CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-2019-XXXX
NPDES NO. CA0064521

WASTE DISCHARGE REQUIREMENTS FOR THE CALLEGUAS MUNICIPAL WATER DISTRICT, REGIONAL SALINITY MANAGEMENT PIPELINE 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	**Calleguas Municipal Water District**
Name of Facility	**Regional Salinity Management Pipeline (RSMP)**
Facility Address	**2100 Olsen Road**
	Thousand Oaks, California 91360
	Ventura County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	**Treated Wastewater from Wastewater Treatment Facilities and Concentrate from Brackish Groundwater Desalter Plants and Wastewater Treatment Facilities**	34.1430º	119.1927º	**Pacific Ocean (at Port Hueneme Beach)**

Table 3. Administrative Information

This Order was adopted on:	**June 13, 2019**
This Order shall become effective on:	**August 1, 2019**
This Order shall expire on:	**July 31, 2024**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**180 days prior to the Order expiration date**
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	**Major**

The Executive Officer does 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, Los Angeles Region, on **June 13, 2019**.

Renee Purdy, Executive Officer

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TABLES

ATTACHMENTS

I. FACILITY INFORMATION

Information describing the Calleguas Municipal Water District, Regional Salinity Management Pipeline (hereinafter, RSMP or the 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, Los Angeles Region (Regional Water Board), finds:

A. Legal Authorities. This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. Background and Rationale for Requirements. The Regional 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 and G 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. However, as indicated below, these provisions are not applicable to the discharges covered by this Order.

D. Notification of Interested Persons. The Regional 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 Regional 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 Order R4-2014-0033-A01 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California 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 Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged at Discharge Point 001 authorized under this Order shall be limited to a maximum of 19.1 million gallons per day (MGD) of treated effluent from wastewater treatment plants and concentrate generated from brackish groundwater desalter plants or wastewater treatment facilities ~~throughout the Calleguas Creek~~ Watershed only ~~as~~ as described in the Fact Sheet (Attachment F). The discharge of any other wastewater, storm water, and wastes from

accidental spills or other sources not identified in this Order is prohibited unless it is authorized by another WDR and/or NPDES permit.

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

C. 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 State Water Resources Control Board's (State Water Board) *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.

D. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order or another WDRs/NPDES permit, to a storm drain system, the Pacific Ocean, or other waters of the State, are prohibited.

E. Neither the treatment nor the discharge of pollutants shall create a condition of pollution, contamination, or a nuisance as defined by section 13050 of the California Water Code (CWC, or the Water Code).

F. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

G. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Board as required by the federal CWA and regulations adopted thereunder.

H. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

I. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

J. Discharge to designated Areas of Special Biological Significance (ASBS) is prohibited.

K. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited and constitutes a violation of the Order.

L. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

IV. 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 Monitoring and Reporting Program, Attachment E:

Table 4. Effluent Limitations at Discharge Point 001

Pollutant	Units	Effluent Limitations					
		Average monthly (30-day average)	Maximum Daily	Instantaneous Minimum[1]	Instantaneous Maximum[1]	Average Weekly	Six-Month Median
Conventional Pollutants							
pH	Std Units	--	--	6.0	9.0	--	--
Total Suspended Solids (TSS)	mg/L	60	--	--	--	--	--
	lbs/day[2]	9600	--	--	--	--	--
Biochemical Oxygen Demand (BOD), 5-day @20°C	mg/L	30	--	--	--	45	--
	lbs/day[2]	4800	--	--	--	7200	--
Oil and Grease	mg/L	25		--	75	40	--
	lbs/day[2]	4000	--	--	12000	6400	--
Non-conventional Pollutants							
Temperature	°F	[3]					
Turbidity	NTU	75	--	--	225	100	--
Settleable Solids	mL/L	1.0	--	--	3.0	1.5	--
Total Coliform	CFU/ 100mL or MPN/ 100mL	[4]					
Fecal Coliform	CFU/ 100mL or MPN/ 100mL	[4]					
Enterococcus	CFU/ 100mL	[4]					
Ocean Plan Table 1 Parameters							
Chronic Toxicity	Pass or Fail	--	Pass[5]	--	--	--	--
Total Chlorine Residual	µg/L	--	580	--	4400	--	150
	lbs/day[2]	--	92	--	700	--	24
TCDD Equivalents[6]	µg/L	2.8E-7	--	--	--	--	--
	lbs/day[2]	4.5E-8	--	--	--	--	--
Benzidine	µg/L	0.0050	--	--	--	--	--
	lbs/day[2]	0.00080	--	--	--	--	--
Hexachlorobenzene	µg/L	0.015	--	--	--	--	--
	lbs/day[2]	0.0024	--	--	--	--	--
Chlordane	µg/L	0.0017	--	--	--	--	--
	lbs/day[2]	0.00027	--	--	--	--	--
Polychlorinated Biphenyls (PCBs)[7]	µg/L	0.0014	--	--	--	--	--
	lbs/day[2]	0.00022	--	--	--	--	--

Pollutant	Units	Effluent Limitations					
		Average monthly (30-day average)	Maximum Daily	Instantaneous Minimum[1]	Instantaneous Maximum[1]	Average Weekly	Six-Month Median
Toxaphene	µg/L	0.015	--	--	--	--	--
	lbs/day[2]	0.0024	--	--	--	--	--

1. Instantaneous minimum and maximum limitations are applied to grab samples.
2. Mass loading limitations are based on the maximum permitted flow at Discharge Point 001 (19.1 million gallons per day (MGD)) and are calculated as follows:
   Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day
3. The temperature effluent limitations for the discharge are as follows:
   a. The discharge shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
   b. The discharge shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of natural temperature in these areas.
   c. The discharge shall not result in increases in the natural water temperature exceeding 4°F at the shoreline, the surface of any ocean substrate, or the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.
4. Bacteria Limitations:
   a. The median total coliform density shall not exceed 70 over 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL. Compliance shall be determined based on sample results over any six-month period.
   b. Fecal coliform density shall not exceed:
      i. A 30-day geometric mean (GM) of 200 per 100 milliliters (mL), calculated based on the five most recent samples.
      ii. A single sample maximum (SSM) of 400 per 100 mL.
   c. Enterococci density shall not exceed:
      i. A six-week rolling GM of 30 colony forming units (cfu) per 100 milliliters (mL), calculated weekly.
      ii. A statistical threshold value (STV) of 110 cfu/100 mL by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
5. The chronic toxicity final effluent limitation is protective of both the numeric acute and chronic toxicity Ocean Plan water quality objectives. The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail." ("% Effect" (percent effect) shall also be reported but it is not used to determine compliance with the MDEL.) See Attachment E.
6. TCDD Equivalents means sum of 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. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.
   Dioxin-TEQ (TCDD Equivalents) = Σ (C_x x TEF_x)
   Where:
   C_x = concentration of dioxin or furan congener x
   TEF_x = TEF for congener x

Toxicity Equivalence Factors

Isomer Group	Toxicity Equivalence Factor (TEF)
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

Isomer Group	Toxicity Equivalence Factor (TEF)
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

7. PCBs 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

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the latest amended version of the Ocean Plan, effective March 22, 2019,[1] and are a required part of this Order. Unless specifically excepted by this Order, the discharge, by itself or jointly with any other discharge(s), shall not cause violations of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed (i.e., outside the zone of initial dilution (ZID)).

1. **Bacterial Characteristics**

a. **Water-Contact Standards**

Subsection (i) of this section contains bacteria water quality objectives adopted by the State Water Board for ocean waters used for water contact recreation.

i. State Water Board Water-Contact Objectives

(a) Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board (i.e., waters designated as REC-1), but including all kelp beds, the following water quality objectives shall be maintained throughout the water column.

Fecal coliform
A 30-day geometric mean (GM) of fecal coliform density not to exceed 200 per 100 milliliters (mL), calculated based on the five most recent samples from each site, and a single sample maximum (SSM) not to exceed 400 per 100 mL.

[1] The amendment is titled, the *Amendment to the Water Quality Control Plan for Ocean Waters of California – Bacterial Provisions and Water Quality Standards Variance Policy*, adopted by the State Water Board on August 1, 2018, and approved by the Office of Administrative Law (OAL) on February 4, 2019, and the United States Environmental Protection Agency (U.S. EPA) on March 22, 2019 (Bacteria Provisions or Ocean Plan Amendment).

Table 5. REC-1 Water Quality Objective for Water-Contact in Ocean Waters

Indicator	Magnitude	
Fecal Coliform Density	**30-day GM**	**SSM**
	200 per 100 mL	400 per 100 mL
GM = geometric mean SSM = single sample maximum mL= milliliter		

Enterococci

A six-week rolling GM of enterococci not to exceed 30 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a statistical threshold value (STV) of 110 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. U.S. EPA recommends using U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci.

Table 6. REC-1 Water Quality Objective for Water-Contact in Ocean Waters

Indicator	**Estimated Illness Rate (NGI):** 32 per 1,000 water contact recreators	
	Magnitude	
Enterococci	GM (cfu/100 mL)	STV (cfu/100mL)
	30	110
The waterbody GM shall not be greater than the GM magnitude in any six-week interval, calculated weekly. The STV shall not be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. NGI= National Epidemiological and Environmental Assessment of Recreational Water gastrointestinal illness rate GM= geometric mean cfu = colony forming units STV= statistical threshold value mL=milliliter		

(b) The “Initial Dilution Zone” of wastewater outfalls shall be excluded from designation as "kelp beds*” for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.

b. **Shellfish Harvesting Standards**

Consistent with the water quality objectives in the Ocean Plan and its latest amendment, in all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the discharge shall not cause the exceedance of the following bacterial objectives throughout the water column:

i. 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 Compliance shall be determined based on the sample results over any six-month period.

2. **Physical Characteristics**

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

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

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

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

e. Trash shall not be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance.

3. **Chemical Characteristics**

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

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

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

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

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

f. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

g. Numerical water quality objectives established in Chapter II, Table 1 of the Ocean Plan shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

4. **Biological Characteristics**

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

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

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

5. **Radioactivity**

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

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:

   a. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

   b. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.

   c. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

   d. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.

   e. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties to which the Discharger is or may be subject to under section 311 of the CWA.

   f. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.

   g. Oil or oily material, chemicals, refuse, or other wastes that constitute a condition of pollution or nuisance shall not be stored or deposited in areas where they may be picked up by rainfall and carried off the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

   h. A copy of these waste discharge specifications shall be maintained at the control room where the operation of the RSMP is overseen, so as to be available at all times to operating personnel.

   i. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

      i. Violation of any term or condition contained in this Order;

      ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

      iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   j. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

   k. The Discharger shall file with the Regional Water Board a report of waste discharge at least 180 days before making any material change or proposed changes in the character, location, or volume of the discharge.

l. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board, 30 days prior to the change taking effect.

m. CWC section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each serious violation. Pursuant to CWC section 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 C.F.R. § 123.45 specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."

n. CWC section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period. Pursuant to CWC section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, "effluent limitation" means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

o. Violation of any of the provisions of this Order may subject the violator to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

p. The Discharger shall notify the Executive Officer in writing no later than six months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

   i. Name and general composition of the chemical,

   ii. Frequency of use,

   iii. Quantities to be used,

   iv. Proposed discharge concentrations, and

   v. U.S. EPA registration number, if applicable.

q. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may

subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

r. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 620-2083 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall briefly describe the measures being taken to remedy the current noncompliance. Within 30 days, a detailed report must be submitted to the Regional Water Board describing the measures being taken to remedy the noncompliance and to prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI-9404 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.

s. The provisions of this order are severable. If any provision of this Order or the application of any provision of this Order is found invalid, the remainder of this Order shall not be affected.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E.

C. Special Provisions

1. Reopener Provisions

a. 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 an Ocean Plan Table 1 water quality objective.

b. The Regional Water Board may modify or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.

c. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards.

d. This Order may be reopened and modified, to revise effluent limitations as a result of the delisting of a pollutant from the 303(d) list.

e. This Order may be reopened and modified, in accordance with the provisions set forth in 40 C.F.R., parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new minimum levels (MLs).

f. This Order may be reopened and modified to revise effluent limitations as a result of future adoption of a TMDL applicable to the discharge.

g. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to: fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste

stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

h. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

i. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 C.F.R. sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order, and endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption.

j. This Order may be reopened and modified to revise any and/or all of the chronic toxicity testing provisions and effluent limitations, to the extent necessary, to be consistent with a revised Ocean Plan or a Toxicity Plan that is subsequently adopted by the State Water Board, after U.S. EPA approval of such plan.

k. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, a new state-wide plan, new laws, or new regulations.

l. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

m. This Order may be modified, or revoked and reissued, based on the results of Magnuson-Stevens Conservation and Management Act and/or Endangered Species Act section 7 consultations with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service.

2. Special Studies, Technical Reports, and Additional Monitoring Requirements

a. **Updated Initial Investigation Toxicity Reduction Evaluation Workplan.** The Discharger shall submit to the Regional Water Board an updated Initial Investigation TRE workplan **within 90 days** of the effective date of this permit. This plan shall describe the steps the Discharger intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements. The workplan shall include information such as procedures on information and data acquisition, facility performance evaluation, toxicity identification evaluation, toxicity control evaluation, and toxicity control implementation.

b. **Mixing Zone Study.** The Discharger shall conduct and submit to the Regional Water Board a mixing zone study **during the term of this Order,** following the procedures outlined in the Mixing Zone Study Workplan that was submitted in June 2014. The Mixing Zone Study should include a condition that is representative of the current average effluent discharge flow condition of the RSMP. The study should include monitoring upstream of the discharge point, directly above the discharge location, at the boundary of the Zone of Initial Dilution as defined using the modeling results, and outside the Zone of Initial Dilution for the list of constituents included on Table E-4 of Attachment E. Refer to section VI.B.2.b of Attachment F of this Order for more detail.

c. **Sediment Loading Study.** The Discharger is required to conduct and submit to the Regional Water Board the results from the sediment loading study **during the term of this Order**, following the procedures outlined in the Sediment Loading Study Work

Plan that was submitted to the Regional Water Board in June 2014. The study was to monitor the concentrations of constituents present in the sediment inside and outside of the mixing zone. Sediment sampling shall be conducted at one location (minimum) inside the mixing zone and at one location (minimum) outside the mixing zone every two years. The sediment samples shall be analyzed for the list of constituents included on Table E-5 of Attachment E of this Order. Alternative, the study can be completed using the data collected in compliance with the Benthic Sediment Monitoring Requirement enumerated in section VIII.B in Attachment E of this Order. Refer to section VI.B.2.c of Attachment F of this Order for more detail.

3. Best Management Practices and Pollution Prevention Plans

The Discharger shall submit an updated **Best Management Practices Plan (BMPP).** A BMPP shall include site-specific procedures implemented and/or to be implemented to reduce and/or prevent the discharge of pollutants, hazardous waste/material, and trash to waters of the State. The BMPP shall also include a summary of the methods of collection and transport of wastewater and/or recycled water through the RSMP to the irrigation distribution system(s) or for discharge through the NPDES outfall. Further, the Discharger shall ensure that unauthorized discharges (i.e. spills or unpermitted storm water or non-storm water discharges) to the receiving water or other waterbodies have been effectively prohibited. The BMPs shall be consistent with the general guidance contained in the U.S. EPA Guidance Manual for Developing Best Management Practices (BMPs) (U.S. EPA 833-B-93-004). The BMPP shall be reviewed annually and shall cover all areas of the Facility, including connectors and pumping stations. The Discharger shall describe the activities in each area and the potential for contamination of the discharge. The Discharger shall submit the updated BMPP **within 90 days of the effective date** of this Order and implement the BMPP within 10 days of the approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. The Discharger shall continue to implement any existing and previously approved BMPP until the updated version is approved by the Executive Officer or until the stipulated 90-day period after the updated BMPP submittal has occurred. Updated information shall be submitted within 30 days of revision.

4. Construction, Operation and Maintenance Specifications

The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

5. Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable

6. Other Special Provisions – Not Applicable

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. Single Constituent Effluent Limitation.

Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement I.H. of the MRP).

B. Effluent Limitations Expressed as a Sum of Several Constituents.

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCBs) if the sum of the individual pollutant concentrations is greater than

the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ).

C. Effluent Limitations Expressed as a Median.

In determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

1. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or
2. If the number of measurements (n) is even, then the median will be calculated as= [$X_{n/2}$ + $X_{(n/2)+1}$]/2, i.e. the midpoint between the n/2 and n/2+1 data points.

D. Multiple Sample Data.

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, 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.

E. Average Monthly (30-Day Average) Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by section D above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation for the purpose of calculating mandatory minimum penalties; though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month) for the purpose of calculating discretionary administrative civil liabilities. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. If multiple samples are taken the Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month. In determining compliance with the AMEL, the following provisions shall also apply to all constituents:

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;
2. If the analytical result of a single sample monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger may collect up to four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. The concentration of a pollutant

(an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data" section above, will be used for compliance determination.

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

F. Average Weekly Effluent Limitation (AWEL)

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

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

G. Maximum Daily Effluent Limitation (MDEL).

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

H. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a potential violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

I. Six-Month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, an alleged violation will be flagged, and the discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median limitation. 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.

J. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the discharger will be

considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation.)

K. Chronic Toxicity.

The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) statistical approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST statistical approach is: Mean discharge IWC response ≤0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response) × 100%.

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail". During a calendar month, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

L. Mass-Based Effluent Limitations.

Compliance with mass effluent will be estimated based on flow and concentration. When the concentration for the parameter in a sample is reported as Not Detected (ND) or Detected but Not Quantified (DNQ), the corresponding mass emission rate determined using that sample concentration shall also be reported as ND or DNQ.

M. Mass and Concentration-Based Effluent Limitations.

Compliance with mass-based effluent limitations and concentration-based effluent limitations for the same parameter shall be determined separately. When the concentration for a parameter in a sample is reported as ND or DNQ, the corresponding mass emission rate determined using that sample concentration shall also be reported as ND or DNQ.

N. Median Monthly Effluent Limitation (MMEL).

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

O. Annual Average Effluent Limitation.

If the annual average of monthly discharges over a calendar year exceeds the annual average effluent limitation for a given parameter, a potential violation will be flagged and the Discharger will be considered out of compliance for each month of that year for that parameter. However, a potential violation of the annual average effluent limitation will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is collected over a calendar year, no compliance determination can be made for that year with respect to effluent violation determination, but compliance determination can be made for that year with respect to reporting violation determination.

P. Bacterial Standards and Analyses.

The geometric mean used for determining compliance with bacterial standards is calculated using the following equation:

$$\text{Geometric Mean} = (C1 \times C2 \times \ldots \times Cn)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection method used for each analysis shall be reported with the results of the analysis.

Detection methods used for coliforms (total, fecal, and *E. coli*) and *Enterococcus* shall be those presented in Table 1A of 40 C.F.R. part 136 (revised May 18, 2012), unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA. Detection method for *Enterococcus* may be those presented in the U.S. EPA's publication U.S. EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*.

ATTACHMENT A – DEFINITIONS

All Forms of Marine Life
Includes all life stages of all marine species.

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 maintenance of natural water quality is assured. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS. ASBS are also referred to as State Water Quality Protection Areas – Areas of Special Biological Significance (SWQPA-ASBS).

