Central Coast Regional Water Quality Control Board

DRAFT ORDER NO. R3-2014-0033
NPDES NO. CA0049224

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

Table 1. Discharger Information

Discharger	**City of San Luis Obispo**
Name of Facility	**Water Resource Recovery Facility**
Facility Address	**35 Prado Road**
	San Luis Obispo, CA 93401
	San Luis Obispo County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Advanced tertiary treated effluent	35º 14' 40" N	120º 40' 45" W	San Luis Obispo Creek

Table 3. Administrative Information

This Order was adopted on:	**September 25, 2014**
This Order shall become effective on:	**December 1, 2014**
This Order shall expire on:	**November 30, 2019**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**June 3, 2019**
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Central Coast Region have classified this discharge as follows:	**Major discharge**

I, Kenneth A. Harris Jr., Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region on September 25, 2014.

Kenneth A. Harris Jr., Executive Officer

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I. FACILITY INFORMATION

Information describing the City of San Luis Obispo Water Reclamation Facility (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

A. Legal Authorities. This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters.

B. Background and Rationale for Requirements. The Central Coast Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.B, IV.C, V.B, and VI.C are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

D. Notification of Interested Parties. The Central Coast Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

E. Consideration of Public Comment. The Central Coast Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order No. R3-2002-0043, modified March 25, 2005, except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Coast Water Board from taking enforcement action for past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of treated wastewater at a location other than 35º 14' 40" N. Latitude, 120º 40' 45" W. Longitude, unless permitted by other waste discharge requirements or NPDES permit, is prohibited.

B. Discharge to San Luis Obispo Creek of wastewaters containing bentazon, molinate, or thiobencarb is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

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

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C [1]	mg/L	10	30	50	--	--
	lbs/day	425	1,275	2,125	--	--
Total Suspended Solids [1]	mg/L	10	30	75	--	--
	lbs/day	425	1,275	3,190	--	--
Oil and Grease	mg/L	5	--	10	--	--
pH	standard units	--	--	--	6.5	8.3
Chlorodibromomethane	µg/L	0.40	--	1.0	--	--
Dichlorobromomethane	µg/L	0.56	--	1.0	--	--
N-Nitrosodimethylamine	µg/L	0.00069	--	0.0014	--	--
Dissolved Oxygen	mg/L	--	--	--	4.0	--
Nitrate (as N)	mg/L	10	--	--	--	--
Settleable Solids	mL/L	0.1	--	--	--	--
Chlorine Residual	mg/L	--	--	ND [3]	--	--

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

[2] When the Discharger continuously monitors effluent pH, levels shall be maintained within specified ranges 99 percent of the time. To determine 99 percent compliance, the following conditions shall be met:

- The total time during which pH is outside the range of 6.5 – 8.3 shall not exceed 7 hours and 26 minutes in any calendar month;
- No single excursion from the range of 6.5 – 8.3 shall exceed 30 minutes;
- No single excursion shall fall outside the range of 6.0 – 9.0; and
- When continuous monitoring is not being performed, standard compliance guidelines shall be followed (i.e., between 6.5 – 8.3 at all times, measured daily)

[3] ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:

- The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
- No single excursion from 0.1 mg/L shall exceed 30 minutes;
- No single excursion shall exceed 2 mg/L.
- When continuous monitoring is not being performed, standard compliance guidelines shall be followed.

b. **Toxicity:** Discharges at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (Attachment E), shall not contain chronic toxicity at a level that would cause or contribute to toxicity in the receiving water. Chronic toxicity is a detrimental biological effect on growth rate, reproduction, fertilization success, larval development, or any other relevant measure of the health of an organism population or community. Compliance with this limit shall be determined by analysis of indicator organisms and toxicity tests as described in the MRP.

c. **Coliform:**

i. The fecal coliform concentrations shall not exceed a median of 2.2 MPN/100 mL as determined from the last 7 days of sampling results for which analyses have been completed;

ii. No more than one sample shall exceed 23 MPN/100 mL total coliform in any 30-day period;

iii. No sample shall exceed 240 MPN/100 mL total coliform.

d. **Effluent flow:** The average dry weather daily discharge flow shall not exceed 5.1 million gallons per day (MGD).

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications

The Discharger currently produces and distributes tertiary treated recycled water within the City of San Luis Obispo. Recycled water is regulated under the City's existing Master Reclamation Permit Order No. R3-2003-081, and therefore no additional specifications are applicable under this permit.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan, are consistent with the State Implementation Policy, and are a required part of this Order. The discharge shall not cause a violation of the following receiving water limitations in San Luis Obispo Creek. The Central Coast Water Board may require the Discharger to investigate the cause of exceedance(s) in the receiving water to determine whether the Discharger caused any water condition that exceeds the following receiving water limitations.

1. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. Coloration attributable to materials of waste origin shall not be greater than 15 units or 10 percent above natural background color, whichever is greater.
2. Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
3. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
4. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
5. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
6. Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.

7. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
8. The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
9. Concentrations of toxic metals and inorganic chemicals in waters shall not be increased in such a manner that may adversely affect beneficial uses.
10. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits:
    a. Where natural turbidity is between 0 and 50 Natural Turbidity Units (NTUs), increases shall not exceed 20 percent.
    b. Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTU.
    c. Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.
    d. Turbidity to exceed 5 NTU when the Creek contains no natural flow.
11. The pH value shall not be depressed below 7.0 nor raised above 8.3. The change in normal ambient pH levels shall not exceed 0.5 units.
12. Dissolved oxygen concentrations in receiving waters shall not be reduced below 7.0 mg/L at any time.
13. Effluent discharged shall not cause the receiving water temperature to increase more than 5° F above receiving water temperature. If, due to the Creek's low temperature as determined by early-morning monitoring, the discharge causes the Creek's temperature increase to exceed the limit, the Discharger must ensure the discharge shall not cause the receiving water to exceed 72.5° F (22.5° C). The Discharger shall monitor the Creek again four hours after discovering the exceedance and shall report both results to the Executive Officer in the monthly self-monitoring report.
14. Waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body in areas unaffected by the waste discharge.
15. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH_3) to exceed 0.025 mg/L (as N) in the receiving water.
16. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect the beneficial uses of the receiving water. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. For waters where existing concentrations are presently nondetectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods as prescribed in *Standard Methods for the Examination of Water and Wastewater*, latest edition, or other equivalent methods approved by the Executive Officer.

17. Waters shall not contain organic substances in concentrations greater than the following:

Table 6. Organic Substances Water Quality Objectives

Parameter	Water Quality Objective
Methylene Blue Activated Substances	0.2 mg/L
Phenols	1.0 µg/L
PCBs [1]	0.3 µg/L
Phthalate Esters	0.002 µg/L

[1] PCBs refer to the sum of PCB 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

18. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstance shall receiving waters contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.

