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

C. Central Coast Standard Provisions – General Monitoring Requirements

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

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

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services (DHS) for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board (State Water Board) and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the DHS or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:

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

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

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

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

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

D. Central Coast Standard Provisions – General Reporting Requirements

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

   a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

   b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).

   c. A description of the sampling procedures and preservation sequence used in the survey.

   d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

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

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

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

4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:

   a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,

   b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

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

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

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

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

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

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

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

8. By January 30 of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain the following:

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

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

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

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

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

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

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

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

E. Central Coast Standard Provisions – General Pretreatment Provisions

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

   a. By the date specified therein;

   b. Within three years of the effective date specified therein, but in no case later than July 1, 1984; or,

   c. If a new indirect discharger, upon commencement of discharge.

F. Central Coast Standard Provision – Enforcement

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

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

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

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

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

3. “Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewering entity (when the collection system is not owned and operated by the

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

4. "Duly Authorized Representative" is one where:

   a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;

   b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,

   c. the written authorization was submitted to the Central Coast Water Board.

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

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

7. "Incompatible wastes" are:

   a. Wastes which create a fire or explosion hazard in the treatment works;

   b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;

   c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;

   d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,

   e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.

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

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

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

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

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

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

mass emission rate (kg/day) = 3.79 x Q x C,

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

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

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

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

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, stormwaters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 CFR part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

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

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

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

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

    a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;

    b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;

    c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or

    d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.

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

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

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

I. GENERAL MONITORING PROVISIONS

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

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

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

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

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

3. *Flow Measurement in Open Channels and Closed Conduits,* U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22050. Order by NTIS No. PB-273 535/5ST.

4. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)

D. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their

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

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

F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxic pollutants specified in Table 1 of the California Ocean Plan shall be conducted in accordance with procedures described in the California Ocean Plan and restated in this MRP.

G. Monitoring and sampling periods are defined as follows unless otherwise specified in this MRP:

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

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

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

Annually: January 1st through December 31st

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

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

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

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

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

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

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Daily Flow	MGD	Metered	1/Day	[1]
Mean Daily Flow	MGD	Calculated	1/Month	[1]
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	mg/L	C-24[2]	1/Week	[1]
Total Suspended Solids (TSS)	mg/L	C-24[2]	1/Week	[1]

[1] As required under 40 CFR part 136.

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

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IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

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

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
BOD_5	mg/L	C-24	1/Week	[1]
TSS	mg/L	C-24	1/Week	[1]
Settleable Solids	mL/L	Grab	1/Month	[1]
Turbidity	NTUs	Grab	1/Week	[1]
Oil and Grease	mg/L	Grab	1/Month	[1]
Total Chlorine Residual	mg/L	Grab	1/Day	[1]
Chlorine Used	lbs/day	Recorded	1/Day	[1]
Total Coliform Bacteria	MPN/100mL	Grab	1/Week	[1]
Fecal Coliform Bacteria	MPN/100mL	Grab	5/Week	[1]
pH	standard units	Grab	1/Month	[1]
Temperature	° F	Grab	1/Month	[1]
Ammonia (as N)	mg/L	Grab	1/Month	[1]
Acute Toxicity [2]	TUa	Grab	1/Permit Term	[1]
Chronic Toxicity [2]	TUc	C-24	1/Year (April)	[1]
Ocean Plan Table 1 Pollutants [3, 4]	µg/L	C-24	1/Year (April)	[1]

[1] As required under 40 CFR part 136.
[2] Whole effluent acute and chronic toxicity monitoring shall be conducted according to the requirements established in section V of this Monitoring and Reporting Program.
[3] Ocean Plan Table 1 metals are those metals identified in Table 1 of the Ocean Plan, and include arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, silver, zinc and cyanide.
[4] Those pollutants identified in Table 1 of the Ocean Plan (2015). Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table 1; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

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

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

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by 96-hour static or continuous flow bioassay techniques using Silversides (*Menidia beryllina*), however

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

Table E-4. Approved Tests – Acute Toxicity

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

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

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

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

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

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

When toxicity monitoring finds acute toxicity in the effluent above the limitation established by the Order, the Discharger shall immediately resample the effluent, if the discharge if continuing, and retest for acute toxicity. Results of the initial failed test and any toxicity monitoring results subsequent to the failed test shall be reported as soon as reasonable to the Executive Officer (EO), not to exceed 14 days from receipt of failure results. The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements (section VI.C.2 of the Order), or to implement other measures.

