effects of the discharge on the Carmel Bay ASBS. The CCLEAN monitoring requirements satisfy the yearly ASBS monitoring requirements. A comprehensive study workplan and subsequent report were submitted in October 2012 and June 2013, respectively. The June 2013 report showed no measurable effect of the discharge on the ASBS and more intensive or frequent monitoring is therefore not required per Resolution No. 84-78. This special provision acts as a place holder for the next ten year comprehensive study workplan and report due September 2022 and March 2023, respectively.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

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

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

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

Determining the Need for a PMP:

- 1. The Discharger must develop and conduct a PMP if all of the following conditions are true:
- (a) The calculated effluent limitation is less than the reported Minimum Level.
- (b) The concentration of the pollutant is reported as DNQ.
- (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
- 2. Alternatively, the Discharger must develop and conduct a PMP if all of the following conditions are true:
- (a) The calculated effluent limitation is less than the Method Detection Limit (MDL).
- (b) The concentration of the pollutant is reported as ND.
- (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

Special Provision for Evidence of Pollutant Presence

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

- 1. Health advisories for fish consumption;
- 2. Presence of whole effluent toxicity;
- 3. Results of benthic or aquatic organism tissue sampling;

- 4. Sample results from analytical methods more sensitive than methods included in the permit (in accordance with the 2012 Ocean Plan, Chapter III, Section C.5.b, *Deviations from Minimum Levels in Appendix II*; or
- 5. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

Elements of a PMP

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

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

4. Construction, Operation and Maintenance Specifications

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

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Biosolids Management.

i. Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 C.F.R. Parts 258 and 503 and Title 23, Chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Central Coast Water Board at least 180 days prior to beginning the alternative means of disposal.

- ii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 C.F.R. Part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- iii. All requirements of 40 C.F.R. Part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.
- iv. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- v. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- vi. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- vii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State. The Discharger shall submit an annual report to the USEPA and the Central Coast Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 C.F.R. Part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 19 of each year and report for the period of the previous calendar year.

b. Pretreatment - Not Applicable

6. Other Special Provisions

- a. Discharges of Storm Water. For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.
- b. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ). This General Order, adopted on May 2, 2006, is applicable to all "federal and state agencies,

municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Order is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and adverse effects of sanitary sewer overflows. If applicable, the Discharger shall seek coverage under the General Order and comply with its requirements.

7. Compliance Schedules – Not Applicable

VI. COMPLIANCE DETERMINATION

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

A. General.

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

B. Multiple Sample Data.

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

- 1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ -determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- 2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.