19. Receiving waters shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.

20. Receiving waters shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural beneficial use. Interpretation of adverse effects shall be derived from guidelines of the University of California Agricultural Extension Service guidelines presented in Section III, Table 3-3 of the Basin Plan.

21. Receiving waters shall not contain concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in Section III, Table 3-4 of the Basin Plan. Salt concentrations for irrigation waters shall be controlled through implementation of the anti-degradation policy to the effect that mineral constituents of currently or potentially usable waters shall not be increased.

22. Receiving waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the levels presented in Section III, Table 3-5 of the Basin Plan.

23. Fecal coliform concentration, based on a minimum of not fewer than five samples for any 30-day period, shall not exceed a log mean of 200 organisms/100 mL, nor shall more than 10 percent of samples collected during any 30-day period exceed 400 organisms/100 mL.

24. Discharges shall not cause receiving water to exceed the following water quality objectives specifically identified for the San Luis Obispo Creek sub-area (Estero Bay sub-basin) by Table 3-7 of the Basin Plan, shown below in Table 7.

Table 7. Surface Water Quality Objectives

Constituent	Annual Running Mean[1], mg/L
Total Dissolved Solids	650
Chloride	100
Sulfate	100
Boron	0.2
Sodium	50

(1) Compliance shall be measured by comparison to an annual running mean of the past four quarterly sampling events.

B. Groundwater Limitations

Activities at the Facility shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the Basin Plan. The Central Coast Water Board may require the Discharger to investigate the cause of exceedances in the groundwater before determining whether the Discharger caused any water condition that exceeds the following groundwater limitations.

1. Groundwater shall not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses.
2. The Discharger shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwaters as determined by comparison of samples collected from wells located up-gradient and down-gradient of the waters affected by the discharge.
3. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. In no circumstances shall groundwater contain concentrations of radionuclides in excess of the MCLs for radioactivity presented in Table 4 of Title 22 California Code of Regulations, Division 4, Chapter 15, Article 5.
4. The median concentration of coliform organisms in groundwater, over any seven-day period, shall be less than 2.2 organisms/100 mL.
5. Groundwater shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of Title 22 California Code of Regulations, Division 4, Chapter 15.
6. Groundwater shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-3 of the Basin Plan.
7. Groundwater used for irrigation and livestock watering shall not exceed concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in Section III, Table 3-4 of the Basin Plan.
8. Groundwater shall not contain pollutants at concentrations greater than the following established in Table 3-8 of the Basin Plan for groundwaters within the San Luis Obispo Creek sub-area (Estero Bay sub-basin).

Table 8. Groundwater Objectives

Constituent	Median[1], mg/L
Total Dissolved Solids	900
Chloride	200
Sulfate	100
Boron	0.2
Sodium	50
Nitrogen (as N)	5

[1] Objectives shown are median values based on data averages; objectives are based on preservation of existing water quality enhancement believed attainable following control of point sources.

VI. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with the following provision:

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

B. Monitoring and Reporting Program (MRP) Requirements

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

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

C. Special Provisions

1. Reopener Provisions

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

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

As indicated in section V.D of the MRP, when acute toxicity is detected in the effluent or chronic toxicity is detected greater than a chronic toxicity trigger of 1 TU_c, and the discharge is continuing, the Discharger shall resample immediately, retest, and report the results to the Executive Officer, who will determine whether to initiate an enforcement action, require a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan, or implement other measures.

A TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. A

TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases - characterization, identification, and confirmation using aquatic organism toxicity tests. The TRE shall include all reasonable steps to identify the source of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level once the source of toxicity is identified.

The Discharger shall maintain a TRE Workplan, which describes steps that the Discharger intends to follow in the event that a toxicity effluent limitation or toxicity trigger established by this Order is exceeded in the discharge. The workplan shall be prepared in accordance with current technical guidance and reference material, including EPA/600/2-88/062, and shall include, at a minimum:

i. Actions that will be taken to investigate/identify the causes/sources of toxicity;

ii. Actions that will be evaluated to mitigate the impact of the discharge, to correct the noncompliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken); and

iii. A schedule under which these actions will be implemented.

When monitoring measures toxicity in the effluent above a limitation or toxicity trigger established by this Order, if the discharge is continuing, the Discharger shall resample immediately, and retest for acute or chronic toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer as soon as possible following receipt of monitoring results. The Executive Officer will determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures. When the Executive Officer requires the Discharger to conduct a TRE, the TRE shall be conducted giving due consideration to guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (USEPA document Nos. EPA 600/R-91/003, 600/R-92/080, and 600/R-92/081, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

Table 9. Toxicity Reduction Evaluation Schedule

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

b. **Facilities Evaluation**

Based on Discharger reports, the Facility is operating at 88% of its design capacity for flow. Based on that data, it appears that the monthly average daily flow will or may reach design capacity during the term of this permit. Pursuant to Central Coast Standard Provisions, the Discharger shall evaluate the need for future expansion of the Facility to accommodate future growth within the City of San Luis Obispo. The evaluation shall quantify future flows to the plant from indirect dischargers, California State Polytechnic University and San Luis Obispo County Airport, and future annexations to the City of San Luis Obispo. This evaluation shall be completed as part of the Facilities Plan during the term of this permit and submitted to the Central Coast Water Board.

c. **Effluent pH Evaluation**

The Discharger shall complete an Effluent pH Evaluation by February 1, 2016 to assess opportunities for effluent pH adjustments consistent with more stringent Basin Plan water quality objectives for receiving water (i.e., 7.0-8.3 standard units), impact on receiving water and environment, cost to pH adjust, and expected frequency and duration that effluent pH would drop below 7.0 s.u. under current operations. Central Coast Water Board staff will review the data to consider whether a more stringent pH effluent limit would indeed be more protective of water quality objectives, or if existing pH effluent limits are adequately protective of receiving water quality objectives.