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

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.

Bacteria Water Quality Objectives(s)
Bacteria water quality objectives set forth in Chapter II.B.1.a.1 of the Ocean Plan and section V.A.1 of the Waste Discharge Requirements of this Order.

Basin Plan
Water quality control plan that consists of a designation or establishment for the waters within a specified area of all of the following: (1) Beneficial uses to be protected, (2) water quality objectives, (3) a program of implementation needed for achieving water quality objectives.

Best Management Practices (BMPs)
BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural control, and operation maintenance procedures, which can be applied before, during, and/or after pollution-producing activities.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

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

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Composite Sample
For flow rate measurement, composite sample means the arithmetic mean of no fewer than eight individual flow rate measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.

For other than flow rate measurement, composite sample means:
a. No fewer than eight individual sample portions taken at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual sample portion shall be directly proportional to the discharge flow rate at the time of sampling; or,
b. No fewer than eight individual sample portions taken of equal volume taken over a 24-hour period. The time interval between each individual sample portion shall vary such that the volume of the discharge between each individual sample portion remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

For a composite sample, if the duration of the discharge is less than 24 hours but greater than 8 hours, at least eight flow-weighted individual sample portions shall be taken during the duration of the discharge and composited. For a discharge duration of 8 hours or less, eight individual “grab samples” may be substituted and composited.

The composite sample result shall be reported for the calendar day during which composite sampling ends.

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.

Debris
Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

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.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

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.

Grab Sample
Grab Sample means an individual sample collected during a period of time not to exceed 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not occur during hydraulic peaks.

Geometric Mean (GM)
A type of mean or average that indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the arithmetic mean which uses their sum). The geometric mean is defined as the nth root of the product of n numbers. The formula is expressed as: GM = $\sqrt[n]{(x_1)(x_2)(x_3)\ldots(x_n)}$, where x is the sample value and n is the number of samples taken.

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.

Indicator Bacteria
Incudes total coliform bacteria, fecal coliform bacteria (or *E. coli*), and/or *Enterococcus* bacteria.

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 Regional Water Board, whichever results in the lower estimate for initial dilution.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

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).

In-stream Waste Concentration (IWC)
The concentration of a toxicant or the parameter of toxicity in the receiving water after mixing.

Kelp Beds
For purposes of the bacteriological standards of the Ocean Plan, are aggregations of marine algae of the order Laminariales, including species in the *genera Macrocystis, Nereocystis, and Pelagophycus*. Kelp beds include the total foliage canopy throughout the water column.

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

Marine Managed Areas
Named, discrete geographic marine or estuarine areas along the California coast designated by law or administrative action, and intended to protect, conserve, or otherwise manage a variety of resources and their uses. According to the California Public Resources Code (§§ 36600 et seq.) there are six classifications of marine managed areas, including State Marine Reserves, State Marine Parks and State Marine Conservation Areas, State Marine Cultural Preservation Areas, State Marine Recreational Management Areas, and State Water Quality Protection Areas.

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. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)}/2$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

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

Multiport Diffuser
Linear structures consisting of spaced ports or nozzles that are installed on submerged marine outfalls. For the purposes of chapter III.M of the Ocean Plan, multiport diffusers discharge brine waste into an ambient receiving waterbody and enable rapid mixing, dispersal, and dilution of brine within a relatively small area.

Natural Light
Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional 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) as Aroclors
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.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Phenolic Compounds (Chlorinated)
The sum of 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4,6-trichlorophenol, and pentachlorophenol.

Phenolic Compounds (Non-Chlorinated)
Non-chlorinated phenolic compounds shall mean the sum of phenol, 2,4-dimethylphenol, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, and 2-methyl-4,6-dinitrophenol.

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 Regional 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.

Pollution Prevention
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in ewe section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board), Regional Water Board, or U.S. EPA.

Publicly Owned Treatment Works
A treatment works as defined by section 212 of the CWA, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature.

It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality which has jurisdiction over the Indirect Discharges to and the discharges from such treatment works. (40 C.F.R. § 403.3(q).)

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 Regional 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.

Salinity
A measure of the dissolved salts in a volume of water. For the purposes of the Ocean Plan, salinity shall be measured using a standard method approved by the Regional Water Board (e.g. Standard Method 2520 B, U.S. EPA Method 120.1, U.S. EPA Method 160.1) and reported in parts per thousand (ppt). For historical salinity data not recorded in parts per thousand, the Regional Water Boards may accept converted data at their discretion.

Shellfish
Organisms identified by the California Department of Public Health 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.

Single Sample Maximum (SSM)
Maximum value not to be exceeded in any single sample.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\Sigma[(x - \mu)^2)/(n - 1))^{0.5}$$

where:

x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

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.

State Water Quality Protection Areas – General Protection (SWQPA-GP)
Designated by the State Water Board to protect marine species and biological communities from an undesirable alteration in natural water quality within State Marine Parks and State Marine Conservation Areas.

Statistical Threshold Value (STV)
A set value for the bacteria water quality objective that approximates the 90th percentile of the water quality distribution of a bacterial population. The STV for the enterococcus bacteria water quality objective is 110 cfu/100mL.

Storm Water
Storm water in the Ocean Plan has the same meaning set forth in 40 Code of Federal Regulations section 122.26(b)(13) (Nov. 16, 1990).

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

Test of Significant Toxicity (TST)
A statistical approach used to analyze toxicity test data. The TST incorporates a restated null hypothesis, Welch's t-test, and the biological effect thresholds for chronic and acute toxicity.

Toxicity Identification Evaluation (TIE)
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.

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.)

Trash
All improperly discarded solid material from any production, manufacturing, or processing operations, including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

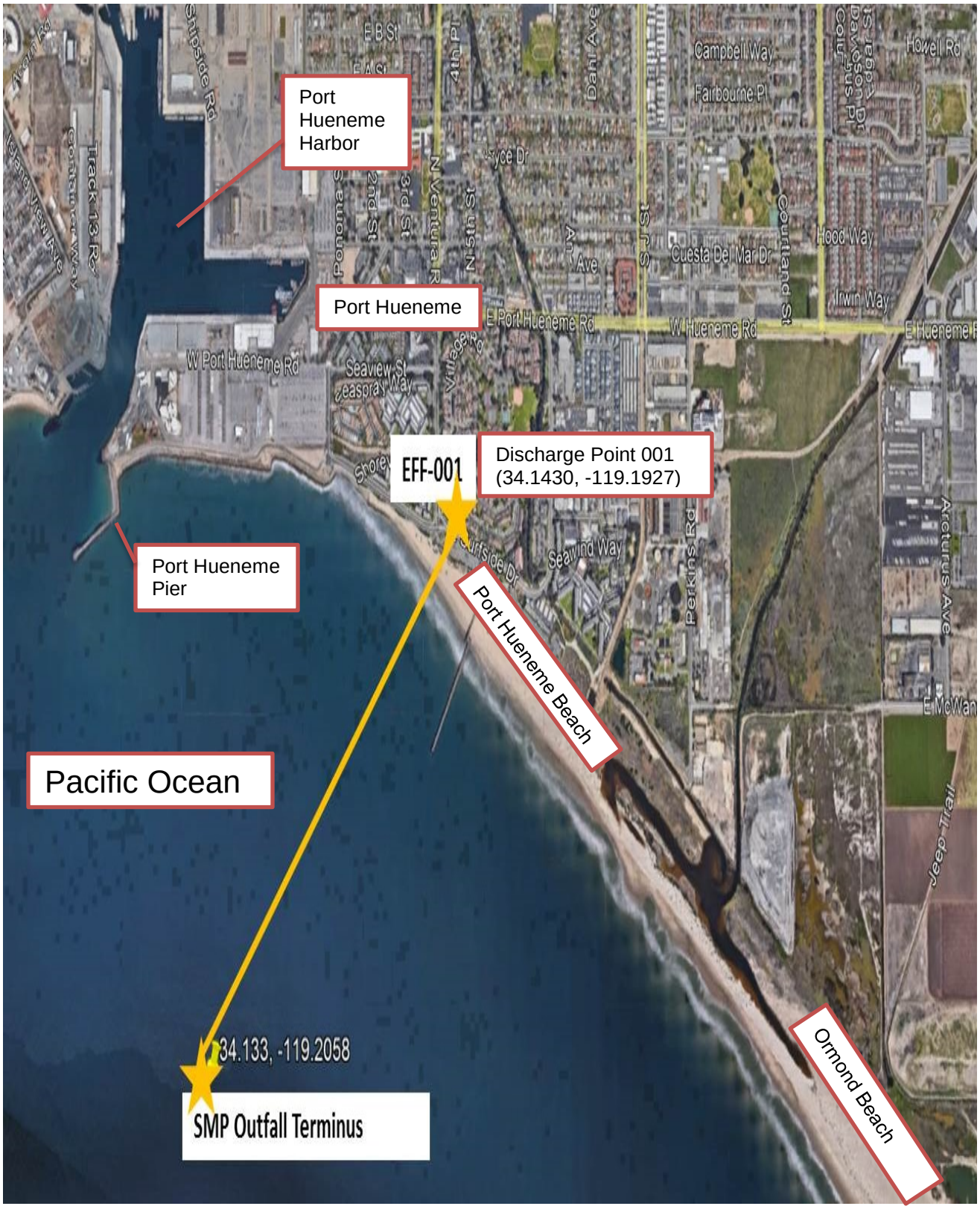
Trash Provisions
The water quality objective for Trash, as well as the prohibition of discharge set forth in Chapter III.I and implementation requirements set forth in Chapter III.L of the Ocean Plan.

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

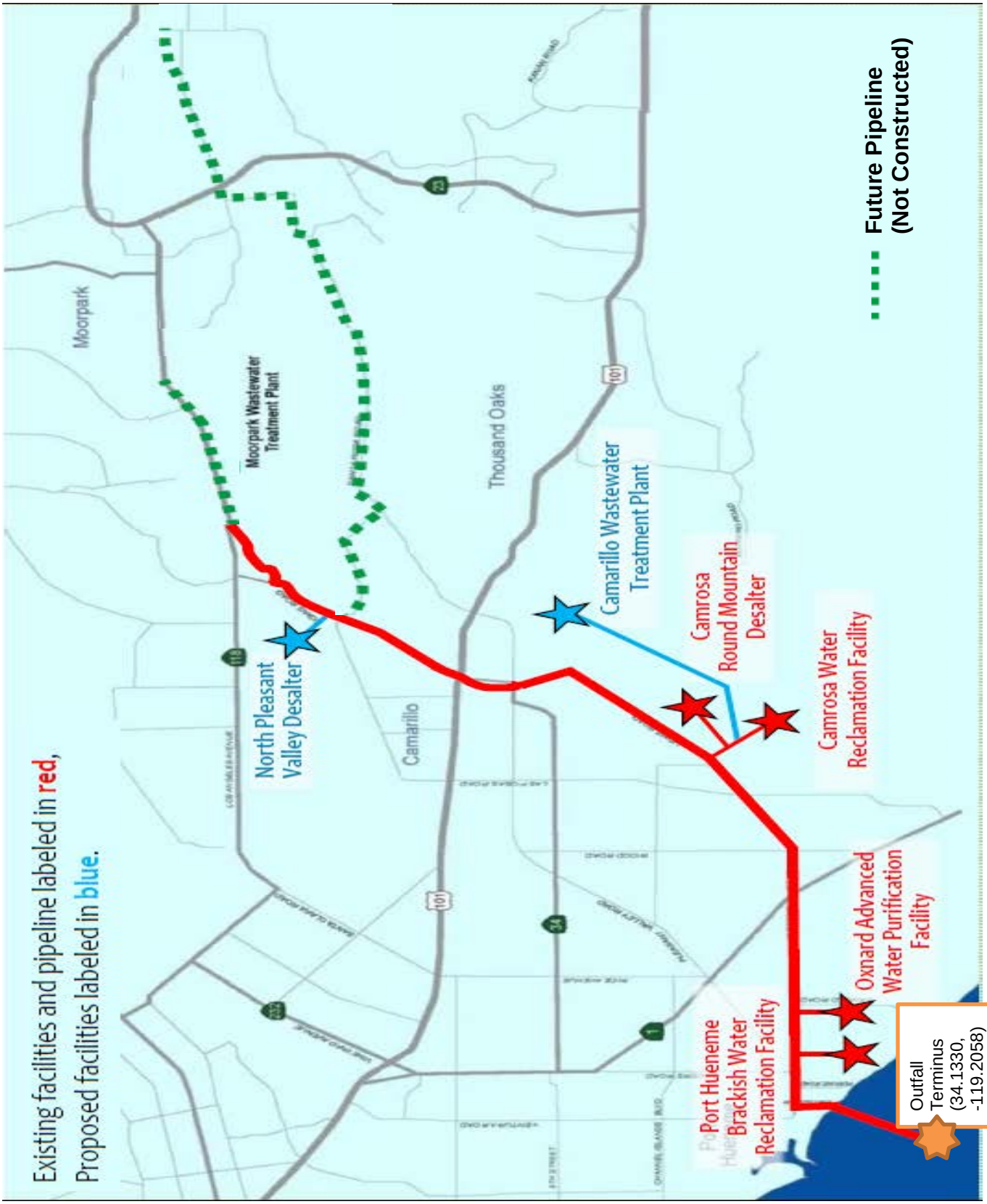
Water Reclamation
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

Zone of Initial Dilution (ZID)
Zone of Initial Dilution (ZID) means, for purposes of designating monitoring stations, the region within which initial dilution of the discharge in the receiving water occurs, and at the boundary of which initial dilution is completed.

ATTACHMENT B – SITE LOCATION MAP



ATTACHMENT C – REGIONAL SALINITY MANAGEMENT PIPELINE AND DISCHARGERS



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, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 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 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 Regional 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)(B); 40 C.F.R. § 122.41(i); Water Code, §§ 13267, 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(B)(i); 40 C.F.R. § 122.41(i)(1); Water Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(B)(ii); 40 C.F.R. § 122.41(i)(2); Water Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(B)(ii); 40 C.F.R. § 122.41(i)(3); Water Code, §§ 13267, 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(B)(ii); 40 C.F.R. § 122.41(i)(4); Water Code, §§ 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 Regional 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 Regional 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 Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional 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. 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. section 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). 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. section 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 Regional Water Board. The Regional 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, subchapter N. 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. 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 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, subchapter N, 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. 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 Regional 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 Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional 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 Regional 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, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional 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 Regional 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 Regional 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 Regional 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 Regional Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 C.F.R. part 3, 40 C.F.R. section 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, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State 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 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. section 122.22, and 40 C.F.R. part 127. The Regional 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 Regional 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 Regional 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).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional 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 Regional 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 Regional 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. section 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. section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional 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.

B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent

conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [40 C.F.R. section 122.41(a)(2)] [Water Code sections 13385 and 13387].

C. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this CWA. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000 [40 C.F.R. section 122.41(a)(3)].

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 C.F.R. section 122.41(j)(5)].

E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 C.F.R. section 122.41(k)(2)].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
    a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));
    b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
    c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
    d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):
    a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (CI-9404)

CONTENTS

TABLES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) (CI-9404)

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 Regional 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. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 [Latitude 34.1430°, Longitude -119.1927°]), and shall be located where representative samples of that effluent can be obtained.

B. The Regional Water Board shall be notified in writing of any changes in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

C. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters or effluent streams from another facility.

D. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. sections 136.3, 136.4, and 136.5 (revised August 28, 2017); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

E. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Board, Drinking Water Division (DDW), Environmental Laboratory Accreditation Program (ELAP) in accordance with the provisions of Water Code section 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

F. Each monitoring report must affirm in writing that "*all analyses were conducted at a laboratory certified for such analyses by the State Water Board, Division of Drinking Water, Environmental Laboratory Accreditation Program or approved by the Executive Officer and in accordance with current U.S. EPA guideline procedures or as specified in this MRP*".

G. For any analyses performed for which no procedure is specified in the U.S. EPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

H. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) [i.e. the applicable reporting level (RL) or reported minimum level (ML)] for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML; or
2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

I. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the analytical method for dilution or concentration of samples, other factors are applied to the ML depending on the sample preparation. The resulting value is the reported ML. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (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.

J. The MLs employed for effluent analyses to determine compliance with effluent limitations shall be lower than the ML included in Appendix II of the Ocean Plan and the effluent limitations and/or performance goals established in this Order for a given parameter as per the sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). If the ML value allowable by current technology is not below the effluent limitations, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year in the quarterly reports, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

K. The MLs employed for effluent analyses not associated with determining compliance with effluent limitations in this Order shall be lower than the lowest applicable water quality objective, for a given parameter as per the sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). Water quality objectives for parameters may be found in Table 1 of the Ocean Plan. If the ML value allowable by current technology is not below the water quality objective, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test, the associated laboratory QA/QC procedures, reporting levels (RLs), and method detection limits (MDLs).

Where no U.S. EPA-approved method exists, the Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Appendix II of the Ocean Plan to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Appendix II of the Ocean Plan;
2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 C.F.R. Part 136 (revised May 18, 2012);
3. When the Discharger agrees to use an ML that is lower than that listed in Appendix II of the Ocean Plan;
4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix II of the Ocean Plan, and proposes an appropriate ML for their matrix; or,
5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the U.S. EPA-approved Method 1613 for dioxins and furans, Method 1624 for volatile organic substances, and Method

1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

L. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 C.F.R. section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

M. Field analyses with short sample holding times such as pH, total residual chlorine, and temperature, may be performed using properly calibrated and maintained portable instruments by trained personnel acting on the Discharger's behalf, using methods in accordance with 40 C.F.R. part 136. All field instruments must be calibrated per manufacturer's instructions. A manual containing the standard operating procedures for all field analyses, including records of personnel proficiency training, instruments calibration and maintenance, and quality control procedures shall be maintained onsite, and shall be available for inspection by Regional Water Board staff. Information including instrument calibration, time of sample collection, time of analysis, name of analyst, quality assurance/quality control data, and measurement values shall be clearly documented during each field analysis and submitted to the Regional Water Board as part of the corresponding quarterly monitoring report.

N. All analyses shall be accompanied by the chain of custody, including but not limited to date and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

O. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements or shall insure that both equipment activities will be conducted.

P. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there are fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from start to finish. A similar frequency shall be maintained for analyzing spiked samples.

Q. For parameters that both average monthly and maximum daily limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger may collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent may be increased to weekly and may continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.

R. In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;
2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
3. Location of the final point(s) of disposal for each type of waste.

If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

S. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

T. 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

U. If there are planned changes to the discharge, including the sources to the Regional Salinity Management Pipeline (RSMP) and its collection and transportation method other than that specified in this Order, the Discharger is required to notify and obtain approval from the Regional Water Board Executive Officer at least 30 days prior to their implementations. Changes to the discharges shall be stated in the corresponding quarterly monitoring report after their implementations.