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

The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA-821/600/R-95/136; *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA-600-4-01-003; *Procedures Manual for Conducting Toxicity Tests developed by the Marine Bioassay Project*, SWRCB 1996, 96-1WQ; and/or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA/600/4-87-028 or subsequent editions.

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

Chronic Toxicity (TUc) = 100 / NOEL

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

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

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

Table E-5. Approved Tests – Chronic Toxicity

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

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

[2] Protocol References:

a. Chapman, G.A., D.L. Denton, and J.M. Lazochak. 1995. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to west coast marine and estuarine organisms. USEPA Report No. EPA/600/R-95/136.

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

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

d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Neiheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1988. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

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

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

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

C. Accelerated Monitoring Requirements

1. When acute or chronic toxicity is detected in the effluent above an effluent limitation or toxicity trigger established by this Order, and the testing meets all test acceptability criteria, the Discharger shall resample immediately and confirm the effluent toxicity. If the retest results in toxicity greater than the effluent limitation or toxicity trigger, the Discharger shall initiate accelerated monitoring.

2. Accelerated monitoring frequency consists of performing six toxicity tests (one every two weeks) in a twelve-week period following the first failed test result (test results exceed effluent limitation or toxicity trigger), or as otherwise instructed by the Executive Officer. Test results shall be submitted to the Central Coast Water Board within 15 days of the conclusion of each test.

3. Unless otherwise specified by the Executive Officer, if the implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the toxicity trigger (for instance, a temporary plan upset), then only one additional test is necessary. If an exceedance of the toxicity effluent limitation or toxicity trigger is detected in this test, the Discharger shall continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.

4. Unless otherwise specified by the Executive Officer, if none of the six accelerated tests indicates exceedances of the toxicity effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

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

1. A TRE shall be implemented by the Discharger as specified by the Executive Officer. A TIE may be required as part of the TRE.

2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the United States Environmental Protection Agency (USEPA) which include the following:

a. *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, (USEPA, 1992a);

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

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

d. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (USEPA, 1993b).

3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period may result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE includes the following:

a. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, August 1999, EPA/833B-99/002; and

b. *Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program* dated Mary 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

E. Toxicity Reporting

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

a. Toxicity test results,

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

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

2. Toxicity test results shall be reported according to the appropriate guidance – *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, USEPA Office of Water, PA821-R-02-012 (2002) or the latest edition, or EPA-821-R-02-012 (2002) or subsequent editions.

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

4. Within 14 days of receipt of a chronic toxicity test result which exceeds 166 TUc or an acute toxicity result which exceeds 5.25 TUa, the Discharger shall provide written notification to the Executive Officer of:

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

b. Actions the Discharger has taken/will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity. When corrective actions, including TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS

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

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Receiving Surface Water Monitoring Requirements

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

Table E-6. Receiving Water Monitoring Requirements

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

B. Benthic Sediment Monitoring

Benthic monitoring shall assess the temporal and spatial occurrence of pollutants in local marine sediments and evaluate the physical and chemical quality of the sediments in relation to the outfall. Sediment monitoring shall be conducted once every three years. One grab sediment sample shall be collected using a 0.1 m^2 Van Veen grab sampler at each benthic monitoring station. Sampling specified in the following table shall occur in the period from July through October at the ocean bottom directly below stations RSW-001, RSW-002N, RSW-002S, RSW-003, and RSW-004.

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

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Table E-7. Benthic Sediment Monitoring Requirements

Parameter	Units	Minimum Sampling Frequency
Sediment particle size	Phi size (% volume)	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Sediment Sulfides at pH 7	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
BOD_5	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Arsenic	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Cadmium	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Chromium	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
$Chromium^{+6}$	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Copper	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Lead	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Nickel	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Mercury	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Silver	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Zinc	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Kjeldahl Nitrogen	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Ammonia	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Nitrate	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)
Total Organic Carbon (TOC)	mg/kg	1/Three Years (2019 and 2022, and additional years if permit is administratively extended)

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

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

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

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

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

C. Benthic Community Monitoring

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

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

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

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

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

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Table E-8. Biosolids Monitoring Requirements

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

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

B. Pretreatment

At least once per year, influent, effluent, and biosolids shall be sampled and analyzed for the priority pollutants identified under Section 307(a) of the Clean Water Act. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the plant's influent and effluent for those pollutants EPA has identified under Section 307(a) of the Act which are known or are suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR part 136. Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent samples.