3. Best Management Practices and Pollution Prevention

a. **Salt and Nutrient Management Program**

i. The Discharger shall develop and implement an ongoing Salts Management Program dedicated to minimizing the discharge of salts to and attainment of applicable WQOs for salts in San Luis Obispo Creek sub-basin of the Estero Bay Drainage Basin. Additionally, the Discharger shall develop and implement a Nutrient Management Program, with the intent of reducing mass loading of nutrients in treated effluent and attainment of applicable WQOs for nutrients in the same basin.

ii. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial, and residential dischargers.

iii. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may also include source control (non-human waste from commercial and industrial sources) as appropriate.

iv. As part of the salts and nutrients management program, the Discharger shall submit an annual report of salts and nutrients reduction efforts. This salts and nutrients management report shall be included as part of the annual report described in the MRP (Attachment E). The report shall be submitted by February 1st, and shall include, as appropriate:

(a) Salt Component

(1) Calculations of annual salt mass discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;

(2) Analysis of wastewater evaporation/salt concentration effects;

(3) Analysis of groundwater monitoring results for salts constituents and associated trends;

(4) Analysis of potential impacts of salt loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);

(5) A summary of existing salt reduction measures; and

(6) Recommendations and time schedules for implementation of any additional salt reduction measures;

(b) Nutrient Component

(1) Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;

(2) Analysis of wastewater treatment facility ability to facilitate nitrification and denitrification, or other means of nitrogen removal;

(3) Analysis of groundwater monitoring results for nitrogen constituents and trends;

(4) Analysis of potential impacts of nitrogen loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);

(5) A summary of existing nitrogen loading reduction measures; and

(6) Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.

v. As an alternative to the Salt and Nutrient Management Program requirements described above, upon Executive Officer approval, the Discharger may submit documentation and summary of participation in a regional salts and nutrients management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy).

b. **Pollutant Minimization Program**

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

i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or

ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

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

iii. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

iv. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

v. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

vi. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

vii. An annual status report that shall be sent to the Central Coast Water Board including:

(a) All PMP monitoring results for the previous year;

(b) A list of potential sources of the reportable priority pollutant(s);

(c) A summary of all actions undertaken pursuant to the control strategy; and

(d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

The Facility shall be operated as specified under Standard Provision I.A.4 of Attachment D.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Management**

i. The handling, treatment, use, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of CWA Section 405 and USEPA regulations at 40 C.F.R. parts 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.

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

iii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 C.F.R. part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.

iv. All requirements of 40 C.F.R. part 503 and 23 CCR Chapter 15 are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.

v. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.

vi. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.

vii. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.

viii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.

ix. The Discharger shall submit an annual report to the USEPA and the Central Coast Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 C.F.R. part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method. This self-monitoring report shall be postmarked by February 19th of each year and report for the period of the previous calendar year.

b. **Pretreatment**

The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 C.F.R. and shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, or other appropriate parties, as provided in the CWA, as amended (33 USA 1351 et seq.). The Discharger shall implement and enforce its Approved Publicly Owned Treatment Works (POWT) Pretreatment Program. Implementation of the Discharger's Approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. USEPA may initiate enforcement action against an industrial user for non-compliance with applicable standards and requirements as provided in the CWA.

The Discharger shall enforce the requirements promulgated under Sections 307 (b), (c), & (d) and 402 (b) of the CWA. The Discharger shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements, or, in the case of a new industrial user, upon commencement of the discharge.

The Discharger shall perform the pretreatment functions as required in 40 C.F.R. 403, including, but not limited to:

i. Implement necessary legal authorities as provided in 40 C.F.R 403.8 (f)(1);

ii. Enforcement of pretreatment requirements under 40 C.F.R. 403.5 and 403.6;

iii. Implement the programmatic functions as provided in 40 C.F.R. 403.8 (f)(2); and

iv. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 C.F.R. 403.8 (f)(3).

The Discharger shall submit annually a report to the USEPA – Region 9, the Central Coast Water Board, and the State Water Board describing the Discharger's pretreatment activities over the previous twelve months. If the Discharger violates this Order's pretreatment conditions or requirements, it shall also include reasons

for noncompliance, and a statement how and when it shall comply. This annual report is due by February 1st of each year and shall contain, but not be limited to, the contents described in the "Pretreatment Reporting Requirements" contained in the Monitoring and Reporting Program (Attachment E).

The Discharger shall comply, and ensure affected "indirect dischargers" comply with Paragraph II.D.1 of the "Standard Provisions and Reporting Requirements."

6. Other Special Provisions

a. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS0000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.

b. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order 2006-0003-DWQ).** This General Permit, adopted on May 2, 2006, is applicable to all "federal and State agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publically owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger has obtained coverage under the General Permit.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. General.

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

B. Multiple Sample Data.

When determining compliance with an average monthly effluent limit and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number

of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

ATTACHMENT A – DEFINITIONS

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

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

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

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

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

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

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the

dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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

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

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

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

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

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

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

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Central Coast Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if

applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Central Coast Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in the Central Coast Water Board Basin Plan.

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

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

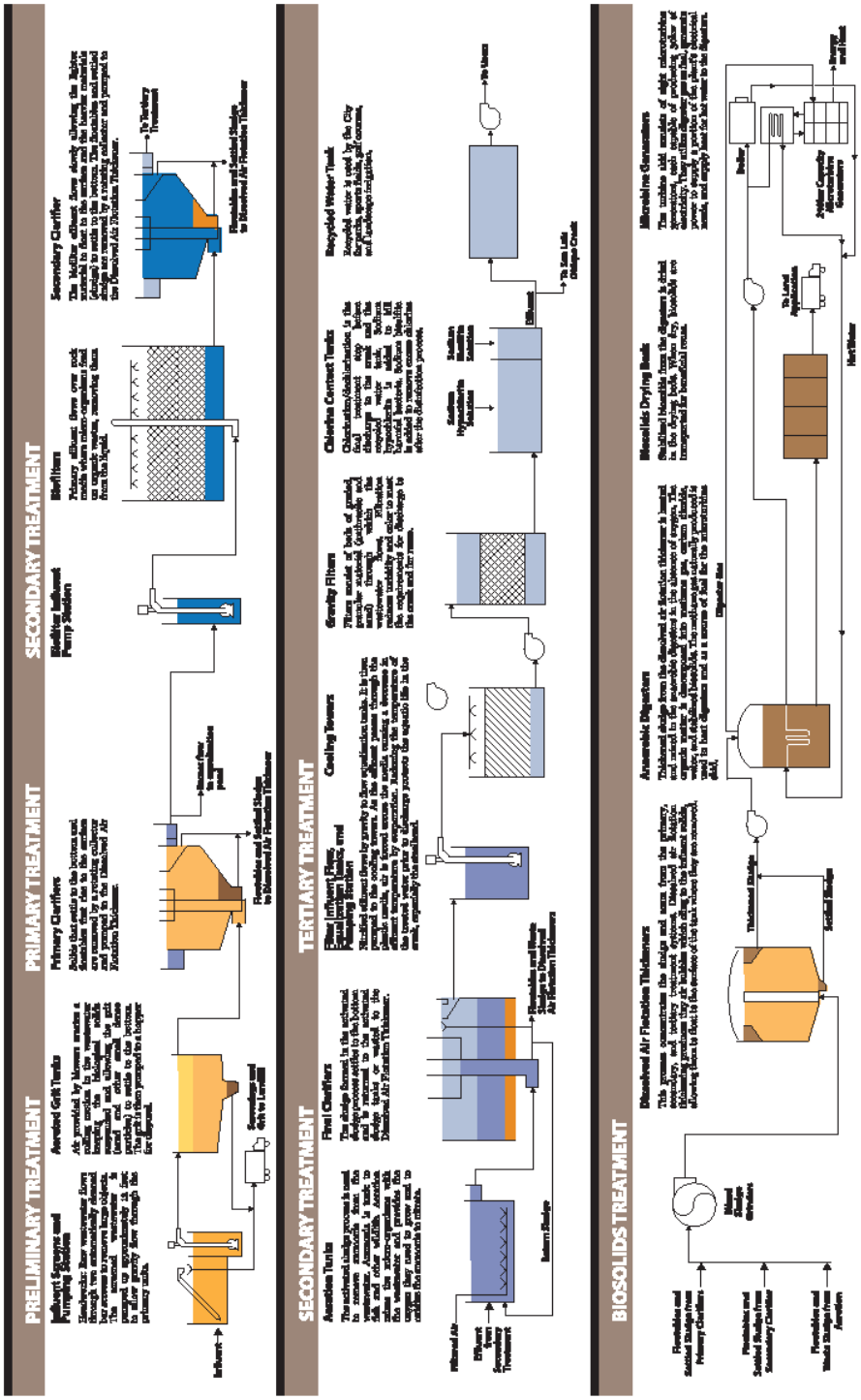
where:
x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