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Effluent Monitoring Station		
001	EFF-001	At a location where a representative sample of the discharge from the RSMP can be obtained prior to entering the receiving water [Latitude: 34.1430°; Longitude: -119.1927°][1]
Receiving Water Monitoring Stations		
--	RSW-001	Center line of mixing zone (within the zone of initial dilution)
--	RSW-002	Edge of the zone of initial dilution [Approximately 47 feet from the outfall terminus at a depth of approximately 10 feet][2]
--	RSW-003	Outside the zone of initial dilution [approximately 100 feet from the outfall terminus at a depth of approximately 10 feet][2]
--	RSW-004	Upstream of the discharge location to the Pacific Ocean (along Oxnard's 4500 transect)[2]
Bottom Stations for Benthic Sediments Monitoring		

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	BEN-001	Directly beneath Monitoring Location RSW-001, at the center line of mixing zone (within the zone of initial dilution)
--	BEN-002	Directly beneath Monitoring Location RSW-002, along the edge of the zone of initial dilution [Approximately 47 feet from the outfall terminus][2]
--	BEN-003	Directly beneath Monitoring Location RSW-003, outside the zone of initial dilution [approximately 100 feet from the outfall terminus][2]
--	BEN-004	Directly beneath Monitoring Location RSW-004, upstream of the discharge location to the Pacific Ocean (along Oxnard's 4500 transect)[2]
Mussel Station for Bioaccumulation Monitoring		
--	MUS-001	Within the Pacific Ocean, as close to the outfall terminus discharge location as possible (within the zone of initial dilution)

1. The North latitude and West longitude information in Table E-1 are approximate.
2. These proposed monitoring locations were selected based on existing modelling results. These monitoring locations may be modified pending the results of an updated Mixing Zone Study.

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

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

Table E-2. Effluent Monitoring at Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous[1]	--
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)[2]	mg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Oil and Grease[2]	mg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
pH	standard units	Grab	1/Month[4]	[5]
Settleable Solids	mL/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Total Suspended Solids (TSS)[2]	mg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Turbidity	NTU	Grab/24-hour Composite[3]	1/Month[4]	[5]
Temperature	°F	Grab	1/Month[4]	[5]
Total Chlorine Residual[2]	µg/L	Grab	1/Month[4]	[5]
Salinity	ppt	Grab/24-hour Composite[3]	1/Quarter[4]	[5]
Dissolved Oxygen	mg/L	Grab	1/Quarter[4]	[5]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen, Total (as N)	µg/L	Grab/24-hour Composite[3]	1/Quarter[4]	[5]
Chronic Toxicity	Pass or Fail and % Effect	Grab/24-hour Composite[3]	1/Month[4]	[6]
Total Coliform	CFU/100mL or MPN/100 mL	Grab	1/Month[4]	[5]
Total Coliform Bacteria, Moving 6-Month Median	CFU/100mL or MPN/100 mL	Calculate	1/Month[4,7]	--
Fecal Coliform	CFU/100mL or MPN/100 mL	Grab	5/Month[4,8]	[5,9]
Fecal Coliform Density, 30-Day Geometric Mean	CFU/100mL or MPN/100 mL	Calculate	1/Month[4,10]	--
Enterococcus	CFU/100 mL	Grab	1/Week[4]	[5,9]
Enterococcus, Rolling 6-Week Geometric Mean	CFU/100 mL	Calculate	1/Week[4,11]	--
TCDD Equivalents[2,12]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Hexachlorobenzene[2]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Benzidine[2]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Chlordane[2]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Polychlorinated Biphenyls (PCBs) [2,13]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Toxaphene[2]	µg/L	Grab/24-hour Composite[3]	1/Month[4]	[5]
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90, and uranium)[14]	pCi/L	Grab/24-hour Composite[3]	2/Year[4]	[5]
Remaining Pollutants Included in Table 1 of the Ocean Plan[15]	µg/L	Grab/24-hour Composite[3]	1/Quarter[4,16]	[5]

[1] Flow should be recorded continuously, and the total daily flow shall be reported.

[2] The mass emission (lbs/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula:

M = 8.34 x Ce x Q

where: M = mass discharge for a pollutant, lbs/day
Ce = Reported concentration for a pollutant in mg/L
Q = actual discharge flow rate (MGD).

[3] For these parameters, the Discharger has the options to either:

a) collect a grab sample; or
b) collect a flow-weighted composite sample of the discharge. See Attachment A for definition of a composite sample

However, grab samples **must** be collected where a composite sample for the parameter is not feasible as specified in the respective analytical method in 40 C.F.R. Part 136 or in other U.S. EPA methods.

[4] If there is no discharge to surface waters during the specified monitoring period, the Discharger shall indicate in the corresponding quarterly monitoring report that no effluent was discharged to surface water during that monitoring period.

[5] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; the methods chosen must meet the lowest MLs specified in Appendix II of the Ocean Plan and be sufficiently sensitive to determine compliance with applicable effluent limitations and/or water quality objectives. Where no methods are specified for a given pollutant, the methods must be approved by the Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.

[6] Refer to section V, Whole Effluent Toxicity Testing Requirements.

[7] For each month, the Discharge shall calculate the median total coliform density using the results of samples collected during the 6-month period ending on that month. The monthly median result shall be reported in the corresponding quarterly monitoring report.

[8] At least five evenly spaced sampling and analysis for fecal coliform shall be conducted each month.

[9] Sample dilutions for fecal coliform bacterial analyses shall range from 2 to 16,000. Sample dilutions for *Enterococcus* bacterial analyses shall range from 1 to 10,000 per 100 mL Each test method number or name (e.g., U.S. EPA publication U.S. EPA 600/4-85/076*, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*) used for each analysis shall be specified and reported with the results. Test methods used for coliforms (fecal) shall be those presented in Table 1A of 40 C.F.R. Part 136, unless alternate methods have been approved in advance by U.S. EPA pursuant to 40 C.F.R. Part 136. The U.S. EPA recommends using the U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci.

[10] The 30-day geometric mean shall be reported monthly for fecal coliform based on the results from the five most recent samples collected during that calendar month.

[11] The 6-week rolling geometric mean shall be calculated each week for enterococci using the results from samples collected during the 6-week period ending on that week. The weekly results shall be reported in the corresponding quarterly monitoring report.

[12] TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD Equivalents)} = \Sigma\ (C_x \times TEF_x)$$

Where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalence Factors

Isomer Group	Toxicity Equivalence Factor (TEF)
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

[13] PCBs as Aroclors shall mean the sum of Aroclor-1016, 1221, 1232, 2342, 1248, 1254, and 1260 when monitoring using U.S. EPA Method 608.

[14] Analyze these radiochemicals by the following U.S. EPA methods:

Method 900.0 for gross alpha and gross beta; Method 903.0 or 903.1 for radium-226;
Method 904.0 for radium-228; Method 906.0 for tritium;

Method 905.0 for strontium-90; Method 908.0 for uranium.

Analysis for combined radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If radium-226 & 228 exceeds 5 pCi/L, analyze for tritium, strontium-90 and uranium. A statement certifying that radioactive pollutants were not added to the discharge may be submitted in lieu of monitoring. If radioactivity is detected in a source discharging to the RSMP, the Discharger must subsequently conduct monitoring for radioactivity at Effluent Monitoring Station EFF-001 in accordance with this Footnote as soon as possible following detection of radioactivity at the source. All results shall be included in the corresponding quarterly monitoring report.

[15] A list of Ocean Plan Table 1 parameters is included in Attachment G of this Order.

[16] Monitoring for these parameters are required once per quarter during the first two years of the permit term; the sampling frequency may be reduced to semiannually after the second year upon approval from the Regional Water Board. However, if after the reduction in monitoring frequency for a constituent is allowed, the monitoring result for that constituent is reported at concentrations greater than its applicable water quality objectives after the Facility's dilution credit is considered (the lowest water quality objective for that constituent listed on Table 1 of the Ocean Plan multiply by the dilution credit of 72), then the monitoring frequency for that constituent shall revert to quarterly until at least four consecutive samples demonstrate compliance with the water quality objective.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

   The chronic toxicity IWC for Discharge Point 001 as measured at Effluent Monitoring Location EFF-001 is 1.37 percent effluent.

2. Sample Volume and Holding Time

   The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the receiving water, sufficient sample volume shall also be collected during accelerated monitoring for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

3. Chronic Marine Species and Test Methods

   If effluent samples are collected from outfalls discharging to receiving waters with salinity >1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples, at the in-stream waste concentration for the discharge, in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (U.S. EPA/600/R-95/136, 1995). Artificial sea salts or hypersaline brine shall be used to increase sample salinity if needed. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

   a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0).

   b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).

   c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first three monthly required sample collection. For each monthly sampling event, the Discharger shall collect a single effluent sample to concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required in accordance with the effluent monitoring schedule listed in Table E-2. As allowed under the test method for the *Atherinops affinis*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. If the result of all three species is "Pass", then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening must be used for routine monitoring. If only one species fails, then that species must be used for routine monitoring. Likewise, if two or more species result in "Fail", then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening must be used for routine monitoring, until such time when a rescreening is required.

Species sensitivity rescreening is required every 24 months. When rescreening is necessary, the Discharger must rescreen with the marine vertebrate species, a marine invertebrate species, and the algal species previously referenced, and continue to monitor with the most sensitive species. The most sensitive species is the species that exhibits the highest “Percent Effect” at the discharge IWC, even if the result of all three species is “Pass”. If the first suite of rescreening tests demonstrates that the same species is the most sensitive then the rescreening does not need to include more than one suite of tests; alternatively, if the percent effects for all three species are less than ten percent and all result in PASS, then the previously established most sensitive species may continue to be used for routine monitoring for the subsequent 24-month period. If a different species is the most sensitive (demonstrating the highest percent effect of greater than ten percent or resulting in FAIL) or if there is ambiguity, then the Discharger must proceed with additional suites of screening tests for a minimum of three, but not to exceed five suites. The most sensitive species determined from the rescreening test must be used subsequently for routine monitoring, until such time when a rescreening is required.

During the calendar month, all toxicity tests used to determine the most sensitive test species shall be reported.

5. Quality Assurance and Additional Requirements

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document,* Appendix A, Figure A-1, and Table A-1, and Appendix B, Table B-1(U.S. EPA 833-R-10-003, 2010). The null hypothesis (H_o) for the TST statistical approach is: Mean discharge IWC response ≤ 0.75 x Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." The relative "Percent Effect" at the discharge IWC is defined and reported for each toxicity test as: ((Mean control response - Mean discharge IWC response) / Mean control response)) x 100%. This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations – in the case of WET, only two test concentrations

(i.e. a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e. if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (U.S. EPA/600/R-95/136, 1995) (see Table E-3 below), then the Discharger must re-sample and re-test within 14 days.

Table E-3. U.S. EPA Test Method and Test Acceptability Criteria

Species & U.S. EPA Test Method Number	Test Acceptability Criteria (TAC)
Topsmelt, *Atherinops affinis,* Larval Survival and Growth Test Method 1006.0. (Table 3 of Test Method)	(1) The mean survival of larvae must be at least 80% in the controls. (2) If the test starts with 9-day old larvae, the mean weight per larva must exceed 0.85 mg in the reference and brine controls; the mean weight of preserved larvae must exceed 0.72 mg. (3) The LC_{50} for survival must be within two standard deviations of the control chart mean for the laboratory. The LC_{50} for survival with copper must be <205 µg/L. (4) The "minimum significant difference" (%MSD) of <25% relative to the control for survival for the reference toxicant test. The (%MSD) of <50% relative to the control for growth for the reference toxicant test.
Purple Sea Urchin, *Strongylocentrotus purpuratus*, and the Sand Dollar, *Dendraster excentricus,* Fertilization Test Method 1008.0 (Table 7 and section 16.12 of Test Method)	1) The mean egg fertilization must be at least 70% in the controls. (2) The minimum significant difference (%MSD) is <25% relative to the control for the reference toxicant. (3) The final sperm stock must have appropriate sperm counts.
Red Abalone, *Haliotis rufescens,* Larval Shell Development Test Method (Table 3 of Test Method)	(1) The mean larval normality must be at least 80% in the controls. (2) The response from 56 µg/L zinc treatment must be significantly different from the control response. (3) The minimum significant difference (%MSD) is <20% relative to the control for the reference toxicant.
Giant Kelp, *Macrocystis pyrifera,* Germination and Growth Test Method 1009.0 (Table 3 of Test Method)	(1) Mean control germination must be at least 70% in the controls. (2) Mean germination-tube length in the controls must be at least 10 µm in the controls. (3) The germination-tube growth NOEC must be below 35 µg/liter in the reference toxicant test. (4) The minimum significant difference (%MSD) is <20% relative to the control for both germination and germ-tube length in the reference toxicant test.

c. Dilution water and control water, including brine controls, shall be 1-µm-filtered uncontaminated natural seawater, hypersaline brine prepared using uncontaminated natural seawater, or laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using the EC_{25}. EC_{25} is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g. death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

e. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the MRP and the rationale is explained in the Fact Sheet (Attachment F).

6. Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan

The Discharger shall prepare and submit a generic initial investigation TRE work plan to be ready to respond to toxicity events within 90 days of the permit effective date for Executive Officer approval. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. The Discharger shall review and update this work plan as necessary so it remains current and applicable to the discharge. At a minimum the work plan shall include:

a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,

c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

7. Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail".

The Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within 5 calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Discharger shall ensure that the first of four accelerated monitoring tests is initiated within seven calendar days of the Discharger becoming aware of the result. The accelerated monitoring schedule shall consist of four toxicity tests (including the discharge IWC), conducted at approximately two-week intervals, over an eight-week period; in preparation for the TRE process and associated reporting, these results shall also be reported using the EC_{25}. If each of the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail," the Discharger shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail") for

chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

8. Toxicity Reduction Evaluation (TRE) Process

In the event of a toxicity test resulting in "Fail", the Permittee shall immediately implement the TRE process. During the TRE Process, effluent monitoring shall resume and TST results ("Pass" or "Fail" and percent effect) for chronic toxicity tests shall be reported to satisfy the chronic toxicity monitoring requirement.

a. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.

ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

iii. A schedule for these actions, progress reports, and the final report.

b. TIE Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (U.S. EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (U.S. EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase Ill Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (U.S. EPA/600/R-92/081 , 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (U.S. EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

d. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

9. Reporting

The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, and shall include:

a. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-4.

b. Summary water quality measurements for each toxicity test (e.g. pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

c. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1 (U.S. EPA 833-R-10-003, 2010).

d. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to completion of the final TIE/TRE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.

e. Statistical program (e.g., TST calculator, Comprehensive Environmental Toxicity Information System (CETIS), etc.) output results, including graphical plots, for each toxicity test.

f. Graphical plots and tabular data clearly showing the laboratory's performance of the reference toxicant, for each solution, for the previous 20 tests and the laboratory's performance of the control mean, control standard deviation, and control coefficient of variation, for each solution, for the previous 12-month period.

g. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon written request of the Regional Water Board Chief Deputy Executive Officer or Executive Officer.

VI. LAND DISCHARGE MONITORING REQUIREMENTS- NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENT – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

The receiving water monitoring program (i.e., Surface Water Monitoring Requirements and Benthic Sediments Monitoring Requirements) shall consist of periodic biological surveys of the area surrounding the discharge and shall include studies of those physical and chemical characteristics of the receiving waters which may be impacted by the discharge.

A. Receiving Water Quality Monitoring at Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004

1. The Discharger shall monitor the receiving water (Pacific Ocean) at Monitoring Locations RSW-001, RSW-002, RSW-003 and RSW-004 as follows:

Table E-4. Water Column Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Visual Observations	--	Visual	2/Year[1]	[2]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Color (Chlorophyll a and/or Color Dissolved Organic Matter [CDOM])	µg/L, mV or fluorescence units	Grab	2/Year[1]	[3]
Light transmittance	Percent	Grab	2/Year[1]	[3]
Salinity	ppt	Grab	2/Year[1]	[3]
Dissolved Oxygen	mg/L	Grab	2/Year[1]	[3]
pH	pH units	Grab	2/Year[1]	[3]
Temperature	ºF	Grab	2/Year[1]	[3]
Chronic Toxicity	Pas or Fail % Effect	Grab	1/Year[4]	[5]
BOD, 5-day @ 20ºC	mg/L	Grab	1/Year	[3]
Oil and Grease	mg/L	Grab	1/Year[6]	[3]
Settleable Solids	mL/L	Grab	1/Year[6]	[3]
Total Suspended Solids (TSS)	mg/L	Grab	1/Year[6]	[3]
Turbidity	NTU	Grab	1/Year[6]	[3]
Total Coliform	MPN/100 mL or CFU/100 mL	Grab	1/Year[6]	[3,7]
Fecal Coliform	MPN/100 mL or CFU/100 mL	Grab	1/Year[6]	[3,7]
Enterococcus	MPN/100 mL or CFU/100 mL	Grab	1/Year[6]	[3,7]
Remaining Pollutants Included in Table 1 of the Ocean Plan	µg/L	Grab	1/Year[6]	[3]

1. Twice per year in summer and winter during flood or ebb tides, as soon as possible following an effluent sampling event at EFF-001.
2. The following general observations or measurements at the receiving water stations shall be reported:
   - Tidal stage and time of monitoring.
   - General water conditions
   - Extent of visible turbidity or color patches
   - Appearance of oil films or grease, or floatable material
   - Depth at each station for each sampling period
   - Presence or absence of red tide
   - Presence of marine life
   - Presence and activity of the California least tern and the California brown pelican
3. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; the methods chosen must meet the lowest MLs specified in Appendix II of the Ocean Plan and be sufficiently sensitive to determine compliance with applicable effluent limitations and/or water quality criteria. Where no methods are specified for a given pollutant, the methods must be approved by the Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations and/or water quality criteria.
4. Receiving water samples shall be collected at the same time, or as soon as possible following an effluent sampling event at EFF-001. If the effluent chronic toxicity sample and a receiving water annual chronic toxicity sample collected during the same sampling event both result in "Fail", the receiving water chronic toxicity monitoring frequency shall be increased to monthly until at least four consecutive monthly samples result in "Pass".
5. Refer to section V, Whole Effluent Toxicity Testing Requirements.

6. Receiving water samples shall be collected at the same time, or as soon as possible following an effluent sampling event at EFF-001. If the effluent sample and a receiving water sample collected during the same sampling event both have results for a parameter that exceed an effluent limitation included in this Order or an applicable water quality criteria included in the Ocean Plan for that parameter, then the receiving water monitoring frequency for that parameter shall be increased to monthly until at least four consecutive monthly samples have results lower than the applicable effluent limitation or water quality criteria.
7. Detection methods used for coliforms (total) shall be those presented in Table 1A of 40 C.F.R. part 136, unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA. Sample dilutions for fecal coliform bacterial analyses shall range from 2 to 16,000. Sample dilutions for *Enterococcu*s bacterial analyses shall range from 1 to 10,000 per 100 mL Each test method number or name (e.g., U.S. EPA publication U.S. EPA 600/4-85/076*, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*) used for each analysis shall be specified and reported with the results. Test methods used for coliforms (fecal) shall be those presented in Table 1A of 40 C.F.R. Part 136, unless alternate methods have been approved in advance by U.S. EPA pursuant to 40 C.F.R. Part 136. The U.S. EPA recommends using the U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci.