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

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C. Ocean Outfall and Diffuser Inspection

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

D. Brine Monitoring

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

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

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

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

[1] Ocean Plan Table 1 metals are identified in Table 1 of the Ocean Plan and include arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, silver, zinc, and cyanide.
[2] Metals analysis shall be conducted on one representative sample per hauler per year.

2. The Discharger shall evaluate potential interferences and develop an updated Brine Monitoring Plan to evaluate final effluent compliance after mixing with treated wastewater. If additional monitoring, beyond that described in Table E-9 above, is warranted to demonstrate the compliance of mixed effluent-brine with effluent limitations of this Order, Discharger shall specify those parameters and frequencies. If flow weighted-averages are appropriate, Discharger shall specify the manner and methods of those parameter's calculations. An updated Brine Monitoring Plan shall be submitted by **August 1, 2019**.

3. The Discharger shall maintain logs that describe and document brine wastes accepted by the treatment plant. Logs shall record, at a minimum, the following information and copies of logs shall be submitted to the Central Coast Water Board corresponding effluent sampling period and reports.

   a. Date and time of receipt of each truckload;

   b. Initials of District personnel present at the time of receipt of each truckload;

   c. Volume of brine waste on each truckload, owner of each truckload, and a brief description of each truckload (e.g., potable water softener regeneration waste, industrial process demineralizer regeneration waste, reverse osmosis brine, etc.)

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X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

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

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

Table E-10. Monitoring Periods and Reporting Schedule

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C. Discharge Monitoring Reports (DMRs)

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

D. Other Reports

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

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	3 400111001
Discharger	South San Luis Obispo County Sanitation District
Name of Facility	Wastewater Treatment Facility
Facility Address	1600 Aloha Place
	Oceano, CA 93445-9735
	San Luis Obispo County
Facility Contact, Title and Phone	Jerome Mychal Jones Jr., Chief Plant Operator, (805) 489 - 6666
Authorized Person to Sign and Submit Reports	SAME
Mailing Address	1600 Aloha Place, Oceano, CA 93445-9735
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	No
Recycling Requirements	No
Facility Permitted Flow	5.0 MGD
Facility Design Flow	5.0 MGD
Watershed	Arroyo Grande Creek
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

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

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

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

B. The Facility discharges wastewater to the Pacific Ocean, a water of the United States. The Discharger was previously regulated by Order No. R3-2009-0046 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048003, which was adopted on October 23, 2009, and expired on October 23, 2014. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on April 22, 2014. The application was deemed complete on April 22, 2014.

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

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

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

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

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

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

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

B. Discharge Points and Receiving Waters

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

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

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

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From September 2012 – September 2017)		
		Avg. Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	mg/L	40	60	90	39.9	56.1	88
	lbs/day[1]	1,668	2,502	3,753	743	1,178	1,835
Total Suspended Solids (TSS)	mg/L	40	60	90	56.9	41.4	480
	lbs/day[1]	1,668	2,502	3,753	1,020	1,132	1,293
Settleable Solids	mL/L	1.0	1.5	3.0	NA	NA	0.2
Turbidity	NTU	75	100	225	35.8	NA	57.8
Oil and Grease	mg/L	25	40	75	NA	NA	8.4
	lbs/day[1]	1,042	1,668	3,127	NA	NA	NA
Fecal Coliform Bacteria	MPN/100 mL	--	200[2]	2,000	NA	240	160,000
pH	standard units	6.0 – 9.0 at all times			6.98 – 8.19		

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

[2] 7-sample median

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

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

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

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

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

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

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

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

D. Compliance Summary

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

Table F-5. Compliance Summary

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

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

E. Planned Changes

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

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

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

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

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

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

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

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

   Beneficial uses applicable to the Pacific Ocean are as follows:

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Table F-6. Basin Plan Beneficial Uses

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

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

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

   The Ocean Plan defines elevated temperature wastes as:

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

   Requirements of this Order implement the Thermal Plan.

3. **California Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, 2012, and 2015. The State Water Board adopted the latest amendment on May 6, 2015, and it became effective on January 28, 2016. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the state to be protected as summarized below:

Table F-7. Ocean Plan Beneficial Uses

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

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

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

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