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

ATTACHMENT B – MAP

Drawing Reference: **SAN LUIS OBISPO (CA)** U.S.G.S TOPOGRAPHIC MAP 7.5 MINUTE QUADRANGLE *Date: 1981*	SITE LOCATION MAP CITY OF SAN LUIS OBISPO WATER RECLAMATION FACILITY SAN LUIS OBISPO COUNTY	N W E S

ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. FEDERAL STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Federal Standard Provisions – Permit Compliance

1. **Duty to Comply**

   a. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

   b. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

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

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

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

5. **Property Rights**

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

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

6. **Inspection and Entry.** The Discharger shall allow the Central Coast Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 C.F.R. § 122.41(i); Water Code §13383]:

a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 C.F.R. § 122.41(i)(1)];

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 C.F.R. § 122.41(i)(2)];

c. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 C.F.R. § 122.41(i)(3)]; and

d. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location [40 C.F.R. § 122.41(i)(4)].

7. **Bypass**

a. **Definitions**

i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 C.F.R. § 122.41(m)(1)(i)].

ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 C.F.R. § 122.41(m)(1)(ii)].

b. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Federal Standard Provisions – Permit Compliance I.A.7.c, I.A.7.d, and I.A.7.e below [40 C.F.R. § 122.41(m)(2)].

c. **Prohibition of bypass.** Bypass is prohibited, and the Central Coast Water Board may take enforcement action against a Discharger for bypass, unless [40 C.F.R. § 122.41(m)(4)(i)]:

i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 C.F.R. § 122.41(m)(4)(i)(A)];

ii. There were no feasible alternatives to the bypass, such as use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 C.F.R. § 122.41(m)(4)(i)(B)]; and

iii. The Discharger submitted notice to the Central Coast Water Board as required under Federal Standard Provisions – Permit Compliance I.A.7.e below [40 C.F.R. § 122.41(m)(4)(i)(C)].

d. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three conditions listed in Federal Standard Provisions – Permit Compliance I.A.7.c above [40 C.F.R. § 122.41(m)(4)(ii)].

e. **Notice.**

i. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 C.F.R. § 122.41(m)(3)(i)].

ii. **Unanticipated bypass.** The Discharger shall submit notice of an unanticipated bypass as required in Federal Standard Provisions - Reporting I.E.5 below (24-hour notice) [40 C.F.R. § 122.41(m)(3)(ii)].

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

a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Federal Standard Provisions – Permit Compliance I.A.8.b below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 C.F.R. § 122.41(n)(2)].

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

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

B. Federal Standard Provisions – Permit Action

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

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

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

C. Federal Standard Provisions – Monitoring

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

2. Monitoring results must be conducted according to test procedures under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503 unless other test procedures have been specified in this Order [40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv)].

D. Federal Standard Provisions – Records

1. **Records Retention.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

2. **Records of monitoring information shall include:**

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

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

   c. The date(s) analyses were performed [40 CF.R. § 122.41(j)(3)(iii)];

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

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

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

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

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

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

E. Federal Standard Provisions – Reporting

1. **Duty to Provide Information**. The Discharger shall furnish to the Central Coast Water Board, State Water Board, or USEPA within a reasonable time, any information which the Central Coast Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Coast Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 C.F.R. § 122.41(h); Water Code §13267].

2. **Signatory and Certification Requirements**

   a. All applications, reports, or information submitted to the Central Coast Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Federal Standard Provisions – Reporting I.E.2.b, I.E.2.c, I.E.2.d and I.E.2.e below [40 C.F.R. § 122.41(k)].

   b. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more

manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 C.F.R. § 122.22(a)(1)].

c. All reports required by this Order and other information requested by the Central Coast Water Board, State Water Board, or USEPA shall be signed by a person described in Federal Standard Provisions – Reporting I.E.2.b above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   i. The authorization is made in writing by a person described in Federal Standard Provisions – Reporting I.E.2.b above [40 C.F.R. § 122.22(b)(1)];

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

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

d. If an authorization under Federal Standard Provisions – Reporting I.E.2.c above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Central Coast Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 C.F.R. § 122.22(c)].

e. Any person signing a document under Federal Standard Provisions – Reporting I.E.2.b or I.E.2.c above shall make the following certification:

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

3. **Monitoring Reports**

   a. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 C.F.R. § 122.41(l)(4)].

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

c. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Coast Water Board [40 C.F.R. § 122.41(l)(4)(ii)].

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

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

5. **Twenty-Four Hour Reporting**

a. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 C.F.R. § 122.41(l)(6)(i)].

b. The following shall be included as information that must be reported within 24 hours under this paragraph [40 C.F.R. § 122.41(l)(6)(ii)]:

i. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 C.F.R. § 122.41(l)(6)(ii)(A)].

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

c. The Central Coast Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 C.F.R. § 122.41(l)(6)(iii)].