B. Benthic Sediments Monitoring at Monitoring Locations BEN-001 through BEN-004

1. The Discharger shall collect and analyze benthic sediment samples once every two years at Monitoring Locations BEN-001 through BEN-004 as follows:

Table E-5. Benthic Sediment Monitoring Requirements (BEN-001 through BEN-004)

Parameter	Units	Sample Type	Minimum Sampling Frequency
Benthic Infauna Community[1]	--	0.1 square meter Van Veen grab	1/ (2 Years)
Sediment Grain Size	Phi size	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Ammonia as Nitrogen	mg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Arsenic	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Beryllium	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Cadmium	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Copper	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Chromium (III)	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Chromium, Total	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Lead	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Mercury	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)

Parameter	Units	Sample Type	Minimum Sampling Frequency
Nickel	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Selenium	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Silver	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Thallium	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Zinc	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Acid Volatile Sulfides	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
PAHs[4]	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Total PCB[5]	µg/kg[2]	0.1 square meter Van Veen grab (upper 2 centimeters)[3]	1/ (2 Years)
Visual Observations[6]	--	Visual	1/ (2 Years)

1. One sample shall be taken at each station for benthic infaunal community analysis. The entire contents of each sample shall be passed through a 1.0 millimeter screen to retrieve the benthic organisms. Sampling methods and protocols shall follow those described in the most current edition of the *Field Operations Manual for Marine Water Column, Benthic and Trawl Monitoring in Southern California*. All organisms contained within the sample shall be identified to the lowest possible taxon and counted. The resulting data shall be used to describe community structure at each station.

   Procedures and test methods shall adhere to the following federal guidelines when applicable: Macroinvertebrate Field and Laboratory Methods for Evaluation the Biological Integrity of Surface Waters (1990) –EPA/600/4-90/030 (PB91-171363). This manual describes guidelines and standardized procedures for the use of macroinvertebrates in evaluating the biological integrity of surface waters.

   Community analysis of benthic infauna shall include number of species, number of individuals per species, total numerical abundance per station, benthic response index (BRI) and biological indices, plus utilize appropriate regression analyses, parametric and nonparametric statistics, and multivariate techniques or other appropriate analytical techniques.

2. Dry weight basis.

3. A separate grab sample shall be collected at each station whenever a biological sample is collected. Sub-samples (upper two centimeters) shall be taken from the grab for sediment chemistry analyses.

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

5. Total PCB (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.

6. The following general observations or measurements at the benthic stations shall be reported:
   - Tidal stage and time of monitoring.
   - General water conditions.
   - Extent of visible turbidity or color patches.
   - Appearance of oil films or grease, or floatable material.

- Depth at each station for each sampling period
- Presence or absence of red tide.
- Presence of marine life.
- Presence and activity of the California least tern and the California brown pelican.

C. Bioaccumulation Monitoring at Monitoring Location MUS-001

1. Native California mussels (*Mytilus Californianus*) shall be collected once during this permit term during the summer from the discharge conduit, as close to the point of discharge as possible, for bioaccumulation monitoring. If mussels are unavailable near the discharge site, source mussels may be transplanted from nearby locations. Mussel tissue shall be analyzed for the parameters listed in the Table below.

Table E-6. Mussels Bioaccumulation Monitoring Requirements (MUS-001)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Arsenic	µg/kg	Tissue	1/Permit Term	[1]
Beryllium	µg/kg	Tissue	1/Permit Term	[1]
Cadmium	µg/kg	Tissue	1/Permit Term	[1]
Copper	µg/kg	Tissue	1/Permit Term	[1]
Chromium (III)	µg/kg	Tissue	1/Permit Term	[1]
Chromium, Total	µg/kg	Tissue	1/Permit Term	[1]
Lead	µg/kg	Tissue	1/Permit Term	[1]
Mercury	µg/kg	Tissue	1/Permit Term	[1]
Nickel	µg/kg	Tissue	1/Permit Term	[1]
Selenium	µg/kg	Tissue	1/Permit Term	[1]
Silver	µg/kg	Tissue	1/Permit Term	[1]
Thallium	µg/kg	Tissue	1/Permit Term	[1]
Zinc	µg/kg	Tissue	1/Permit Term	[1]
PAHs[2]	µg/kg	Tissue	1/Permit Term	[1]
Pesticides[3]	µg/kg	Tissue	1/Permit Term	[1]

1. Procedures used to determine compliance with bioaccumulation monitoring should use the *U.S. EPA. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories* (November 2000, EPA 823-B-00-007), NOAA Technical Memorandum NOS ORCA 130, *Sampling and Analytical Methods of the National Status and Trends Program Mussel Watch Project* (1998 update), and/or State Mussel Watch Program, 1987-1993 Data Report, State Water Resources Control Board 94-1WQ.
2. PAHs shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4 benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.
3. Pesticides shall include the following:

a. chlorinated hydrocarbons - aldrin, chlordane (cis and trans), dacthal, DDT (o,p' DDD, p,p' DDD, o,p' DDE, p,p' DDE, o,p' DDT, p,p' DDT), dieldrin, endosulfan (-I,-II, and -sulfate), endrin, endrin aldehyde, HCH (alpha, beta, and gamma), heptachlor, heptachlor epoxide, hexachlorobenzene, methoxychlor, mirex, nonachlor (cis and trans), oxadiazon, oxychlordane, toxaphene.

b. OP pesticides – mevinphos, ethoprop, sulfotep, phorate, diazinon, disulfoton, dimethoate, fenchlorphos, parathion (ethyl and methyl), chlorpyrifos, malathion, prothiofos, tetrachlorvinphos, methidathion, sulprofos, phosmet, azinphos (ethyl and methyl), coumaphos, demeton, thionazin, dichlorofenthion, fenitrothion, chlorfenvinphos, ehtion, famphur, leptophos, terbufos, fonophos, trichloronate, fenthion, carbophenothion, fensulfothion.

D. Regional Monitoring Program

The Discharger may participate in regional monitoring activities coordinated by the Southern California Coastal Water Research Project (SCCWRP), and other appropriate agencies approved by the Regional Water Board and U.S. EPA. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated monitoring efforts, the Discharger's receiving water sampling and analytical effort may be reallocated to provide a regional assessment of the impact of wastewater discharges to the Southern California Bight; however, certain core elements shall remain unchanged. Thus, if the Discharger decides to participate in regional monitoring activities, the Discharger may submit a request to the Regional Water Board for modifications to the routine receiving water monitoring program. Modifications to these requirements may be made under the direction and approval of the U.S. EPA and Regional Water Board as necessary to accomplish the goal of assessing regional impacts from all contaminant sources and may include resource exchanges.

IX. OTHER MONITORING REQUIREMENTS

A. Outfall and Diffuser Inspection

The ocean outfall shall be externally inspected at a minimum of once per year. Inspections shall include observations and photographic/video records of the outfall pipes and adjacent ocean bottom. The pipes shall be visually inspected by a diver, manned submarine, or remotely operated vehicle. A summary report of the inspection findings of the previous year shall be included in the first quarterly monitoring report (due by May 1 of each year). This written report, augmented with video and/or photographic images, will provide a description of the observed condition of the discharge pipes from shallow water to their respective termini.

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.
2. If there is no discharge during any reporting period, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. If the Discharger conducts monitoring more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be reflected in the calculation of the average (or median) used in demonstrating compliance with this Order.
4. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned and a proposed time schedule for planned corrective actions that may be needed to bring the discharge into full compliance with waste discharge requirements. This section

shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

5. The Discharger shall inform the Regional Water Board well in advance of any changes to the proposed construction activity as described in the Fact Sheet of this Order (Attachment F) that could potentially affect compliance with applicable requirements.
6. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.
7. The pollutant mass discharged shall be reported in addition to the reported concentration for those pollutants with mass-based final effluent limitations.
8. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, section V.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website at <http://www.waterboards.ca.gov/water_issues/programs/ciwqs/>. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP. The Discharger shall submit quarterly 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.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule, except where specific monitoring periods and reporting dates are required elsewhere in the Order.

Table E-7. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	August 1, 2019	All	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)
1/Day	August 1, 2019	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)
1/Week	August 1, 2019	Sunday through Saturday	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)
5/Month	August 1, 2019	First day of the calendar month to the last day of the calendar month	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Month	August 1, 2019	First day of the calendar month to the last day of the calendar month	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)
1/Quarter	August 1, 2019	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	May 1 August 1 November 1 February 1
2/Year	August 1, 2019	January 1 – June 30 July 1 - December 31	August 1 February 1
1/Year	August 1, 2019	January 1 through December 31	Submit with 4th quarterly SMR (February 1 of the subsequent year)
1/ (2 Years)	August 1, 2019	January 1 through December 31	Submit with 4th quarterly SMR (February 1 of the subsequent year)
1/Permit Term	August 1, 2019	During the effective term of this Order	Submit with quarterly SMR (refer to monitoring and reporting period for 1/quarter sampling frequency)

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

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

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

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

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

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

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

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

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

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

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

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

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

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

1. DMRs are 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. **Within 90 days** of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:

   a. Initial Investigation TRE workplan

b. BMPP

The BMPP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of trash and pollutants in wastewater discharged from the Facility are addressed. All changes or revisions to the BMPP shall be submitted to the Regional Water Board within 30 days of revisions. The Discharger is required to submit the BMPP to the Regional Water Board annually.

2. The Discharger shall report the results of any special studies required by Section VI.C.2 of the Waste Discharge Requirements of this Order (including the Mixing Zone Study and the Sediment Loading Study); acute and chronic toxicity testing; and TIE/TRE in compliance with SMR reporting requirements described in subsection X.B above.

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

As described in section II.B of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional 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	4A560130001
Discharger	Calleguas Municipal Water District
Name of Facility	Regional Salinity Management Pipeline (RSMP)
Facility Address	2100 Olsen Road
	Thousand Oaks, CA 91360
	Ventura County
Facility Contact, Title and Phone	Amy Mueller, Regulatory Compliance Supervisor, (805) 579-7117
Authorized Person to Sign and Submit Reports	Eric Bergh, Interim General Manager, (805) 526-9323
Mailing Address	2100 Olsen Road, Thousand Oaks, CA 91360
Billing Address	Same as Mailing Address
Type of Facility	Wholesale water supplier, SIC Code 4941
Major or Minor Facility	Major
Threat to Water Quality	3
Complexity	C
Pretreatment Program	N/A
Recycling Requirements	N/A
Facility Permitted Flow	19.1 Million Gallons Per Day (MGD)
Facility Design Flow	19.1 Million Gallons Per Day (MGD)
Watershed	Ventura County Coastal
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean Waters

A. Calleguas Municipal Water District (hereinafter Discharger or CMWD) is a wholesale water supplier to cities and unincorporated areas in south Ventura County and east of the Santa Clara River. The Discharger is the owner and operator of the Regional Salinity Management Pipeline (hereinafter Facility or RSMP). The RSMP is used to collect and transport treated effluent from publicly-owned treatment works (POTWs) and concentrates from brackish groundwater desalter plants and wastewater treatment facilities throughout the Calleguas Creek Watershed for discharge into the Pacific Ocean. The RSMP is also used to transport recycled water from the City of Oxnard's Advanced Water Purification Facility (AWPF) to the Pleasant Valley County Water District's (PVCWD) irrigation distribution system until a permanent connection can be

constructed or additional flows into the RSMP render the option infeasible, whichever comes first.

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 Discharger discharges wastewater to the Pacific Ocean at Port Hueneme Beach, a water of the United States. The discharge was previously regulated by Order No. R4-2014-0033-A01 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064521. Order No. R4-2014-0033-A01 was adopted and became effective on July 9, 2015, to amend the previous Order No. R4-2014-0033 to incorporate the AWPF as an additional source to the RSMP and to permit the transport of recycled water from the AWPF to the PVCWD's irrigation distribution system via the RSMP. Separate WRRs and WDRs were issued to authorize the discharge from the RSMP to the PVCWD irrigation distribution system and to the irrigation systems of two individual growers on the Oxnard Plain for irrigation of crops under Order No. R4-2011-0079-A02. Order No. R4-2014-0033-A01, which authorized the discharge from the RSMP to the Pacific Ocean, expired on April 30, 2019. Attachment B provides a map of the area around the Facility. Attachment C provides the current and planned flow schematics of the RSMP.

C. The Discharger filed a report of waste discharge (ROWD) and submitted an application for the reissuance of its waste discharge requirements (WDRs) and NPDES permit on November 19, 2018. Supplemental information was requested on January 15, 2019, and received on January 29, 2019, through March 20, 2019. The application was deemed complete on April 2, 2019. A site inspection was conducted on April 12, 2019, to observe the operation and effluent sampling/discharge location for the RSMP, and collect additional information to develop permit limitations and requirements for waste discharge. This permit also modifies the permitted flow to 19.1 MGD based on updated information submitted in the Discharger's ROWD, which indicates that an increase in permitted flow is required to accommodate wastewater flow discharging to the RSMP.

D. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits. The Discharger has complied with these federal NPDES requirements and the permit was automatically continued.

II. FACILITY DESCRIPTION

The RSMP began to discharge to the Pacific Ocean in September 2014. It currently extends from the City of Camarillo to the Pacific Ocean at Port Hueneme to collect, transport, and discharge concentrates generated by membrane treatment of groundwater and tertiary treated wastewater/recycled water from municipal wastewater treatment facilities. The RSMP discharges into the Pacific Ocean through the Hueneme Outfall (in the vicinity of the Port Hueneme Beach), which is equipped with a multi-port diffuser. Operation of the RSMP is intended to reduce salt loadings to the Calleguas Creek Watershed by diverting saline concentrates for discharge to the Pacific Ocean.

The RSMP pipe diameter varies along the length of the pipeline and is at a maximum of 48 inches in internal diameter near the downstream end. Pipeline materials also vary along the pipeline and include high-density polyethylene (HDPE), polyvinyl chloride (PVC), and welded steel (WSP). Construction of the pipeline is ongoing and includes multiple phases:

- Phase 1: Construction of RSMP from the Camrosa Round Mountain Water Treatment Plant (RMWTP) and Camrosa Water Reclamation Facility (CWRF) to the Hueneme Outfall.
- Phase 2: Construction of the RSMP extending along Lewis Road, across Highway 101, up Somis Road to West Street, and across agricultural land to near La Cumbre Road and Highway 118/Los Angeles Avenue (Phases 2A, 2B, 2C, and 2D). Construction of the RSMP will ultimately continue along Highway 118/Los Angeles Avenue to the vicinity of Hitch Boulevard (Phase 2E). This phase will collect concentrate from desalters in Camarillo, Somis, and Moorpark areas.
- Phase 3: Extension of the RSMP partially through the Santa Rosa Valley. This phase will collect concentrate from desalters in the Santa Rosa and Simi Valley areas.

Currently, Phases 1 through 2D have been completed.

A. Description of Wastewater Treatment and Controls

Table F-2 provides information on existing and prospective facilities (anticipated to start within the next five years) that discharge to the RSMP:

Table F-2. Summary of Sources and Discharges to the RSMP

Sources Discharging to the RSMP	Design Flow (MGD)	Description of Discharge Water
Current Dischargers into RSMP		
Camrosa Round Mountain Water Treatment Plant (CRMWTP)	0.4	Groundwater Desalter Reverse Osmosis Concentrate
Camrosa Water Reclamation Facility (CWRF)	4.9	Tertiary Treated Effluent
Port Hueneme Water Agency Brackish Water Reclamation Demonstration Facility (BWRDF)	2.3	Groundwater Desalter Reverse Osmosis Concentrate
City of Oxnard Advanced Water Purification Facility	5.7	Advanced Treated Tertiary Treated Effluent
Dischargers Anticipated in the Next 5 Years		
Camarillo North Pleasant Valley Desalter	1.2 (Anticipated)	Groundwater Desalter Reverse Osmosis Concentrate
Camarillo Sanitary District Water Reclamation Plant (CSDWRP)	7.2 (Anticipated)	Tertiary Treated Effluent

The Discharger will establish flow limitations to individual sources discharging into the RSMP to ensure that the actual discharge flow of the RSMP to the Pacific Ocean will not exceed the permitted flow of 19.1 MGD. The Discharger is required to notify and obtain approval from the Regional Water Board Executive Officer of the location, type, and connection schedule for any new discharges to the RSMP that are not set forth in this Order. Additional sources will be allowed to discharge to the RSMP only if they satisfy the following criteria:

- They consist of potable water, groundwater, concentrate resulting from membrane treatment of potable water or groundwater, or concentrate resulting from membrane treatment of tertiary treated wastewater sources specifically listed in this Order;
- The source discharge does not exceed effluent and receiving water quality-based limitations established in this Order;
- The additional flow from the source will not result in an exceedance of the maximum permitted flow rate established by this Order.

The RSMP is used solely to transport the combined waste stream from sources listed on Table F-2 through Discharge Point 001 into the Pacific Ocean at the Hueneme Outfall. All treatment would be completed prior to entering the RSMP. The Discharger does not anticipate the need to provide additional treatment for the discharge. The Discharger requires each source to comply with the effluent limitations included in this NPDES permit as a condition to discharge into the RSMP.

A brief description of each source to the RSMP as listed on Table F-2 is provided in subsequent parts to this section:

Camrosa Round Mountain Desalter

The Camrosa Round Mountain Water Treatment Plant (CRMWTP) is located at the Camrosa Water Reclamation Facility (CWRF) and includes a raw water supply pipeline from the existing University Well to the treatment plant site, a finished water pipeline to the pressure distribution system, and a concentrate disposal line to the RSMP. The CRMWTP was the first discharger to the RSMP; it began discharging groundwater desalter reverse osmosis concentrate to the RSMP in March 2014. However, according to the ROWD submitted in January 2019, actual discharge from the RSMP to the ocean did not occur until September 2014. The Discharger indicated that no discharge to the Ocean through the RSMP occurred from March 2014 through September 2014 as a result of the CRMWTP effluent because of the location of Camrosa's discharge station relative to the location of the Hueneme Outfall, the amount that was discharged from the CRMWTP, and the capacity of the RSMP pipeline.

Camrosa Water Reclamation Facility (CWRF)

The CWRF, at the time of this permit renewal, has a wastewater treatment capacity of ~~1.5~~up to 2.25 MGD. Wastewater treatment is provided through extended aeration, nitrogen removal, secondary clarification, tertiary filtration, disinfection, and dechlorination. CWRP recycles part of the tertiary treated effluent for landscaping and agricultural use. CWRF discharges the remaining portion of tertiary treated effluent into Calleguas Creek when the volume of treated effluent exceeds the recycled water demand and storage pond capacity under the NPDES Permit No. CA0059501. CWRF may also intermittently discharge tertiary treated effluent to the RSMP, in lieu of the option to discharge to Calleguas Creek, when the demand for its recycled water is low.

Port Hueneme Water Agency Brackish Water Reclamation Demonstration Facility (BWRDF)

The BWRDF is owned by the Port Hueneme Water Agency (PHWA) and is located along Perkins Road in the City of Oxnard. The BWRDF was constructed in 1998 and began to operate in January 1999. The BWRDF incorporates a combination of desalting treatment technologies, including reverse osmosis (RO) and nanofiltration (NF). Chloraminated water is treated through the membranes at the BWRDF, and the BWRDF dechlorinates the resulting concentrate stream prior to its discharge into the RSMP. According to the ROWD submitted by the Discharger, discharge from the BWRDF is intermittent, and has in the past occurred during 2014, 2016, and 2018, lasting a couple of months each time.