6. **Planned Changes.** The Discharger shall give notice to the Central Coast Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 C.F.R. § 122.41(l)(1)].

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

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

c. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 C.F.R. § 122.41(l)(1)(iii)].

7. **Anticipated Noncompliance.** The Discharger shall give advance notice to the Central Coast Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. [40 C.F.R. § 122.41(l)(2)].

8. **Other Noncompliance.** The Discharger shall report all instances of noncompliance not reported under Federal Standard Provisions – Reporting I.E.3, I.E.4, and I.E.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Federal Standard Provisions – Reporting I.E.5 above. [40 C.F.R. § 122.41(l)(7)].

9. **Other Information.** When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Coast Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [40 C.F.R. § 122.41(l)(8)].

F. Federal Standard Provisions – Enforcement

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

G. Additional Federal Provisions – Notification Levels

1. **Non-Municipal Facilities.** Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Central Coast Water Board as soon as they know or have reason to believe [40 C.F.R. § 122.42(a)]:

   a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 C.F.R. § 122.42(a)(1)]:

      i. 100 micrograms per liter (µg/L) [40 C.F.R. § 122.42(a)(1)(i)];

      ii. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4, 6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 C.F.R. § 122.42(a)(1)(ii)];

      iii. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 C.F.R. § 122.42(a)(1)(iii)]; or

      iv. The level established by the Central Coast Water Board in accordance with 40 C.F.R. § 122.44(f) [40 C.F.R. § 122.42(a)(1)(iv)].

   b. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" [40 C.F.R. § 122.42(a)(2)]:

      i. 500 micrograms per liter (µg/L) [40 C.F.R. § 122.42(a)(2)(i)];

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

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

iv. The level established by the Central Coast Water Board in accordance with 40 C.F.R. § 122.44(f) [40 C.F.R. § 122.42(a)(2)(iv)].

2. **Publicly Owned Treatment Works (POTWs).** All POTWs shall provide adequate notice to the Central Coast Water Board of the following [40 C.F.R. § 122.42(b)]:

a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 C.F.R. § 122.42(b)(1)]; and

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. [40 C.F.R. § 122.42(b)(2)]

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

II. CENTRAL COAST REGION'S STANDARD PROVISIONS (JANUARY 2013)

A. Central Coast General Permit Conditions

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

B. Central Coast Standard Provisions – Provisions

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by Section 13050 of the California Water Code.
2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.
3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Code of Regulations.
6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
   a. violation of any term or condition contained in this order;
   b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;
   c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
   d. a substantial change in character, location, or volume of the discharge.

7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.

8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:

    a. Promulgation of a new or revised effluent standard or limitation;

    b. A material change in character, location, or volume of the discharge;

    c. Access to new information that affects the terms of the permit, including applicable schedules;

    d. Correction of technical mistakes or mistaken interpretations of law; and

    e. Other causes set forth under Subpart D of 40 C.F.R. 122.

9. Safeguards shall be provided to assure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:

    a. Identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)

    b. Evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.

11. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; ANSI/NETA MTS *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.

12. If the discharger's facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger should implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.

13. Production and use of recycled water is subject to the approval of the Board. Production and use of recycled water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Code of Regulations and Chapter 7, Division 7, of the California Water Code. An engineering report pursuant to section 60323, Title 22, of the California Code of Regulations is required and a waiver or water reclamation requirements from the 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 II.F.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 II.F.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 Public Health (DPH) 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 and the State Department of Fish and Game.

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 – Definitions II.B.1 above, and Federal Standard Provision – Monitoring I.C.1. 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 at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.

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

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

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

   In addition to complying with Federal Standard Provision – Reporting I.E.2, 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 are 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 IB.3.

7. Except for data determined to be confidential under Section 308 of the Clean Water Act (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 EPA. Please also see Federal Standard Provision – Records I.D.3.

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

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

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

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

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

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

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

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

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

E. Central Coast Standard Provisions – General Pretreatment Provisions

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 C.F.R. part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 C.F.R. Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards by the date specified therein or, if a new indirect discharger, upon commencement of discharge.

F. Central Coast Standard Provisions – Enforcement

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

G. Central Coast Standard Provisions – Definitions

(Not otherwise included in Attachment A to this Order)

1. A “composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.
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: (l) the Discharger, (2) the local sewering entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger”, it refers to the discharger.)
4. “Duly Authorized Representative" is one where:
   a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision I.E.2;
   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 II.F.2 and instantaneous maximum limits.
6. "Hazardous substance” means any substance designated under 40 C.F.R. 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, or 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:

   Log Mean = (C1 x C2 x...x 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 flow rate 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 F.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 II.F.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 = (Xl + 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, storm waters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 C.F.R. 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 (%) = l00 x (l – $C_{effluent}$ / $C_{influent}$)

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass”. It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.
22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
    a. Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;
    b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
    c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
    d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 C.F.R. 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions I.E.5.).
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 Resources Control Board.

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH), in accordance with 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 22151. 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 devise shall be calibrated at least once per year to ensure continued accuracy of the devices.

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

F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 C.F.R. 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxics listed by the California Toxics Rule (CTR) shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005) (SIP).

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

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Influent	INF-001	A location where a representative sample of the influent into the facility can be collected prior to any plant return flows or treatment processes
Effluent	EFF-001	A location where a representative sample of the effluent from the facility can be collected after all treatment processes and prior to commingling with other waste streams or being discharged into San Luis Obispo Creek
Receiving Water	RSW-001	At Fox Canyon Road
Receiving Water	RSW-002	At Mission
Receiving Water	RSW-003	At Marsh Street Bridge
Receiving Water	RSW-004	50 feet upstream of effluent structure discharge point on San Luis Obispo Creek
Receiving Water	RSW-005	A location in San Luis Obispo Creek immediately upstream of the confluence with Prefumo Canyon Creek
Receiving Water	RSW-006	A location in Prefumo Canyon Creek 50 feet upstream of the confluence with San Luis Obispo Creek
Receiving Water	RSW-007	Approximately 0.5 miles downstream from effluent structure discharge point on San Luis Obispo Creek
Receiving Water	RSW-008	At Higuera Street Bridge, near US 101
Biosolids	BIO-001	Representative sample location for biosolids at the last point in the biosolids handling process (i.e., the drying beds just before removal).

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
Biochemical Oxygen Demand, 5-day @ 20°C (BOD_5)	mg/L	24-hr. composite	1/Month
Total Suspended Solids (TSS)	mg/L	24-hr. composite	1/Month

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor effluent at EFF-001 as follows.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Daily Flow	MG	Metered	1/Day
Instantaneous Maximum Flow Rate	MGD	Metered	1/Day
Maximum Daily Flow	MGD	Calculated	1/Month
Mean Daily Flow	MGD	Calculated	1/Month
BOD Mass Emissions Rate	lbs/day	Calculated	1/Month
pH	s.u.	Grab	1/Day [1], [2]
Chlorine Residual	mg/L	Continuous or Grab [1]	Grab samples shall be taken a minimum of twice per day, and within 30 minutes of any excursion above 0.1 mg/L
Total Chlorine	lbs/day	Instantaneous	1/Day
Temperature	°C	Grab [2]	5/Week
Fecal Coliform Organisms	MPN/100 mL	Grab	5/Week
Total Coliform Organisms	MPN/100 mL	Grab	5/Week
Settleable Solids	ml/L	24-hr. composite	5/Week
Ammonia (as N)	mg/L	Grab	1/Week
Total Suspended Solids	mg/L	24-hr. composite	1/Week
Turbidity	NTU	24-hr. composite	1/10 days
BOD, 5-day	mg/L	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Color	mg/L	Grab	1/Month
Oil and Grease	mg/L	Grab	1/Month
Total Kjeldahl Nitrogen (TKN) (as N)	mg/L	Grab	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorodibromomethane	µg/L	24-hr. composite	1/Month
Dichlorobromomethane	µg/L	24-hr. composite	1/Month
Nitrite (as N)	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Dissolved Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Total Dissolved Solids	mg/L	Grab	1/Quarter
Pentachlorophenol	µg/L	24-hr. composite	1/Quarter
N-Nitrosodimethylamine	µg/L	24-hr. composite	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Chronic Toxicity [3]	TUc	Grab	1/Year (in October)
Acute Toxicity [3]	TUa	Grab	1/Year (in October)
MBAS	mg/L	Grab	1/Year (in October)
Boron	mg/L	Grab	1/Year (in October)
Cobalt	mg/L	Grab	1/Year (in October)
Iron	mg/L	Grab	1/Year (in October)
Lithium	mg/L	Grab	1/Year (in October)
Manganese	mg/L	Grab	1/Year (in October)
Molybdenum	mg/L	Grab	1/Year (in October)
Vanadium	mg/L	Grab	1/Year (in October)
CTR Pollutants [4], [5]	µg/L	24-hr. composite	1/Year (in October)
Title 22 Pollutants [6], [7]	µg/L	24-hr. composite	1/Year (in October)

[1] Report minimum and maximum pH values and maximum chlorine residual value. Also report if there is natural flow in San Luis Obispo Creek.

[2] Temperature and pH shall be measured simultaneously with the sample taken for measurement of total ammonia. Results shall be used to calculate un-ionized ammonia concentration.

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

[4] The CTR Priority Pollutants are those listed by the California Toxics Rule at 40 C.F.R. § 131.38(b)(1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibrate standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all MLs, the Discharger and is analytical laboratory shall select the lowest ML.

[5] Monitoring for the CTR pollutant in the effluent shall occur simultaneously with monitoring required for the CTR pollutants in the receiving water.

[6] The Title 22 Pollutants are those for which primary Maximum Contaminant Levels (MCLs) have been established by the Department of Public Health and which are listed in Tables 64431-A and 64444-A of the California Code of Regulations, Title 22, Division 4, Chapter 15. Where these pollutants are included in other groups of pollutants (CTR Priority Pollutants), monitoring does not need to be duplicated. Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by Title 22 of the California Code of Regulations, Division 4, Chapter 15, section 64432 and 64445.1.

[7] Monitoring for the Title 22 pollutants in the effluent shall occur simultaneously with monitoring required for the Title 22 pollutants in the receiving water.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

1. Acute toxicity shall be evaluated by measuring survival of test organisms exposed to 96-hour static renewal toxicity tests.

2. Test organisms shall be fathead minnow unless the Executive Officer specifies in writing otherwise. The Discharger may be required by the Executive Officer to retest sensitivity upon changes to the facility or operations which may affect effluent toxicity.

3. All bioassays shall be performed using the most sensitive species based on the most recent screening test results and in accordance with the most up-to-date protocols in 40 C.F.R. part 136, currently in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms,* 5th Edition.

4. If the Discharger can demonstrate that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limitation may be determined after the test samples are adjusted to remove the influence of those substances. The Discharger must obtain written approval from the Executive Officer to authorize such an adjustment.

5. The sample shall be taken from treated effluent after disinfection. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported in the monthly SMRs or as specified by the Central Coast Water Board.

6. The presence of acute toxicity shall be determined as significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test. The Discharger shall include with the SMR the percent survival of the organisms for both the effluent and control, and the results of the t-test ("statistically different" or "not statistically different").

   If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

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

1. **Chronic Toxicity Monitoring Requirements**

   a. *Toxicity Trigger.* A toxicity trigger of 1 TUc is established for the discharge of effluent through Discharge Point 001.

   b. *Sampling.* The Discharger shall collect grab samples of the effluent at EFF-001, as specified in Table E-3 above, for critical life stage toxicity testing as indicated below.

   c. *Test Species*. The test species for chronic toxicity screening shall include a vertebrate, invertebrate, and an aquatic plant as identified in Table E-4 below. The Executive Officer may change the test species if data suggest that another test species is more sensitive to the discharge. After a three-month screening period, monitoring may be reduced to the most sensitive species.

Table E-4. Short-Term Methods for Estimating Chronic Toxicity – Fresh Water

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow	*Pimephales promelas*	Larval Survival and Growth	7
Water Flea	*Ceriodaphnia dubia*	Survival; number of young	6 to 8 days
Green Alga	*Selenastrum capricornutum*	Growth Rate	4 days

d. *Methodology.* Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1 and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms,* currently third edition (EPA-821-R-02-014) and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, currently fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

e. *Dilution Series*. The Discharger shall conduct tests at 100%, 85%, 70%, 50%, and 25%. The "%" represents percent effluent as discharged. The Discharger may use the biological buffer MOPS (3-(N-Morpholino)propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test.

2. **Chronic Toxicity Reporting Requirements**

a. *Routine Reporting.* Toxicity test results for the current reporting period shall include, at a minimum, for each test:

i. Sample dates

ii. Test initiation date

iii. Test species

iv. End point values for each dilution (e.g., number of young, growth rate, percent survival)

v. NOEC values in percent effluent

vi. IC_{15}, IC_{25}, IC_{40}, and IC_{50} values (or EC_{15}, EC_{25} ... etc.) in percent effluent

vii. TUc values (100/NOEC, 100/IC_{25}, or 100/EC_{25})

viii. Mean percent mortality (±s.d.) after 96 hours in 100% effluent (if applicable)

ix. NOEC and LOEC values for reference toxicant tests

x. IC_{50} or EC_{50} values for reference toxicant test

xi. Available water quality measurements for each test (pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia)

b. *Compliance Summary.* The results of the chronic toxicity testing shall be provided in the next Self-Monitoring Report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under 2.a.