City of Oxnard Advanced Water Purification Facility (AWPF)

The AWPF is part of the Groundwater Recovery, Enhancement, and Treatment (GREAT) Program, which was scheduled to deliver the water to Pleasant Valley agricultural growers in 2016. The Pleasant Valley County Water District (PVCWD) and the City of Oxnard requested the delivery of recycled water produced by the AWPF to offset the loss of agricultural water due to the extended drought. The PVCWD and the City of Oxnard submitted a request to the Regional Water Board to permit the transport of recycled water from the AWPF to the PVCWD's irrigation distribution system via the RSMP until a planned permanent connection can be constructed, or until additional flows into the RSMP render the option infeasible, whichever comes first. In July 2015, Order No. R4-2014-0033 was amended to allow discharge from the AWPF into the RSMP. The discharge from the RSMP to the PVCWD irrigation distribution

system and to the irrigation systems of two individual growers on the Oxnard Plain is regulated separately by the water recycling requirements (WRRs) and waste discharge requirements (WDRs) Order No. R4-2011-0079-A02, which was issued to the City of Oxnard. Oxnard began delivering recycled water via the RSMP in 2016. The discharge from AWPF to the RSMP that is not delivered to the PVCWD or to individual growers on the Oxnard Plain for irrigation will be discharged at the Hueneme Outfall into the Pacific Ocean and must comply with the effluent limits contained in this Order.

Camarillo North Pleasant Valley Desalter (CNPVD)

The City of Camarillo currently operates two wells (Wells A and B) that have groundwater with high salinity. Groundwater from Wells A and B is blended with imported water to achieve drinking water quality standards. The City of Camarillo plans to install one or two additional wells in the area and treat groundwater from all of the wells with the proposed CNPVD. The CNPVD will be located in the City of Camarillo at the intersection of Las Posas Road and Lewis Road. The treatment plant pilot testing and the groundwater modeling have been completed. The CNPVD is not yet operational but it is expected to produce up to 1.20 MGD of desalter concentrate.

Camarillo Sanitary District Water Reclamation Plant (CSDWRP)

The CSDWRP has a treatment capacity of 7.25 MGD and provides wastewater treatment consisting of primary treatment, activated sludge treatment, nitrification/denitrification, secondary clarification, tertiary filtration, chlorination, and dechlorination. CSDWRP recycles a portion of the tertiary treated effluent for landscape and agricultural use. Tertiary treated effluent flow in excess of recycled water demand (which varies with the seasonal demand for recycled water) is discharged into Conejo Creek under the NPDES Permit No. CA0053597. It is anticipated that the CSDWRP may intermittently discharge up to 7.1 MGD tertiary treated effluent to the RSMP, in lieu of the option to discharge to Conejo Creek, when the demand for its recycled water is low.

B. Discharge Points and Receiving Waters

The Discharger proposes in the ROWD submitted in January 2019 to discharge up to 19.1 MGD of treated municipal wastewater and concentrates generated by membrane treatment of groundwater and wastewater treatment facilities via the RSMP into the Pacific Ocean at Port Hueneme Beach, a water of the United States, through Discharge Point 001 [Latitude 34.1430° ; Longitude -119.1927°]. In addition to the Hueneme Outfall, the waste stream transported by the RSMP may be discharged via other discharge points if they are authorized by separate WDRs.

The Discharger is the owner and operator of the Hueneme Outfall, which is used solely for discharging effluent from the RSMP into the Pacific Ocean. The inland portion of the RSMP connects with the Hueneme Outfall at Port Hueneme Beach. The terminus of the Hueneme Outfall is located approximately 5000 feet offshore. The multiport diffuser on the Hueneme Outfall is 380 feet in length and includes 30 ports. The port openings position alternate on each side so that they are at 26-foot centers on each side, staggered with ports at the same spacing on the opposite side, giving 13-foot spacing along the diffuser. Ports are above the pipe axis, discharging at an angle of about 20 degrees from the horizontal. The diffuser follows the sea bed slope, falling gradually offshore, from a high point at the connection to the main outfall pipe. Characteristics of the diffuser are summarized in Table F-3.

Table F-3. Characteristics of the Hueneme Outfall

Parameter	Value
Length	5,000 ft
Conveyance piping inside diameter	30 inches
Port diameter at opening	5 inches
Port spacing	13 feet
Port vertical angle	20 degrees
Port horizontal angle	132.3 degrees
Number of ports	30
Length of diffuser section	380
Approximate depth to the top of the port	47 feet (mean lower low water)
Exit design velocity	10 feet per second
Dilution ratio	72:1

In 2007, the Discharger submitted the results of theoretical dilution modelling for the Hueneme Outfall using the U.S. EPA-approved Visual Plumes (VP) program. The modelling runs were also summarized in the 2007 Final Environment Impact Report (EIR), State Clearinghouse (SCH) No. 2007021026, that the Discharger developed to examine the environmental impacts that may result from the construction and/or operation of the RSMP. Modelling runs were performed at theoretical discharge flow rates of 2, 6, 10, 14, and 19.1 MGD, using ambient receiving water (Pacific Ocean) salinity and temperature data collected by the nearby Reliant Energy facility from 2002. The lowest dilution predicted by the VP model was 99.5:1, occurring at the highest flow rate of 19.1 MGD during summer conditions. The modelling was updated again in 2007 to use more recent (August 2006 and February 2007) receiving water data collected by the City of Oxnard. Summer and winter conditions were modelled with an assumed 19.4 MGD effluent flow using CORMIX, VP, and Koh-Fan models using the updated receiving water data. CORMIX predicted a dilution ratio of 94:1, and VP predicted a dilution ratio of 89:1. The Koh-Fan model predicted a dilution ratio of 72:1, which is a more conservative estimate of the dilution upon reaching the surface. Based on the dilution studies, the Regional Water Board and the State Water Board approved a dilution ratio of 72:1 for the discharge through the Hueneme Outfall to be included the RSMP NPDES permit.

The Discharger submitted a Mixing Zone Study Workplan (Workplan) in June of 2014 in accordance with the requirement included in Order No. R4-2014-0033-A01 to field verify the modeling results. The Discharger stipulated in the Workplan that a new mixing zone study will be conducted during peak flows close to the maximum permitted flow authorized by Order No. R4-2014-0033-A01 and summer conditions to obtain the most conservative dilution ratio. The Facility did not achieve peak flows during the term of Order No. R4-2014-0033-A01. In the ROWD submitted in January 2019, the Discharger proposed to complete the mixing zone study when the average effluent flow reaches 8.5 MGD (i.e., approximately half the permitted maximum flow). The Regional Water Board has instead included a requirement to conduct a mixing zone study during the term of this permit, at a condition representative of the current average effluent discharge flow. This requirement is to ensure that impacts on the receiving water as a result of the discharge can be evaluated using receiving water and effluent monitoring data that are representative of current discharge conditions to confirm the assertions of the previous dilution modelling for the discharge, which was done in 2007. This Order

continues to include a dilution ratio of 72:1 for the discharge until updated information is provided, at which point this permit may be reopened and amended to incorporate findings of the mixing zone study.

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

Effluent limitations from Order No. R4-2014-0033-A01 for Discharge Point 001 and effluent monitoring data collected during the term of the previous Order No. R4-2014-0033-A01 are listed in Table F-4 below.

Table F-4. Historic Effluent Limitations and Monitoring Data for Discharge Point 001

Parameter	Units	Effluent Limitation from Order No. R4-2014-0033-A01					Effluent Monitoring Data (From August 2015 – December 2018)
		AMEL[1]	AWEL[1]	MDEL[1]	IMAX[1]	6-Month Median	Highest Daily Discharge[2]
Flow	MGD	17.52[3]					1.17
Biochemical Oxygen Demand (BOD) (5 day @ 20 Deg. C)	mg/L	30	45	--	--	--	15
Total Suspended Solids (TSS)	mg/L	60	--	--	--	--	3.51
Oil and Grease	mg/L	25	40	--	75	--	8.3
pH	std units	--	--	--	6.0 – 9.0[4]	--	7.4 – 9.3[5]
Settleable Solids	mL/L	1.0	1.5	--	--	--	All are ND
Turbidity	NTU	75	100	--	225	--	1.17
Total Residual Chlorine	µg/L	--	--	580	4,400	150	260
Ammonia as N	µg/L	--	--	180,000	440,000	44,000	24,300
Temperature	°F	[6]					77[7]
Chronic Toxicity	Pass or Fail, % Effect	Pass[8]	--	Pass or % Effect <50	--	--	Pass
Total Coliform	MPN/ 100 mL	[9]					280
Fecal Coliform	MPN/ 100 mL	[9]					6.8
Enterococcus	MPN/ 100 mL	[9]					25.9
Antimony, Total Recoverable	µg/L	88,000	--	--	--	--	0.156
Arsenic, Total Recoverable	µg/L	--	--	2,100	5,600	370	3.52
Beryllium, Total Recoverable	µg/L	2.4	--	--	--	--	0.0166
Cadmium, Total Recoverable	µg/L	--	--	290	730	73	0.358
Chromium (III), Total Recoverable	µg/L	1.4E07	--	--	--	--	0.794
Chromium (VI), Total Recoverable	µg/L	--	--	580	1,500	150	All are ND
Copper, Total Recoverable	µg/L	--	--	730	2,000	75	7.6

Parameter	Units	Effluent Limitation from Order No. R4-2014-0033-A01					Effluent Monitoring Data (From August 2015 – December 2018)
		AMEL[1]	AWEL[1]	MDEL[1]	IMAX[1]	6-Month Median	Highest Daily Discharge[2]
Lead, Total Recoverable	µg/L	--	--	580	1,500	150	0.113
Mercury, Total Recoverable	µg/L	--	--	12	29	2.9	All are ND
Nickel, Total Recoverable	µg/L	--	--	1,500	3,700	370	7.29
Selenium, Total Recoverable	µg/L	--	--	4,400	11,000	1,100	0.137
Silver, Total Recoverable	µg/L	--	--	190	500	40	0.08(10)
Thallium, Total Recoverable	µg/L	150	--	--	--	--	0.0281
Zinc, Total Recoverable	µg/L	--	--	5,300	14,000	880	43
Cyanide	µg/L	--	--	290	730	73	All are ND
Phenolic Compounds (non-chlorinated)	µg/L	--	--	8,800	22,000	2,200	All are ND
Chlorinated Phenolics	µg/L	--	--	290	730	73	All are ND
TCDD Equivalents	µg/L	2.8E-07	--	--	--	--	6.6E-07(10)
Acrolein	µg/L	16,000	--	--	--	--	All are ND
Acrylonitrile	µg/L	7.3	--	--	--	--	All are ND
Benzene	µg/L	430	--	--	--	--	All are ND
Carbon Tetrachloride	µg/L	66	--	--	--	--	All are ND
Chlorobenzene	µg/L	42,000	--	--	--	--	All are ND
Chlorodibromomethane	µg/L	630	--	--	--	--	37.2
Chloroform	µg/L	9,500	--	--	--	--	25.3
Dichlorobromomethane	µg/L	450	--	--	--	--	36.1
1,2-Dichloroethane	µg/L	2,000	--	--	--	--	All are ND
1,1-Dichloroethylene	µg/L	66	--	--	--	--	All are ND
1,3-Dichloropropylene	µg/L	650	--	--	--	--	All are ND
Ethylbenzene	µg/L	3.0E+05	--	--	--	--	All are ND
Halomethanes	µg/L	9,500	--	--	--	--	16.3
Dichloromethane	µg/L	33,000	--	--	--	--	3.72
1,1,2,2-Tetrachloroethane	µg/L	170	--	--	--	--	All are ND
Tetrachloroethylene	µg/L	150	--	--	--	--	All are ND
Toluene	µg/L	6.2E+06	--	--	--	--	All are ND
1,1,1-Trichloroethane	µg/L	3.9E+07	--	--	--	--	All are ND
1,1,2-Trichloroethane	µg/L	690	--	--	--	--	All are ND
Trichloroethylene	µg/L	2,000	--	--	--	--	All are ND
Vinyl Chloride	µg/L	2,600	--	--	--	--	0.125(10)
4,6-Dinitro-2-Methylphenol	µg/L	16,000	--	--	--	--	All are ND

Parameter	Units	Effluent Limitation from Order No. R4-2014-0033-A01					Effluent Monitoring Data (From August 2015 – December 2018)
		AMEL[1]	AWEL[1]	MDEL[1]	IMAX[1]	6-Month Median	Highest Daily Discharge[2]
Tributyltin	µg/L	0.102	--	--	--	--	0.0015
2,4-Dinitrophenol	µg/L	290	--	--	--	--	All are ND
2,4,6 -Trichlorophenol	µg/L	21	--	--	--	--	All are ND
Benzidine	µg/L	0.005	--	--	--	--	All are ND
Polynuclear Aromatic Hydrocarbons	µg/L	0.64	--	--	--	--	0.0854
Bis(2-Chloroethoxy) Methane	µg/L	320	--	--	--	--	All are ND
Bis(2-Chloroethyl)Ether	µg/L	3.3	--	--	--	--	All are ND
Bis(2-chloroisopropyl)Ether	µg/L	88,000	--	--	--	--	All are ND
Bis(2-Ethylhexyl)Phthalate	µg/L	260	--	--	--	--	3.89(10)
Dichlorobenzenes	µg/L	3.7E+05	--	--	--	--	All are ND
1,4-Dichlorobenzene	µg/L	1,300	--	--	--	--	All are ND
3,3'-Dichlorobenzidene	µg/L	0.59	--	--	--	--	All are ND
Diethyl Phthalate	µg/L	2.4E+06	--	--	--	--	All are ND
Dimethyl Phthalate	µg/L	6.0E+07	--	--	--	--	All are ND
Di-n-Butyl Phthalate	µg/L	2.6E+05	--	--	--	--	0.62(10)
2,4-Dinitrotoluene	µg/L	190	--	--	--	--	All are ND
1,2-Diphenylhydrazine	µg/L	12	--	--	--	--	All are ND
Fluoranthene	µg/L	1,100	--	--	--	--	All are ND
Hexachlorobenzene	µg/L	0.015	--	--	--	--	All are ND
Hexachlorobutadiene	µg/L	1,000	--	--	--	--	All are ND
Hexachlorocyclopentadiene	µg/L	4,200	--	--	--	--	All are ND
Hexachloroethane	µg/L	180	--	--	--	--	All are ND
Isophorone	µg/L	53,000	--	--	--	--	All are ND
Nitrobenzene	µg/L	360	--	--	--	--	All are ND
N-Nitrosodimethylamine	µg/L	530	--	--	--	--	All are ND
N-Nitrosodi-n-Propylamine	µg/L	28	--	--	--	--	All are ND
N-Nitrosodiphenylamine	µg/L	180	--	--	--	--	All are ND
Aldrin	µg/L	0.0016	--	--	--	--	All are ND
HCH	µg/L	--	--	0.58	0.88	0.29	All are ND
Chlordane	µg/L	0.0017	--	--	--	--	All are ND
DDT	µg/L	0.012	--	--	--	--	All are ND
Dieldrin	µg/L	0.0029	--	--	--	--	All are ND
Endosulfan	µg/L	--	--	1.3	2.0	0.66	All are ND

Parameter	Units	Effluent Limitation from Order No. R4-2014-0033-A01					Effluent Monitoring Data (From August 2015 – December 2018)
		AMEL[1]	AWEL[1]	MDEL[1]	IMAX[1]	6-Month Median	Highest Daily Discharge[2]
Endrin	µg/L	--	--	0.29	0.44	0.15	All are ND
Heptachlor	µg/L	0.0037	--	--	--	--	All are ND
Heptachlor Epoxide	µg/L	0.0015	--	--	--	--	All are ND
PCB	µg/L	0.0014	--	--	--	--	All are ND
Toxaphene	µg/L	0.015	--	--	--	--	All are ND
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, §30253 of the California Code Regulation. Reference to §30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.						9.07pCi/L (alpha) 8.7 pCi/L(beta) (11)

1 AMEL=Average Monthly Effluent Limitation; AWEL=Average Weekly Effluent Limitation; MDEL=Maximum Daily Effluent Limitation; IMAX=Instantaneous Maximum Effluent Limitation.

2 The Discharger was only required to sample at a frequency of monthly or quarterly for these constituents (except flow); therefore, the highest single monthly or quarter monitoring results were shown in this table.

3 Maximum permitted discharge flow rate from Order No. R4-2014-0033-A01.

4 This range represents the instantaneous minimum and maximum pH limitations, respectively.

5 This range represents the instantaneous minimum and maximum pH effluent monitoring results, respectively.

6 The temperature of wastes discharged shall not:

a. Exceed the natural temperature of receiving waters by more than 20º F.
b. Result in increases in the natural water temperature exceeding 4º F at (a) the shoreline, (b) the surface of any ocean substrate, or (c) the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.

7 Maximum effluent temperature result reported.

8 "Pass" or "Fail" for Median Monthly Effluent Limitation (MMEL). "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

9 Bacteria effluent limitations:

a. 30-Day Geometric Mean
   i. Total coliform density shall not exceed 1,000/100 ml;
   ii. Fecal coliform density shall not exceed 200/100 ml; and
   iii. Enterococcus density shall not exceed 35/100 ml.
b. Single Sample Maximum (SSM)
   i. Total coliform density shall not exceed 10,000/100 ml;
   ii. Fecal coliform density shall not exceed 400/100 ml;
   iii. Enterococcus density shall not exceed 104/100 ml; and
   iv. Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.

10 Result was detected, but not quantified (DNQ) value. The result was an estimated value as it is detected greater than the method detection limit (MDL), but less than the minimum level (ML).

11 The maximum gross alpha and beta results were taken from different effluent monitoring events.

D. Compliance Summary

The Discharger was cited for one discharge violation during the term of Order No. R4-2014-0033-A01 listed in Table F-5. No other types of permit violations were cited during the term of

Order No. R4-2014-0033-A01. The Regional Water Board has not issued any enforcement action resulting from the violation cited in Table F-5 at the time of issuance of this Order.

Table F-5. Summary of Compliance History at EFF-001

Date Occurred	Monitoring Period	Violations Type	Pollutant	Reported Value	Permit Limitation	Units
08/02/2018	3rd Quarter 2018	Instantaneous Maximum	pH	9.3	9.0	Std unit

E. Planned Changes

Construction for the RSMP extension is ongoing (Refer to the section II of this Fact Sheet and Attachment C). The pipeline construction is expected to branch off in the vicinity of the North Pleasant Valley Desalter at Upland Road. One branch (to be constructed) will extend east along Santa Rosa Road toward the Santa Rosa Valley, ultimately terminating in Simi Valley; another branch, which is partially constructed and has reached Highway 118, will extend to west of the City of Moorpark near the Moorpark Desalter. The expected construction dates for these branches are not yet finalized. Additional sources to the RSMP may develop pending construction of the RSMP extension.

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 CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

In addition, the Discharger prepared an EIR pursuant to CEQA for the construction and operations of the RSMP in 2007 (SCH No. 2007021026). Specifically, the EIR analyzed potential impacts to water quality that could result from construction and operational activities, including but not limited to the discharge from the treated effluent into the Pacific Ocean. Based on the results of effluent modeling and other studies, and on the fact that this NPDES Permit would contain receiving water and effluent limitations and other requirements consistent with the Ocean Plan, the EIR concluded that the discharge is in compliance with Ocean Plan objectives and would not cause any significant impacts to the receiving water quality.