C. Quality Assurance

1. For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an LC_{50}).
2. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
3. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the Discharger must resample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger collects the first sample required to complete the retest.
4. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

D. Accelerated Monitoring Requirements

1. When acute toxicity is detected in the effluent or when the chronic toxicity trigger of 1 TU_c is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results.
3. If implementation of the Discharger's Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the effluent limitation or toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the effluent limitation or toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
4. If none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

E. Conducting Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE)

1. A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
   a. Two of the three accelerated toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, section V.D.
   b. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
   c. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
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 I 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 shall 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 March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001, RSW-002, RSW-003, RSW-004, RSW-005, RSW-006, RSW-007, RSW-008

1. The Discharger shall monitor the receiving water at Monitoring Locations RSW-001, RSW-002, RSW-003, RSW-004, RSW-005, RSW-006, RSW-007, AND RSW-008 as follows:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type [1]	Sampling Station	Minimum Sampling Frequency
Flow [2]	cfs	Instantaneous	4, 5, 7, 8	1/Week, Apr – Oct
Flow	MGD	Instantaneous	4, 5, 7, 8	1/Week, Apr – Oct [3]
Turbidity [2]	NTU	Grab	4, 5	1/Week
Color [2]	Units	Grab	4, 5	1/Week
pH [2] [4]	s.u.	Grab	4, 5	1/Week
Dissolved Oxygen	mg/L	Grab	4, 5	1/Week
Temperature [4]	°C	Grab	4, 5	1/Week
Un-Ionized	mg/L	calculated	4, 5	1/Month

Ammonia [4]				
Total Dissolved Solids	mg/L	Grab	4, 5	1/Quarter
Sodium	mg/L	Grab	4, 5	1/Quarter
Chloride	mg/L	Grab	4, 5	1/Quarter
pH [4]	s.u.	Grab	5, 7, 8	1/Month
Nitrate as N	mg/L	Grab	5, 7, 8	1/Month
Dissolved Oxygen	mg/L	Grab	5, 7, 8	1/Month
Total Phosphate as P	mg/L	Grab	5, 7, 8	1/Month
Algal description [5]	Visual observation	Grab	5, 7, 8	1/Month
Nitrite as N	mg/L	Grab	5, 7, 8	1/Month
Ammonia as N	mg/L	Grab	5, 7, 8	1/Month
TKN as N	mg/L	Grab	5, 7, 8	1/Month
Dissolved Orthophosphate as P	mg/L	Grab	5, 7, 8	1/Month

[1] Samples shall be obtained only when safe to do so.
[2] The San Luis Obispo Creek flow rate shall determine the upstream and downstream stations where these constituents shall be monitored, as follows. If the creek flows underground between Monitoring Location RSW-002 and the discharge point, samples shall be obtained from Monitoring Location RSW-002. If the creek flows aboveground from Monitoring Location RSW-002 to the discharge point, samples shall be obtained from Monitoring Location RSW-004. In either case, Monitoring Location RSW-005 shall be the downstream location.
[3] Sampling shall be concurrent with sampling of effluent for ammonia.
[4] Temperature and pH are to be measured at the same time the Total Ammonia sample is collected. Results shall be used to calculate and report Un-Ionized Ammonia concentrations.
[5] Narrative description of algae present at the monitoring location shall include: algal color, location with respect to stream banks and depth of water, and appearance (filamentous, matting, attached, etc., percent coverage of water surface).

IX. OTHER MONITORING REQUIREMENTS

A. Solids/Biosolids Monitoring, Notification, and Reporting

1. Biosolids Monitoring

   a. Biosolids shall be tested for the metals required in 40 C.F.R. § 503.16 (for land application) or 40 C.F.R. § 503.26 (for surface disposal), using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), as required in 40 C.F.R. § 503.8(b)(4), at the following minimum frequencies:

Volume (dry metric tons) [1]	Sampling and Analysis Frequency [2]
0-290	Once per year
290-1500	Once per quarter
1500-15000	Once per 60 days
> 15000	Once per month

[1] For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples.
[2] Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis. Biosolids to be land applied shall be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required above

b. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 C.F.R. § 503.32. Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day. If pathogen reduction is demonstrated using a "Process to Significantly/Further Reduce Pathogens", the Discharger shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in 11(a) above. For fecal coliform, at least seven grab samples must be drawn during each monitoring event and a geometric mean calculated from these seven samples.

c. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 C.F.R. § 503.33(b).

d. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with greater than five million gallons per day (MGD) influent flow shall sample biosolids for pollutants listed under Section 307(a) of the Clean Water Act (as required in the pretreatment section of the permit for POTW's with pretreatment programs). Class 1 facilities and Federal facilities greater than five MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the time of their next priority pollutant scan if they have not done so within the past five years, and once per five years thereafter.

e. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness in accordance 40 C.F.R. part 261.

f. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

g. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Method 9095) at the frequency in 11 (a) above or more often if necessary to demonstrate that there are no free liquids.

2. Biosolids Notification

The Discharger, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:

a. Notification of non-compliance: The Discharger shall notify U.S. EPA Region 9, the Central Coast Regional Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall notify U.S. EPA Region 9 and the affected Regional Boards of the non-compliance in writing within five working days of becoming aware of the non-compliance. The Discharger shall require their biosolids management contractors to notify U.S. EPA Region 9 and the affected Regional Boards of any non-compliance within the same timeframes. See Attachment D for Regional Board contact information.

b. If biosolids are shipped to another State or to Indian Lands, the Discharger must send 60 days prior notice of the shipment to the permitting authorities in the

receiving State or Indian Land (the U.S. EPA Regional Office for that area and the State/Indian authorities).

c. For land application: Prior to reuse of any biosolids from this facility to a new or previously unreported site, the Discharger shall notify U.S. EPA and Regional Board. The notification shall include a description and topographic map of the proposed site(s), names and addresses of the applier, and site owner and a listing of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates and determination of agronomic rates. If any biosolids within a given monitoring period do not meet 40 C.F.R. § 503.13 metals concentration limits, the Discharger (or its contractor) must pre-notify U.S. EPA, and determine the cumulative metals loading at that site to date, as required in 40 C.F.R. § 503.12.