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

1. **Water Quality Control Plan.** The *Water Quality Control Plan for the Los Angeles Region* (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and all waters addressed through the Basin Plan. Requirements in this Order implement the Basin Plan. Beneficial uses applicable to the discharge are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	**Pacific Ocean** Ventura County Coastal Feature – Nearshore Zone (The zone bounded by the shoreline and a line 1,000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline)	Existing: Industrial Service Supply (IND); Navigation (NAV); Commercial and Sport Fishing (COMM); Marine Habitat (MAR); Wildlife Habitat (WILD); Preservation of Biological Habitats (BIOL)[1]; Rare, Threatened, or Endangered Species (RARE)[2]; Migration of Aquatic Organisms (MIGR)[3]; Spawning, Reproduction, and/or Early Development (SPWN)[3]; Shellfish Harvesting (SHELL); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2)
	Pacific Ocean Ventura County Coastal Feature – Offshore Zone	Existing: NAV; COMM; MAR; WILD; RARE[2]; MIGR[3]; SPWN[3]; SHELL; REC-1; REC-2

[1] Areas of Special Biological Significance (along coast from Latigo Point to Laguna Point) and Big Sycamore Canyon and Abalone Cove Ecological Reserves and Point Fermin Marine Life Refuge.
[2] One or more rare species utilizes all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.
[3] Aquatic organisms utilize all bays, estuaries, lagoons, and coastal wetlands, to a certain extent, for spawning and early development. This may include migration into areas which are heavily influenced by freshwater inputs.

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 May 18, 1972, and again on September 18, 1975 (Resolution No. 75-89). The Thermal Plan contains temperature objectives for coastal waters. This Order contains effluent limitations for temperature that are consistent with the Thermal Plan.

3. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and has amended it on a number of occasions. The State Water Board adopted the latest amendment to the Ocean Plan that became effective on March 22, 2019. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan also identifies beneficial uses of ocean waters of the state to be protected as summarized below:

Table F-7. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
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 migration; 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. **Alaska Rule.** On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. part 131.21, 65 Federal Register 24641 (April 27, 2000)). Under the

revised regulation (also known as the Alaska Rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved by U.S. EPA before being used for Clean Water Act (CWA) purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by U.S. EPA.

5. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional 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.

6. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. This Order includes requirements that are consistent with the federal anti-backsliding regulations, as described in detail in section IV.D.1 of this Fact Sheet.

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

8. **Trash Amendments.** The State Water Board adopted the *Amendment to the Ocean Plan and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Trash Amendments) through Resolution 2015-0019, which became effective upon U.S. EPA approval on January 12, 2016. The Trash Amendments amended the Ocean Plan to establish a narrative water quality objective for trash and a prohibition on the discharge of trash, implemented through permits issued pursuant to CWA section 402(p), waste discharge requirements, or waivers of waste discharge requirements.

   Consistent with the Trash Amendments, this Order implements the narrative objective of the Trash Provisions through a prohibition of trash discharges to the NPDES discharge point. This Order includes monitoring requirements and effluent limitations for solids to control sediment emission in the discharge. It also requires the Discharger to develop and implement a Best Management Practices Plan (BMPP), which shall include specific BMPs used as wastewater control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the Pacific Ocean. The Discharger is required to detail and submit to the Regional Water Board annually (through their annual BMPP submittal) specific BMPs employed to control and prohibit the discharge of trash and other pollutants from the Facility.

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

Section 303(d) of the CWA 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 CWA section 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U.S. EPA approved the State's 2014 and 2016 303(d) list of impaired water bodies on April 6, 2018. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 303(d) List of Water Quality Limited Segments (hereinafter 303(d) list) and have been scheduled for TMDL development. The Facility discharges into the Pacific Ocean in the vicinities of Port Hueneme Beach Park, Ormond Beach, Port Hueneme Pier, and the Port Hueneme Harbor. The 2014/2016 State Water Board's California 303(d) List classifies these water bodies as impaired. The pollutants of concern for these water bodies include:

- Port Hueneme Beach Park and Ormond Beach: indicator bacteria
- Port Hueneme Pier: polychlorinated biphenyls (PCBs)
- Port Hueneme Harbor: arsenic, dichlorodiphenyltrichloroethane (DDT), dieldrin, polynuclear aromatic hydrocarbons (PAHs), and PCBs

The inclusion of these waterbodies on the 2014/2016 303(d) list documents the waterbodies' lack of assimilative capacity for these pollutants of concern. Total Maximum Daily Loads (TMDLs) development for the pollutants of concern for these waterbodies have not been completed. TMDLs addressing impairments for indicator bacteria at Port Hueneme Beach Park and Ormond Beach are scheduled for completion in 2027. A TMDL addressing impairment for PCBs at Port Hueneme Pier is scheduled for 2019. TMDLs addressing arsenic, dieldrin, and PAHs at Port Hueneme Harbor are scheduled for 2027. Impairments for DDT and PCBs at Port Hueneme Harbor are being addressed by actions other than a TMDL (such as dredging of contaminated sediments) and attainment is expected in 2019. This Order contains monitoring requirements for these pollutants at the effluent and the receiving water and retains the effluent limitations for PCBs as included in Order No. R4-2014-0033-A01, to ensure that elevated levels of these pollutants that may be present in the RSMP discharge will be detected and addressed appropriately.

E. Other Plans, Polices and Regulations – Not Applicable

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. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

This Order identified a number of pollutants that may be present in the Facility's discharge (pollutants of concern) based on a review of its operations, with consideration of the impairments of the receiving water as identified on the State's 2014/2016 303(d) list. The RSMP began discharging to the Pacific Ocean in September 2014. Discharges from the RSMP consist of tertiary treated municipal wastewater and concentrate from brackish groundwater desalter plants and wastewater

treatment facilities. As such, the discharge may contain pollutants present in municipal wastewater and reject concentrate from brackish groundwater treatment. Pollutants of concern included TSS, BOD, oil and grease, bacteria, pH, temperature, settleable solids, nutrients, turbidity, metals, PAHs, PCBs, DDT, total dissolved solids (TDS), sulfate, chloride, sodium, boron, and toxicity. This Order includes monitoring requirements and/or effluent limitations, where appropriate, for these pollutants of concern.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. Section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitations on a case-by-case basis limitations based on mass are infeasible because the mass of pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

Discharge prohibitions in this Order are based on the Federal Clean Water Act, Basin Plan, Water Code, State Water Resources Control Board's plans and policies, Ocean Plan, and U.S. Environmental Protection Agency guidance and regulations. This permit implements discharge prohibitions that are applicable under sections III.I 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. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards in the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test in accordance with the methodology developed by the U.S. EPA, as published in a Federal Register notice on July 9, 1986 (51 FR 24974). The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 C.F.R. section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3 and CWA section 301(b)(2)(A).

2. Applicable Technology-Based Effluent Limitations (TBELs)

The technology-based requirements included in this Order are based on the Ocean Plan. Table 2 in Section III.B of the Ocean Plan includes effluent limitations that are applicable to "publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established." The Facility discharges reject concentrates from groundwater treatment facilities and highly treated municipal wastewater effluent. Therefore, discharges from the RSMP are comprised in part of treated municipal wastewater, and effluent limitations included in Table 2 of the Ocean Plan are applicable to this discharge. In accordance with the Ocean Plan, TBELs included in Order No. R4-2014-0033-A01 based on Table 2 of the Ocean Plan are retained in this Order for total suspended solids, oil and grease, turbidity, pH, and settleable solids at Discharge Point 001 as measured at EFF-001. In addition, this Order also retains the TBEL for BOD as included in Order No. R4-2014-0033-A01, applying Secondary Treatment Standards specified in 40 C.F.R. Part 133. The effluent limitations for these pollutants are also consistent with TBELs included in other orders within the State for similar types of discharges to the Pacific Ocean. The Regional Water Board considered other relevant factors pursuant to 40 C.F.R. section 125.3 and concluded that the limitations are appropriate. Existing effluent monitoring data suggest that the discharge will be able to comply with the TBELs included herein.

Pursuant to section 122.44(k), this Order requires the Discharger to update, implement, and submit a Best Management Practices Plan (BMPP). The BMPP shall include a summary of BMPs aimed at controlling the potential discharge of pollutants to waters of the United States.

The combination of the BMPP and permit limitations will serve as the equivalence of technology-based effluent limitations in this Order in order to carry out the purposes and intent of the CWA. All TBELs are prescribed independent of the dilution credit.

Table F-8. Summary of Technology-Based Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	75
	lbs/day[1]	4000	6400	--	12000
Biochemical Oxygen Demand, 5-day @20°C (BOD)	mg/L	30	45	--	--
	lbs/day[1]	4800	7200	--	--
Settleable Solids	mL/L	1.0	1.5	--	3.0

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
Total Suspended Solids (TSS)	mg/L	60	--	--	--
	lbs/day[1]	9600	--	--	--
Turbidity	NTU	75	100	--	225
pH	Std Units	Must be within limit of 6.0 to 9.0 at all times			

[1] Mass-loading limitations are based on the maximum permitted flow at Discharge Point 001 (19.1 million gallons per day (MGD)) and are calculated as follows:
Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

Section 122.44(d)(1)(i) of 40 C.F.R. requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard in the receiving water, including numeric and narrative objectives within a standard. Where reasonable potential to cause or contribute to an excursion above a narrative criterion within an applicable water quality standard has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). WQBELs must also be consistent with the assumption and requirements of TMDL WLAs approved by the U.S. EPA.

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 the Ocean Plan and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and the Ocean Plan designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for the receiving water. Applicable beneficial uses for the receiving water included in the Basin Plan and the Ocean Plan are summarized in section III.C.1 and III.C.3 of this Fact Sheet, respectively. The Basin Plan and the Ocean Plan include both narrative and numeric water quality objectives applicable to the receiving water, which are incorporated as final effluent limitations (based on reasonable potential analysis) or receiving water limitations. In addition, the Ocean Plan references the Thermal Plan for provisions regulating the thermal aspect of waste discharged to the ocean. This Order includes an effluent limitation for temperature based on the provisions of the Thermal Plan.

3. Determining the Need for WQBELs

The need for effluent limitations based on water quality objectives in Table 1 of the Ocean Plan was evaluated in accordance with 40 C.F.R. section 122.44(d) and Appendix VI of the Ocean Plan, which provides guidance for statistically determining the reasonable potential for a discharged pollutant to exceed an objective. The statistical RPA approach as included in the Ocean Plan is promulgated into a computer program RPcalc developed by the State Water Resources Control Board.

Consistent with the Ocean Plan, this Order uses RPcalc to calculate the one-sided, upper confidence bound (UCB) at 95% confidence level of the 95th percentile effluent population for a pollutant after complete mixing. The UCB of a pollutant is then compared to its corresponding numeric water quality objective. If the UCB exceeds its objective, then the discharge is determined to cause, have the reasonable potential to cause, or contributes to an excursion above the objective for that pollutant, and an effluent limitation for that pollutant is required. Conversely, if the UCB for a pollutant is lower than its objective, then an effluent limitation for that pollutant may not be required depending on other available information and best professional judgement (BPJ).

According to the Ocean Plan, the reasonable potential analysis (RPA) can yield three endpoints:

Endpoint 1: An effluent limitation is required and monitoring is required;

Endpoint 2: An effluent limitation is not required and the Regional Water Board may require monitoring; and

Endpoint 3: The RPA is inconclusive, monitoring is required, and an existing effluent limitation may be retained or a permit reopener clause may be included to allow inclusion of an effluent limitation if future monitoring warrants the inclusion.

For constituents that have an insufficient number of monitoring data points or a substantial number of non-detected data with a reporting limit higher than the respective water quality objective, the RPA result is likely to be inconclusive.

As discussed in section II.B of the Fact Sheet, this Order is incorporating a minimum probable initial dilution (Dm) of 72:1 for discharges through Discharge Point 001, consistent with the previous Order No. R4-2014-0033-A01 for the Facility. This D_m value for Discharge Point 001 is applied to the RPA and WQBELs established herein.

The RPA for the effluent was conducted using effluent monitoring data collected between August 2015 and December 2018 during the term of the previous Order No. R4-2014-0033-A01. Results from the RPA have been used to determine the need for effluent limitations for the Ocean Plan Table 1 parameters. Pollutant concentrations were adjusted to account for the initial dilution of 72 parts seawater per part wastewater. The adjustment for dilution is consistent with the previous orders for this Facility. Table F-9 below summarizes the RPA results for all Table 1 parameters. The RPA for most of the Table 1 parameters resulted in an Endpoint 2, which indicated that an effluent limitation is not required for these parameters; however, additional monitoring may be required. The RPA for total residual chlorine, benzidine, chlordane, hexachlorobenzene, PCBs, TCDD equivalents, and toxaphene resulted in an Endpoint 3, which indicates that the RPAs for these parameters are inconclusive, and existing monitoring and effluent limitations will be retained. RPA result for chronic toxicity was determined to be Endpoint 1; see section IV.C.6 of this Fact Sheet.

Table F-9. Summary of Reasonable Potential Analysis for Discharge Point 001

Pollutant	Units	n[1]	MEC[2,3]	Most Stringent Criterion	Background[4]	RPA Endpoint[5]
Objectives for Protection of Marine Aquatic Life						
Arsenic, Total Recoverable	µg/L	41	3.52	8	3	Endpoint 2
Cadmium, Total Recoverable	µg/L	41	0.358	1	0	Endpoint 2
Chromium (Hexavalent), Total Recoverable	µg/L	41	<0.005	2	0	Endpoint 2
Copper, Total Recoverable	µg/L	41	7.6	3	2	Endpoint 2
Lead, Total Recoverable	µg/L	41	0.113	2	0	Endpoint 2
Mercury	µg/L	41	<0.012	0.04	0.0005	Endpoint 2
Nickel, Total Recoverable	µg/L	41	7.29	5	0	Endpoint 2
Selenium, Total Recoverable	µg/L	41	0.137	15	0	Endpoint 2
Silver, Total Recoverable	µg/L	41	0.08	0.7	0.16	Endpoint 2
Zinc, Total Recoverable	µg/L	41	43	20	8	Endpoint 2
Cyanide	µg/L	41	<0.001	1	0	Endpoint 2
Total Chlorine Residual	µg/L	41	0.26	2	0	Endpoint 3(6)
Ammonia	µg/L	41	24.3	600	0	Endpoint 2
Chronic Toxicity	TU_c	41	(7)	1	0	Endpoint 1(8)
Phenolic Compounds (non-chlorinated)[9]	µg/L	41	<1.64	30	0	Endpoint 2
Chlorinated Phenolics[10]	µg/L	41	<2.7	1	0	Endpoint 2
Endosulfan	µg/L	41	<0.0042	0.009	0	Endpoint 2
Endrin	µg/L	41	<0.0013	0.002	0	Endpoint 2
HCH[11]	µg/L	41	<0.0044	0.004	0	Endpoint 2
Radioactivity	pCi/L	17	(12)	(13)	0	Endpoint 2
Objectives for Protection of Human Health – Non-Carcinogens						
Acrolein	µg/L	41	<12	220	0	Endpoint 2
Antimony	µg/L	41	0.156	1200	0	Endpoint 2
Bis(2-chloroethoxy) methane	µg/L	41	<0.56	4.4	0	Endpoint 2
Bis(2-chloroisopropyl) ether	µg/L	41	<0.53	1200	0	Endpoint 2
Chlorobenzene	µg/L	41	<0.047	570	0	Endpoint 2
Chromium (III)	µg/L	41	0.794	190000	0	Endpoint 2
Di-n-butyl-phthalate	µg/L	41	0.617	3500	0	Endpoint 2
Dichlorobenzenes	µg/L	41	<1.39	5100	0	Endpoint 2
Diethyl phthalate	µg/L	41	<0.34	33000	0	Endpoint 2
Dimethyl phthalate	µg/L	41	<0.31	820000	0	Endpoint 2
4,6-dinitro-2-methylphenol	µg/L	41	<0.96	220	0	Endpoint 2
2,4-dinitrophenol	µg/L	41	<0.22	4	0	Endpoint 2
Ethylbenzene	µg/L	41	<0.49	4100	0	Endpoint 2
Fluoranthene	µg/L	41	<0.44	15	0	Endpoint 2

Pollutant	Units	n[1]	MEC[2,3]	Most Stringent Criterion	Background[4]	RPA Endpoint[5]
Hexachlorocyclopentadiene	µg/L	41	<0.47	58	0	Endpoint 2
Nitrobenzene	µg/L	41	<0.47	4.9	0	Endpoint 2
Thallium	µg/L	41	0.0281	2	0	Endpoint 2
Toluene	µg/L	41	<0.060	85000	0	Endpoint 2
Tributyltin	µg/L	41	0.0015	0.0014	0	Endpoint 2
1,1,1-trichloroethane	µg/L	41	<0.053	540000	0	Endpoint 2
Objectives for Protection of Human Health – Carcinogens						
Acrylonitrile	µg/L	41	<3	0.1	0	Endpoint 2
Aldrin	µg/L	41	<0.0012	0.000022	0	Endpoint 2
Benzene	µg/L	41	<0.13	5.9	0	Endpoint 2
Benzidine	µg/L	41	<1.8	0.000069	0	Endpoint 3
Beryllium	µg/L	41	0.0166	0.033	0	Endpoint 2
Bis(2-chloroethyl) ether	µg/L	41	<0.52	0.045	0	Endpoint 2
Bis(2-ethylhexyl) phthalate	µg/L	41	3.89	3.5	0	Endpoint 2
Carbon tetrachloride	µg/L	41	<0.053	0.9	0	Endpoint 2
Chlordane	µg/L	41	<0.0031	0.000023	0	Endpoint 3
Chlorodibromomethane	µg/L	41	37.2	8.6	0	Endpoint 2
Chloroform	µg/L	41	25.3	130	0	Endpoint 2
DDT[14]	µg/L	41	<0.0067	0.00017	0	Endpoint 2
1,4-dichlorobenzene	µg/L	41	<0.11	18	0	Endpoint 2
3,3'-dichlorobenzidine	µg/L	41	<0.43	0.0081	0	Endpoint 2
1,2-dichloroethane	µg/L	41	<0.048	28	0	Endpoint 2
1,1-dichloroethylene	µg/L	41	<0.49	0.9	0	Endpoint 2
Dichlorobromomethane	µg/L	41	36.1	6.2	0	Endpoint 2
Dichloromethane	µg/L	41	3.72	450	0	Endpoint 2
1,3-dichloropropene	µg/L	41	<0.135	8.9	0	Endpoint 2
Dieldrin	µg/L	41	<0.0015	0.00004	0	Endpoint 2
2,4-dinitrotoluene	µg/L	41	<0.49	2.6	0	Endpoint 2
1,2-diphenylhydrazine	µg/L	41	<0.47	0.16	0	Endpoint 2
Halomethanes[15]	µg/L	41	16.3	130	0	Endpoint 2
Heptachlor	µg/L	41	<0.0018	0.00005	0	Endpoint 2
Heptachlor epoxide	µg/L	41	<0.00077	0.00002	0	Endpoint 2
Hexachlorobenzene	µg/L	41	<0.47	0.00021	0	Endpoint 3
Hexachlorobutadiene	µg/L	41	<0.45	14	0	Endpoint 2
Hexachloroethane	µg/L	41	<0.43	2.5	0	Endpoint 2
Isophorone	µg/L	41	<0.41	730	0	Endpoint 2
N-nitrosodimethylamine	µg/L	41	<0.47	7.3	0	Endpoint 2
N-nitrosodi-N-propylamine	µg/L	41	<0.53	0.38	0	Endpoint 2
N-nitrosodiphenylamine	µg/L	41	<0.74	2.5	0	Endpoint 2
PAHs[16]	µg/L	41	0.0854	0.0088	0	Endpoint 2

Pollutant	Units	n[1]	MEC[2,3]	Most Stringent Criterion	Background[4]	RPA Endpoint[5]
PCBs[17]	µg/L	41	<0.19	0.000019	0	Endpoint 3
TCDD equivalents[18]	µg/L	41	<6.56E-7	3.9E-09	0	Endpoint 3
1,1,2,2-tetrachloroethane	µg/L	41	<0.076	2.3	0	Endpoint 2
Tetrachloroethylene	µg/L	41	<0.099	2	0	Endpoint 2
Toxaphene	µg/L	41	<0.18	0.00021	0	Endpoint 3
Trichloroethylene	µg/L	41	<0.069	27	0	Endpoint 2
1,1,2-trichloroethane	µg/L	41	<0.060	9.4	0	Endpoint 2
2,4,6-trichlorophenol	µg/L	41	<0.90	0.29	0	Endpoint 2
Vinyl chloride	µg/L	41	0.125	36	0	Endpoint 2

1. Number of data points available for the RPA.
2. If there is a detected value (including DNQ value), the highest reported value is summarized in the table. If there are no detected values, the highest MDL is summarized in the table.
3. Note that the reported MEC does not account for dilution. The RPA does account for dilution; therefore, it is possible for a parameter with an MEC in exceedance of the most stringent criteria not to present an Endpoint 1.
4. In accordance with implementation procedures for Table 1 of the Ocean Plan, background seawater concentration (Cs) is set equal to zero for all Table 1 parameters except those provided in Table 3 of the Ocean Plan.
5. Endpoint 1 – RP determined, limit required, monitoring required.

   Endpoint 2 – no RP, monitoring may be established.

   Endpoint 3 – RPA was inconclusive, carry over previous limitations if applicable, and establish monitoring.
6. No MDLs were reported for non-detect values. Therefore, RPA result for total residual chlorine is inconclusive (Endpoint 3).
7. All chronic toxicity testing resulted in “Pass” using the TST statistical approach.
8. The Discharger did not perform chronic testing consistently using the most sensitive species. Therefore, RPA result for chronic toxicity based on existing effluent monitoring data is inconclusive; reasonable potential was determined for chronic toxicity based on BPJ in accordance with step 13 of the RPA procedure. See section IV.C.6 of this Fact Sheet for detail.
9. Non-chlorinated phenolic compounds represent the sum of 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; and 4-nitrophenol.
10. Chlorinated phenolic compounds represent the sum of 2-chlorophenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; and pentachlorophenol.
11. HCH shall mean the sum of alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.
12. Highest detect gross alpha value was 9.07 pCi/L; highest detected gross beta value was 8.7 pCi/L.
13. 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.
14. 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.
15. Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).
16. PAHs shall mean the sum of acenaphthylene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo(k)fluoranthene; 1,12-benzoperylene; benzo(a)pyrene; chrysene; dibenzo(a,h)anthracene; fluorene; indeno(1,2,3-cd)pyrene; phenanthrene; and pyrene.
17. PCBs shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Arolclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

18. TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD Equivalents)} = \Sigma\ (C_x \times TEF_x)$$

Where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

Isomer Group	Toxicity Equivalency Factor (TEF)
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

4. WQBEL Calculations

WQBELs for total chlorine residual, chronic toxicity, benzidine, chlordane, hexachlorobenzene, PCBs, TCDD equivalents, and toxaphene as included in Order No. R4-2014-0033-A01 are retained in this Order based on results from the RPA. WQBELs for other Table 1 parameters not mentioned above that were included in Order No. R4-2014-0033-A01 are not included in this Order, because existing monitoring data for these parameters did not demonstrate reasonable potential based on the results of the RPA. No additional WQBELs were established as a result of the RPA.

In accordance with section III.C of the Ocean Plan, effluent limitations for Table 1 constituents are calculated using Equation 1 from the Ocean Plan:

Equation 1: $C_e = C_o + D_m (C_o - C_s)$, where:

C_e = effluent concentration limit, ng/l

C_o = water quality objective to be met at the completion of initial dilution, ng/l

C_s = background seawater concentration, ng/l

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater (a D_m of 72 is applied for this discharge, consistent with Order No. R4-2014-0033-A01)

Using benzidine as an example,

$C_{e,\ \text{Benzidine, average monthly}} = 0.000069\ \mu g/L + 72\ (0.000069\ \mu g/L - 0) = 0.0050\ \mu g/L$

5. Temperature

The temperature limitations included in this Order are consistent with temperature water quality objectives for coastal waters discharges included in the Thermal Plan and the previous Order No. R4-2014-0033-A01.

6. Whole Effluent Toxicity (WET)

Whole Effluent Toxicity (WET) testing detects the aggregate toxic effect on the receiving waters from a mixture of pollutants in the effluent or pollutants that are not typically monitored. 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 a sublethal endpoint such as reproduction or growth in addition to mortality. As such, chronic toxicity is a more stringent requirement than acute toxicity, and it evaluates the mortality endpoint as does the acute toxicity testing as well as reductions in reproduction and growth. A chemical at a low concentration can have chronic effects but no acute effects.

The Ocean Plan addresses the application of chronic and acute toxicity requirements based on the minimum initial dilution factor for ocean discharges. The minimum probable initial dilution (D_m) for Discharge Point 001 is 72:1, which is below 100:1. In accordance with the Ocean Plan, dischargers are required to conduct chronic toxicity monitoring with minimum initial dilution factors below 100:1. The Ocean Plan establishes a daily maximum chronic toxicity objective of 1.0 TU_c = 100/(No Observed Effect Concentration (NOEC)) using a 5-concentration hypothesis test. This Order evaluates chronic toxicity using U.S. EPA's 2010 Test of Significant Toxicity (TST) hypothesis testing statistical approach. This statistical approach is consistent with the Ocean Plan in that it provides the maximum protection to the environment, since it more reliably identifies acute and chronic toxicity than the current NOEC hypothesis-testing approach (See Ocean Plan, Section III.F and Appendix I). In 2010, U.S. EPA endorsed the peer-reviewed TST statistical approach in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) as an improved statistical tool to evaluate data from U.S. EPA's toxicity test methods. The TST statistical approach is the superior statistical approach for addressing statistical uncertainty when used in combination with U.S. EPA's toxicity test methods and is implemented in federal permits issued by U.S. EPA Region 9.

The TST's null hypothesis for chronic toxicity is:

H_0: Mean response (In-stream Waste Concentration (IWC) in % effluent) ≤ (0.75 x mean response (Control)).

Results obtained from a chronic toxicity test are analyzed using the TST statistical approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P". Chronic toxicity results are expressed as "Pass" or "Fail" and "% Effect". The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed at the IWC using the TST statistical approach, results in "Fail". During a calendar month, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

The chronic toxicity IWCs for Discharge Point 001 is 1.37 percent effluent. Effluent monitoring data collected during the term of Order No. R4-2014-0033-A01 all resulted in "Pass" and "% effect" less than 50; however, the most sensitive species was not consistently used to conduct the chronic toxicity tests. Therefore, the RPA based on existing effluent chronic toxicity monitoring results is inconclusive. Additionally, step 13 of the RPA procedure included in Appendix VI of the Ocean Plan states that an RPA may be

conducted on the basis of best professional judgment using all available information to determine if a water quality-based effluent limitation is required, notwithstanding the analysis using Steps 1 through 12 of the RPA procedure in the Ocean Plan, to protect beneficial uses of the receiving water. Information that may be used includes, but is not limited to: the discharge type, potential toxic impacts of the discharge, water quality and beneficial uses of the receiving water, CWA 303(d) listing for the pollutant, and other information. The Regional Water Board has determined that chronic toxicity demonstrates reasonable potential based on Step 13 of the RPA procedure. The Facility has the potential to discharge a number of pollutants commonly associated with the various sources that discharge into the RSMP, which include treated municipal wastewater effluent and reject concentrate from groundwater desalter plants and municipal wastewater treatment facilities. The presence of these pollutants of concern, which individually may not be present in toxic concentrations while exhibiting aggregated toxic effects as a whole, can cause or contribute to chronic toxicity in the receiving water. Also, the composition of the discharge may change in any given time (additional sources of municipal wastewater effluent and reject concentrate from groundwater desalter facilities and municipal wastewater treatment facilities as described in Section II of this Fact Sheet may begin to discharge into the RSMP during the term of this Order). As such, consistent with the Ocean Plan, the Regional Water Board determine that it is appropriate to retain the chronic toxicity monitoring requirements and effluent limitations as included in Order No. R4-2014-0033-A01 to ensure that the synergistic effects from the multitude of pollutants that may be present in the various sources to the RSMP discharge will be detected and addressed immediately, and to ensure that the discharge does not cause or contribute to the chronic toxicity of the receiving water.

7. Bacteria

This Order includes effluent limitations for bacteria (total coliform bacteria, fecal coliform, and Enterococcus) consistent with the current version of the Ocean Plan, effective March 22, 2019.

8. Final WQBELs

The following WQBELs are included in this Order, developed using the steps enumerated above, and consistent with applicable plans and regulations and the previous Order No. R4-2014-0033-A01.

Table F-10. Summary of WQBELs for Discharge Point 001

Pollutant	Units	Effluent Limitations					
		Average monthly (30-day average)	Maximum Daily	Instantaneous Minimum[1]	Instantaneous Maximum[1]	Average Weekly	Six-Month Median
Total Coliform	CFU/100mL or MPN/100mL	(2)					
Fecal Coliform	CFU/100mL or MPN/100mL	(2)					
Enterococcus	CFU/100mL	(2)					
Temperature	°F	(3)					
Chronic Toxicity	Pass or Fail, % Effect	--	Pass	--	--	--	--

Pollutant	Units	Effluent Limitations					
		Average monthly (30-day average)	Maximum Daily	Instantaneous Minimum[1]	Instantaneous Maximum[1]	Average Weekly	Six-Month Median
Total Chlorine Residual	µg/L	--	580	--	4400	--	150
	lbs/day[4]	--	92	--	700	--	24
TCDD Equivalents[5]	µg/L	2.8E-7	--	--	--	--	--
	lbs/day[4]	4.5E-8	--	--	--	--	--
Benzidine	µg/L	0.0050	--	--	--	--	--
	lbs/day[4]	0.00080	--	--	--	--	--
Hexachlorobenzene	µg/L	0.015	--	--	--	--	--
	lbs/day[4]	0.0024	--	--	--	--	--
Chlordane	µg/L	0.0017	--	--	--	--	--
	lbs/day[4]	0.00027	--	--	--	--	--
Polychlorinated Biphenyls (PCBs)[6]	µg/L	0.0014	--	--	--	--	--
	lbs/day[4]	0.00022	--	--	--	--	--
Toxaphene	µg/L	0.015	--	--	--	--	--
	lbs/day[4]	0.0024	--	--	--	--	--

1. Instantaneous minimum and maximum limitations are applied to grab samples.
2. Bacteria Limitations:
   a. The median total coliform density shall not exceed 70 over 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL Compliance shall be determined based on sample results over any six-month period.
   b. Fecal coliform density shall not exceed:
      i. A 30-day geometric mean (GM) of 200 per 100 milliliters (mL), calculated based on the five most recent samples.
      ii. A single sample maximum (SSM) of 400 per 100 mL
   c. Enterococci density shall not exceed:
      i. A six-week rolling GM of 30 colony forming units (cfu) per 100 milliliters (mL), calculated weekly.
      ii. A statistical threshold value (STV) of 110 cfu/100 mL by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
3. The temperature effluent limitations for the discharge are as follows:
   a. The discharge shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
   b. The discharge shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of natural temperature in these areas.
   c. The discharge shall not result in increases in the natural water temperature exceeding 4°F at the shoreline, the surface of any ocean substrate, or the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.
4. Mass loading limitations are based on the maximum combined flow at Discharge Point 001 (19.1 million gallons per day (MGD)) and are calculated as follows:
   Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day
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 in the table below. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.
   Dioxin-TEQ (TCDD Equivalents) = Σ (C_x x TEF_x)

Where:

C_x = concentration of dioxin or furan congener x
TEF_x = TEF for congener x

Toxicity Equivalence Factors

Isomer Group	Toxicity Equivalence Factor (TEF)
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

6. PCBs 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.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 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 previous Order No. R4-2014-0033-A01, which became effective in July 2015, included effluent limitations for all Ocean Plan Table 1 parameters consistent with prior orders regulating the discharge. These effluent limitations were included in Order No. R4-2014-0033-A01 and prior orders on the basis that there were insufficient data available to determine reasonable potential at the time of permit issuance, as the RSMP only began to discharge in September 2014. This Order considered effluent monitoring data collected during the term of Order No. R4-2014-0033-A01 and removed effluent limitations for all Table 1 parameters that have Endpoint 2 RPA results (refer to Table F-9 for a list of the parameters with Endpoint 2). Based on available effluent monitoring data collected during the term of Order No. R4-2014-0033-A01, there is no reasonable potential for these parameters; therefore, removal of the effluent limitations is appropriate and consistent with CWA section 402(o)(2)(B)(i). Nonetheless, this Order retains effluent monitoring requirements for these parameters to identify any elevated levels of these parameters that may occur in the discharge so that it can be addressed appropriately.

This Order also modifies the temperature limitations as included in Order No. R4-2014-0033-A01. This action is in accordance with federal anti-backsliding regulations because the temperature limitations included in Order No. R4-2014-0033-A01 were not entirely consistent with the requirement set forth in the Thermal Plan for coastal dischargers. Specifically, Order No. R4-2014-0033-A01 limited the maximum temperature of the discharge from exceeding the natural temperature of the receiving water by more than 20°F is not included in this permit because this limitation was based on the Thermal Plan objective for coastal discharge of thermal waste. The discharge from the RSMP is not a thermal waste and this limitation is not applicable to the RSMP discharge. Therefore, the Regional Water Board determined that a mistaken interpretation was made in issuing the

temperature limitations as included in Order No. R4-2014-0033-A01, and the temperature limitations are modified in this Order to be consistent with the Thermal Plan. See CWA section 402(o)(2)(B)(ii).

This Order also modifies the chronic toxicity limitations included in Order No. R4-2014-0033-A01, which consisted of an average monthly effluent limitation (AMEL) of "Pass" and a maximum daily effluent limitation (MDEL) of "Pass or percent effect <50%". Specifically, this Order removed the AMEL for chronic toxicity and modified the MDEL for chronic toxicity to "Pass" only. The chronic toxicity limitations included in Order No. R4-2014-0033-A01 were not entirely consistent with the requirements set forth in the Ocean Plan. The inclusion of a MDEL only for chronic toxicity in this Order is consistent with the Ocean Plan requirement, which only included a maximum daily water quality objective (See Table 1 of the Ocean Plan). Therefore, the Regional Water Board determined that a mistaken interpretation was made in issuing the AMEL for chronic toxicity in Order No. R4-2014-0033-A01, and the limitation included in this Order is consistent with the Ocean Plan as per CWA section 402(o)(2)(B)(ii). The modification of the MDEL for chronic toxicity included in this Order does not constitute backsliding as the MDEL included in this Order is a more stringent requirement than that included in Order No. R4-2014-0033-A01.

The mass-based effluent limitations included in this Order for BOD, TSS, oil and grease, total chlorine residual, benzidine, chlordane, hexachlorobenzene, PCBs, TCDD equivalents, and toxaphene are less stringent than the mass-based effluent limitations included in Order No. R4-2014-0033-A01 for these parameters due to a modification of the permitted flow from 17.52 MGD to 19.1 MGD provided in this Order. This modification was included based on updated information on the maximum flows from individual sources that may discharge to the RSMP, as included in the ROWD submitted by the Discharger in November 2018. The combined maximum flow from all sources discharging to the RSMP is anticipated to reach 21.7 MGD (refer to Table F-2), which exceeds the previous permitted flow of 17.52 MGD. This Order allows for an increase of the permitted discharge flow to 19.1 MGD only, as the existing dilution ratio of 72:1 assigned for the discharge was developed based on a maximum discharge flow of 19.1 MGD, reviewed and approved by the State Water Board and the Regional Water Board. Therefore, this action to increase the permitted flow is consistent with the federal anti-backsliding regulations, as the federal anti-backsliding provisions allow for relaxation of effluent limitations where WQBELs may be relaxed if consistent with the State's antidegradation policy, as set forth in the section below. See CWA section 303(d)(4)(B). The concentration-based effluent limitations included in this Order remain the same as those included in the previous Order to ensure that the level of treatment applied to the discharge is not reduced as a result of this modification.

2. Antidegradation Policies

40 C.F.R. Section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. The Regional Water Board's Basin Plan and the Ocean Plan implements, and incorporates by reference, both the state and federal antidegradation policies. Specifically, the Ocean Plan Purpose and Authority indicates "The Board finds further that this plan shall be reviewed at least every three years to guarantee that the current standards are adequate and are not allowing degradation to marine species or posing a threat to public health." As such, compliance with the standards set forth in the Ocean Plan will ensure the discharge does not create degradation of marine species, including demersal fish, benthic invertebrates, or attached algae. Compliance with the

standards will also result in the use of best practicable treatment or control of the discharge.

This Order provides for an increase in the permitted flow based on updated information submitted in the Discharger's ROWD. The increase in the permitted flow is needed to accommodate anticipated wastewater flows to the RSMP. Considering the 2007 final EIR, historical effluent monitoring data, and a review of the operation of the RSMP as discussed below, the Regional Water Board concludes that the increase in the permitted flow will not result in degradation of water quality and marine species outside the zone of initial dilution, and the beneficial uses of the receiving water will not be impacted outside of the zone of initial dilution. Accordingly, the increase in the permitted flow for the discharge is consistent with the antidegradation policies of this state, and the federal antidegradation policy, as set forth below.

First, the 2007 EIR analyzed the effects of the RSMP discharge to ocean water quality and marine life. Modelling of the effluent was completed using the Visual Plumes software at varying discharge flow rates, up to 19.1 MGD. The most stringent dilution ratio resulted in the case of the maximum flow of 19.1 MGD, with an estimated dilution of 100:1. Based on a review of existing monitoring data from sources that were to discharge to the RSMP, the modelling results indicated that the discharge is not expected to exceed any Ocean Plan water quality objective after accounting for dilution. Additionally, acute and chronic toxicity testing of the composited sample (blend of anticipated sources), or of the individual sources, indicated that no chronic or acute toxicity was detected in the samples after the dilution credit was considered. Therefore, the 2007 EIR concluded that operation of the RSMP was not expected to result in any significant impacts to ocean water quality and marine life.

Here, the dilution credit has since been updated to 72:1, using the more conservative Koh-Fan model and a flow scenario of 19.4 MGD (the maximum design flow of the RSMP pipeline). That modeling is described briefly in section II.B of this Fact Sheet. The dilution credit of 72:1 was approved by the State Water Resources Control Board and the Regional Water Board. Order No. R4-2014-0033-A01 prescribed a dilution credit of 72:1 to the discharge. Effluent monitoring data for the RSMP discharge collected during the term of Order No. R4-2014-0033-A01 demonstrated that there were no exceedances of effluent limitations developed based on the Ocean Plan water quality objectives after applying the dilution credit of 72:1. Also, no chronic toxicity was observed in the discharge during the same period. Thus, the conclusion of the 2007 EIR (made using a discharge flow scenario of 19.1 MGD) that the discharge will not result in significant impacts on the receiving water was confirmed.

Second, the nature of the discharge supports the conclusion that the discharge will not contribute to degradation of water quality. Specifically, the RSMP is solely a pipeline that transports tertiary treated wastewater generated by municipal wastewater treatment facilities and concentrates from groundwater desalter plants. The RSMP diverts wastewater that would otherwise be discharged into the Calleguas Creek Watershed for discharge into the Pacific Ocean. The purpose of the RSMP is to reduce the salt and nutrient loading into the Calleguas Creek Watershed, which includes waterbodies that are on the 2014/2016 State Water Board's California 303(d) list as impaired for salt and nutrient parameters. Discharges from the RSMP are intermittent. The effect, if any, from the discharge to the Pacific Ocean is spatially limited with respect to the waterbody, within the zone of initial dilution.

Finally, the cumulative effect of all effluent and receiving water limitations and other requirements included in this Order ensures that applicable water quality objectives of the receiving water will be attained outside of the zone of initial dilution, thereby protecting the

beneficial uses of the receiving water. The Ocean Plan allows temporary exceedances of water quality objectives within the zone of initial dilution. Based on existing effluent monitoring data, the discharge has not exceeded any Ocean Plan water quality objectives after accounting for dilution. The effect from an increase in the permitted flow is not anticipated to result in a significant reduction of water quality, as this Order does not allow a reduction in treatment of the discharges to the RSMP. Future sources discharging to the RSMP are also limited to similar types of wastewater as existing sources (i.e. tertiary treated municipal wastewater and groundwater desalter concentrate); therefore, the discharge characteristics of the RSMP effluent are not expected to change with the new sources. To further ensure that the level of treatment applied to wastewater discharging through the RSMP is maintained, this Order includes concentration-based effluent limits that are at least as stringent as those included for the same parameters in the previous order. As discussed in sections IV.B and IV.C of this Fact Sheet, this Order contains technology-based effluent limitations for TSS, BOD, turbidity, oil and grease, settleable solids, and pH, and water quality-based effluent limitations for chronic toxicity, total chlorine residual, benzidine, chlordane, hexachlorobenzene, PCBs, TCDD equivalents, and toxaphene based on the Ocean Plan. This Order also includes an effluent limitation for temperature consistent with the Thermal Plan. The final limitations in this Order, which include concentration-based and mass-based effluent limitations and a robust effluent and receiving water monitoring program, hold the Discharger to performance levels that will not cause or contribute to water quality impairment or degradation of marine species outside the zone of initial dilution, and they protect the beneficial uses of the receiving waters. Therefore, the permitted discharge is consistent with the Ocean Plan, the antidegradation provision of 40 C.F.R. section 131.12, the Basin Plan, and State Water Board Resolution 68-16.

3. Mass-based Effluent Limitations

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 C.F.R. section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitation on a case-by-case basis under 40 CFR section 125.3, limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production, and permit conditions ensure that dilution will not be used as a substitution for treatment.

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)

where: Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limit for a pollutant (mg/L)

Flow rate = discharge flow rate (MGD)

Mass-based effluent limitations applicable to Discharge Point 001 are calculated based on a total permitted discharge flow of 19.1 MGD. Compliance of these mass-based effluent limitation shall be met at the effluent through Discharge Point 001, as measured at the Effluent Monitoring Location EFF-001.

4. Stringency of Requirements for Individual Pollutants

This Order contains technology-based effluent limitations consisting of restrictions on BOD, TSS, oil and grease. Restrictions on these pollutants/parameters are discussed in section IV.B of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements, and are consistent with the Ocean Plan.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating individual water quality-based effluent limitations for priority pollutants are based on the Ocean Plan. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

Table F-11. Summary of Final Effluent Limitations for Discharge Point 001

Pollutant	Units	Effluent Limitations						Basis[2]
		Average monthly (30-day average)	Maximum Daily	Instant. Minimum[1]	Instant Maximum[1]	Average Weekly	Six-Month Median	
Conventional Pollutants								
pH	Std Units	--	--	6.0	9.0	--	--	E, OP
Total Suspended Solids (TSS)	mg/L	60	--	--	--	--	--	E, OP
	lbs/day[3]	9600	--	--	--	--	--	
Biochemical Oxygen Demand (BOD), 5-day @20°C	mg/L	30	--	--	--	45	--	E, BPJ
	lbs/day[3]	4800	--	--	--	7200	--	
Oil and Grease	mg/L	25		--	75	40	--	E, OP
	lbs/day[3]	4000	--	--	12000	6400	--	
Non-conventional Pollutants								
Temperature	°F	[4]						E, TP
Turbidity	NTU	75	--	--	225	100	--	E, OP
Settleable Solids	mL/L	1.0	--	--	3.0	1.5	--	E, OP
Total Coliform	CFU/ 100mL or MPN/ 100mL	[5]						E, OP
Fecal Coliform	CFU/ 100mL or MPN/ 100mL	[5]						E, OP
Enterococcus	CFU/ 100mL or MPN/ 100mL	[5]						E, OP
Ocean Plan Table 1 Parameters								
Chronic Toxicity	Pass or Fail, % Effect	--	Pass	--	--	--	--	E, OP

Pollutant	Units	Effluent Limitations						Basis[2]
		Average monthly (30-day average)	Maximum Daily	Instant. Minimum[1]	Instant Maximum[1]	Average Weekly	Six-Month Median	
Total Chlorine Residual	µg/L	--	580	--	4400	--	150	E, OP
	lbs/day[3]	--	92	--	700	--	24	
TCDD Equivalents[6]	µg/L	2.8E-7	--	--	--	--	--	E, OP
	lbs/day[3]	4.5E-8	--	--	--	--	--	
Benzidine	µg/L	0.0050	--	--	--	--	--	E, OP
	lbs/day[3]	0.00080	--	--	--	--	--	
Hexachlorobenzene	µg/L	0.015	--	--	--	--	--	E, OP
	lbs/day[3]	0.0024	--	--	--	--	--	
Chlordane	µg/L	0.0017	--	--	--	--	--	E, OP
	lbs/day[3]	0.00027	--	--	--	--	--	
Polychlorinated Biphenyls (PCBs)[7]	µg/L	0.0014	--	--	--	--	--	E, OP
	lbs/day[3]	0.00022	--	--	--	--	--	
Toxaphene	µg/L	0.015	--	--	--	--	--	E, OP
	lbs/day[3]	0.0024	--	--	--	--	--	

1. Instantaneous minimum and maximum limitations are applied to grab samples.
2. E = Order No. R4-2014-0033-A01; OP= Ocean Plan; BPJ= Best Professional Judgement; and TP= Thermal Plan.
3. Mass loading limitations are based on the maximum permitted flow at Discharge Point 001 (19.1 million gallons per day (MGD)) and are calculated as follows:
   Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day
4. The temperature effluent limitations for the discharge are as follows:
   a. The discharge shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
   b. The discharge shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of natural temperature in these areas.
   c. The discharge shall not result in increases in the natural water temperature exceeding 4°F at the shoreline, the surface of any ocean substrate, or the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.
5. Bacteria Limitations:
   a. The median total coliform density shall not exceed 70 over 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL Compliance shall be determined based on sample results over any six-month period.
   b. Fecal coliform density shall not exceed:
      i. A 30-day geometric mean (GM) of 200 per 100 milliliters (mL), calculated based on the five most recent samples.
      ii. A single sample maximum (SSM) of 400 per 100 mL
   c. Enterococci density shall not exceed:
      i. A six-week rolling GM of 30 colony forming units (cfu) per 100 milliliters (mL), calculated weekly.
      ii. A statistical threshold value (STV) of 110 cfu/100 mL by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
6. TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective

toxicity factors, as shown in the table below. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD Equivalents) = Σ (C_x x TEF_x)

Where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalence Factors

Isomer Group	Toxicity Equivalence Factor (TEF)
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

7. PCBs 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.

E. Interim Effluent Limitations- Not Applicable

F. Land Discharge Specifications- Not Applicable

G. Recycling Specifications- Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan contains numeric and narrative water quality objectives applicable to coastal waters of California. The water quality objectives are consistent with the policy to maintain the high-quality waters pursuant to federal regulations (40 C.F.R. section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of the beneficial uses. If there is reasonable potential as demonstrated by a reasonable potential analysis during permit development or a U.S. EPA-approved TMDL WLA, then WQBELs are included in this Order to ensure protection of those water quality standards.

B. Groundwater- Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in section VI.A of the Waste Discharge Requirements and Attachment D to this Order. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 C.F.R. section 122.42.

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. 40 C.F.R. 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. section

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

B. Special Provisions

1. Reopener Provisions

The reopener provisions included in section VI.C.1 of the Waste Discharge Requirements of this Order are based on 40 C.F.R. Part 123. The Regional Water Board may reopen the Order to modify conditions and requirements. Causes for modifications can include, but are not limited to: the promulgation of new regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan, Basin Plan, or applicable TMDLs.

2. Special Studies and Additional Monitoring Requirements

a. **Toxicity Reduction Evaluation (TRE) Workplan Requirements.** This Order requires the Discharger to develop a Toxicity Reduction Evaluation (TRE) Workplan. In addition, if effluent toxicity testing consistently result in "Fail" as specified in this Order, the Discharger shall conduct a TRE as detailed in section V of the MRP (Attachment E). The TRE will help the Discharger identify the possible source(s) of toxicity. The Discharger shall take all reasonable steps to reduce toxicity.

b. **Mixing Zone Study**

This Order requires the Discharger to perform a Mixing Zone Study to evaluate and confirm the assumptions used to evaluate the discharge that resulted in a dilution ratio of 72:1, which is included in this permit. The previous Order No. R4-2014-0033-A01 included a requirement to conduct a Mixing Zone Study during that permit term. The Discharger submitted a Mixing Zone Study Workplan in June 2014, in which the Discharger stipulated that a Mixing Zone Study would be conducted when the actual discharge flow rate has reached 17.52 MGD. However, discharge flows during the term of the previous Order No. R4-2014-0033-A01 were less than 17.52 MGD, and no mixing zone study was conducted during that permit term. As such, this Order requires the Discharger to conduct the Mixing Zone Study within the term of this Order, at a condition that is representative of the actual discharge flow from the RSMP.

c. **Sediment Loading Study**

This Order requires the Discharger to conduct a sediment loading study following the procedures outlined in the Sediment Loading Study Work Plan that was submitted to the Regional Water Board in June 2014. The Sediment Loading Study Work Plan stipulated that the Sediment Loading Study was only required when the discharge flow exceeds 10 MGD. However, discharge flows during the term of the previous Order No. R4-2014-0033-A01 were less than 10 MGD, and no actual study was conducted during that permit term. The Discharger requested in the ROWD to modify its Sediment Loading Study Work Plan to collect sediment samples from two locations (inside and outside of the mixing zone) every two years. As such, this Order requires sediment sampling be conducted at one location (minimum) inside the mixing zone and at one location (minimum) outside the mixing zone every two years and analyzed for the list of constituents included on Table E-5 of Attachment E of this Order. Alternatively, the study can be completed using the data collected in compliance with the Benthic Sediment Monitoring Requirement enumerated in section VIII.B in Attachment E of this Order.

3. Best Management Practices Plan (BMPP).

This Order requires the Discharger to develop and implement a BMPP using site-specific procedures to prevent hazardous waste/material and trash from being discharged to waters of the State, to ensure that the discharges from the Facility would neither cause nor contribute to a nuisance in the receiving water, and that unauthorized discharges (i.e. spills or unpermitted storm water and non-storm water discharges) to the receiving water have been effectively prohibited.

4. Construction, Operation, and Maintenance Specifications

The provision is included in section VI.C.4 of the Waste Discharge Requirements of this Order is based on the requirements of 40 C.F.R. section 122.41(e).

5. Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable

6. Other Special Provisions – Not Applicable

7. Compliance Schedules- Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring- Not Applicable

B. Effluent Monitoring

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The MRP is a standard requirement in NPDES permits issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violations, and routine monitoring data in accordance with NPDES regulations, the Water Code, and Regional Water Board policies. The MRP also contains a sampling program specific to the Discharger's RSMP. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified or expected to be present in the discharge. Monitoring frequencies included in Table E-2 of the MRP are based on the Ocean Plan, best professional judgment, and can generally be summarized as follows:

1. Monthly monitoring is required for pollutants where effluent limitations at Discharge Point 001 have been established.
2. Quarterly monitoring for all other Table 1 parameters (except radioactivity), which do not have effluent limitations, are required. Data generated from this monitoring are necessary for future reasonable potential analysis to evaluate the discharge. The monitoring frequency for these parameters may be reduced to semiannually after the second year of the permit term upon approval from the Regional Water Board.

3. Monitoring for radioactivity is required semiannually as per the requirement included in Appendix III of the Ocean Plan.

C. Whole Effluent Toxicity Testing Requirements

The rationale for WET testing required under this Order has been discussed in section IV.C.6 of this Fact Sheet.

D. Receiving Water Monitoring

1. Water Quality Monitoring

The monitoring requirements included in section VIII.A of the MRP (Attachment E) implement the Ocean Plan and follow the monitoring guidance in Appendix III (Standard Monitoring Procedures) of the Ocean Plan. The water quality monitoring requirements are included in to determine compliance with the receiving water limitations established in this Order.

2. Benthic Sediments Monitoring

The monitoring requirements included in section VIII.B of the MRP (Attachment E) implement the Ocean Plan and follow the monitoring guidance in Appendix III (Standard Monitoring Procedures) of the Ocean Plan. This monitoring is required to determine if benthic conditions are changing and/or degrading over time as a result of the discharge.

3. Bioaccumulation Monitoring

The monitoring requirements included in section VIII.C implement the Ocean Plan and follow the monitoring guidance in Appendix III (Standard Monitoring Procedures) of the Ocean Plan. This local bioaccumulation trends survey is to address the question: “Is mussel tissue contamination in the vicinity of the outfall changing or degrading over time?”

4. Regional Monitoring Program

Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs. Regional monitoring data also assist in the interpretation of core monitoring studies. As such, the Discharger is encouraged to participate in regional monitoring activities coordinated by the Southern California Coastal Water Research Project (SCCWRP), and other appropriate agencies approved by the Regional Water Board and U.S. EPA. Upon approval from the Regional Water Board Executive Officer, revisions to the routine receiving water monitoring program for sediment and benthic community health at BEN-001 through BEN-004, and bioaccumulation at MUS-001 may be made under the direction of the U.S. EPA and Regional Water Board as necessary to accomplish the goal of assessing regional impacts from all contaminant sources; and may include resource exchanges. During these coordinated monitoring efforts, the Discharger’s sampling and analytical effort may be reallocated to provide a regional assessment of the impact of wastewater discharges; however, certain core elements shall remain unchanged.

5. Groundwater- Not Applicable

E. Other Monitoring Requirements

1. 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 dischargers 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 Regional Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Calleguas Municipal Water District, Regional Salinity Management Pipeline. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following: email and local newspaper; relevant documents to the tentative permit was also available on the Regional Water Board website.

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

http://www.waterboards.ca.gov/losangeles

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDRs as provided through the notification process. Comments were required to be submitted either in person or by mail to the Executive Officer at the Regional Water Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013, or by email to losangeles@waterboards.ca.gov with a copy to Ching-Yin.To@waterboards.ca.gov.

To be fully responded to by staff and to ensure full consideration by the Regional Water Board, and included in the record, the written comments were due at the Regional Water Board office by 5:00 p.m. **May 16, 2019**.

C. Public Hearing

The Regional 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: June 13, 2019

Time: 9:00 a.m.

Location: City of Camarillo
601 Carmen Drive
Camarillo, California 93011

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see:

<http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml>

E. Information and Copying

The Report of Waste Discharge (ROWD), tentative WDRs, comments received, and other supporting documents are on file and the electronic copies may be assessed in the CIWQS database or on the Los Angeles Regional Water Quality Control Board website at www.waterboards.ca.gov/losangeles. Hard copies may be inspected at the Regional Water Board's office at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Viewing and copying of documents may be arranged through the Regional Water Board by calling (213) 576 – 6600.

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 Regional 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 Ching Yin To through electronic mail at ching-yin.to@waterboards.ca.gov or by phone at (213) 576-6696.

ATTACHMENT G- LIST OF OCEAN PLAN TABLE 1 PARAMETERS

Objectives for Protection of Marine Aquatic Life	Objectives for Protection of Human Health – Non-Carcinogens	Objectives for Protection of Human Health – Carcinogens	
Arsenic, Total Recoverable	Acrolein	Acrylonitrile	Halomethanes
Cadmium, Total Recoverable	Antimony	Aldrin	Heptachlor
Chromium (Hexavalent), Total Recoverable	Bis(2-chloroethoxy) methane	Benzene	Heptachlor epoxide
Copper, Total Recoverable	Bis(2-chloroisopropyl) ether	Benzidine	Hexachlorobenzene
Lead, Total Recoverable	Chlorobenzene	Beryllium	Hexachlorobutadiene
Mercury, Total Recoverable	Chromium (III)	Bis(2-chloroethyl) ether	Hexachloroethane
Nickel, Total Recoverable	Di-n-butyl-phthalate	Bis(2-ethylhexyl) phthalate	Isophorone
Selenium, Total Recoverable	Dichlorobenzenes	Carbon tetrachloride	N-nitrosodimethylamine
Silver, Total Recoverable	Diethyl phthalate	Chlordane	N-nitrosodi-N-propylamine
Zinc, Total Recoverable	Dimethyl phthalate	Chlorodibromomethane	N-nitrosodiphenylamine
Cyanide	4,6-dinitro-2-methylphenol	Chloroform	PAHs
Total Chlorine Residual	2,4-dinitrophenol	DDT	PCBs
Ammonia	Ethylbenzene	1,4-dichlorobenzene	TCDD equivalents
Chronic Toxicity	Fluoranthene	3,3'-dichlorobenzidine	1,1,2,2-tetrachloroethane
Phenolic Compounds (non-chlorinated)	Hexachlorocyclopentadiene	1,2-dichloroethane	Tetrachloroethylene
Chlorinated Phenolics	Nitrobenzene	1,1-dichloroethylene	Toxaphene
Endosulfan	Thallium	Dichlorobromomethane	Trichloroethylene
Endrin	Toluene	Dichloromethane	1,1,2-trichloroethane
HCH	Tributyltin	1,3-dichloropropene	2,4,6-trichlorophenol
Radioactivity	1,1,1-trichloroethane	Dieldrin	Vinyl chloride
		2,4-dinitrotoluene	1,2-diphenylhydrazine