d. The Discharger shall notify the applier of all the applier's requirements under 40 C.F.R. part 503, including the requirement that the applier certify that the management practices, site restrictions, and any applicable vector attraction reduction requirements have been met. The Discharger shall require the applier to certify at the end of 38 months following application of Class B biosolids that the harvesting restrictions in effect for up to 38 months have been met.

e. For surface disposal: Prior to disposal to a new or previously unreported site, the Discharger shall notify U.S. EPA and the Regional Board. The notice shall include description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any state or local permits. The notice shall describe procedures for ensuring public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

3. Biosolids Reporting

The Discharger shall submit an annual biosolids report to the U.S. EPA Region 9 Biosolids Coordinator and Regional Board by February 19th of each year for the period covering the previous calendar year. The report shall include:

a. The amount of biosolids generated during the reporting period, in dry metric tons, and the amount accumulated from previous years;

b. Results of all pollutant and pathogen monitoring required in Item 12 above and the Monitoring and Reporting Program of this Order. Results must be reported on a 100% dry weight basis for comparison with 40 C.F.R. part 503 limits;

c. Descriptions of pathogen reduction methods and vector attraction reduction methods, including supporting time and temperature data, and certifications, as required in 40 C.F.R. §§ 503.17 and 503.27;

d. Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and volumes delivered to each.

e. For land application sites, the following information must be submitted by the Discharger, unless the Discharger requires its biosolids management contractors to report this information directly to the U.S. EPA Region 9 Biosolids Coordinator:

i. Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner.

ii. Volumes applied to each filed (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;

iii. Crop planted, dates of planting and harvesting;

iv. For any biosolids exceeding 40 C.F.R. § 503.13 Table 3 metals concentrations: the locations of sites where applied and cumulative metals loading at that site to date;

v. Certifications of management practices in 40 C.F.R. § 503.14; and

vi. Certifications of site restrictions in 40 C.F.R. § 503(b)(5).

f. For surface disposal sites:

i. Locations of sites, site operator, site owner, size of parcel on which disposed;

ii. Results of any required groundwater monitoring;

iii. Certifications of management practices in 40 C.F.R. § 503.24; and

iv. For closed sites, date of site closure and certifications of management practices for the three years following site closure.

g. For all biosolids used or disposed at the Permittee's facilities, the site and management practice information and certification required in 40 C.F.R. §§ 503.17 and 503.27; and

h. For all biosolids temporarily stored, the information required in 40 C.F.R. § 503.20 required to demonstrate temporary storage.

Reports shall be submitted to:

Regional Biosolids Coordinator
USEPA (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93455-5411

i. All the requirements of 40 C.F.R. part 503 and 23 CCR 15 are enforceable by the U.S. EPA and this Regional Board whether or not the requirements are stated in an NPDES permit or any other permit issued to the Discharger.

B. Pretreatment Monitoring

By February 1st of each year, the Discharger shall submit an annual report to the Central Coast Regional Board, State Board, and USEPA describing the Discharger's pretreatment activities over the previous calendar year. In the event that the Discharger is not in compliance with any conditions or requirements of this permit affected by the pretreatment program, including any noncompliance with pretreatment audit or compliance inspection requirements, then the Discharger shall also include the reasons for noncompliance and state

how and when the Discharger shall comply with such conditions and requirements. This report shall contain, but not be limited to, the following information:

1. A summary of analytical results from representative, flow-proportioned, 24-hour composite samples of the plant's influent and effluent for those pollutants USEPA has identified under Section 307(a) of the CWA which are known or suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until USEPA promulgates an applicable analytical technique under 40 C.F.R. part 136.

2. A discussion of upset, interference, or pass-through incidents, if any, at the POTW which the Discharger knows or suspects were caused by industrial users of the POTW system. The discussion shall include the reasons why the incidents occurred, corrective actions taken and, if known, the name and address of the industrial user(s) responsible. Discussions shall also include a review of applicable pollutant limitations to determine whether any additional limitations or changes to existing requirements may be necessary to prevent pass-through, interference, or noncompliance with sludge disposal requirements.

3. The cumulative number of industrial users that the Discharger has notified regarding Baseline Monitoring Reports, and the cumulative number of industrial user responses.

4. An updated list of the Discharger's industrial users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The Discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to Federal Categorical Standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the Federal Categorical Standards. The Discharger shall also list the non-categorical industrial users that are subject only to local discharge limitations. The Discharger shall characterize the compliance status of each industrial user by employing the following descriptions:

   a. In compliance with Baseline Monitoring Report requirements (where applicable);

   b. Consistently achieving compliance;

   c. Inconsistently achieving compliance;

   d. Significantly violated applicable pretreatment requirements as defined by 40 C.F.R. § 403.8(f)(2)(vii);

   e. On a schedule to achieve compliance (include the date final compliance is required);

   f. Not achieving compliance and not on a compliance schedule; or

   g. The Discharger does not know the industrial user’s compliance status.

5. A quarterly report describing the compliance status of any industrial user characterized by descriptions in Items 4(c) through (g) above shall be submitted to the Central Coast Water Board, State Board, and USEPA. The report shall identify the specific compliance status of each applicable industrial user. This quarterly reporting requirement shall commence upon issuance of this Order and Permit. Quarterly reports shall be submitted May 1, August 1, November 1, and February 1. Quarterly reports shall briefly describe POTW compliance with audit/pretreatment compliance inspection requirements. If none of the aforementioned conditions exist, at a minimum, a letter indicating that all industries

are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted.

6. A summary of inspection and sampling activities conducted by the Discharger during the past year to gather information and data regarding industrial users. The summary shall include:

   a. Names and addresses of the industrial users subject to surveillance by the Discharger and an explanation of whether they were inspected, sampled, or both, and the frequency of these activities at each user; and

   b. Conclusions or results from the inspection or sampling of each industrial user.

7. A summary of compliance and enforcement activities during the past year. The summary shall include names and addresses of the industrial users affected by the following actions:

   a. Warning letters or notices of violation regarding the industrial users' apparent noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the Federal Categorical Standards or local discharge limitations;

   b. Administrative Orders regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

   c. Civil actions regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

   d. Criminal actions regarding the industrial user's noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned Federal Categorical Standards or local discharge limitations;

   e. Assessment of monetary penalties. For each industrial user, identify the amount of the penalties;

   f. Restriction of flow to the POTW; or

   g. Disconnection from discharge to the POTW.

8. Description of any significant changes in operating the pretreatment program which differ from the information in the Discharger's Approved POTW Pretreatment Program, including but not limited to changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority or enforcement policy; funding mechanisms; resource requirements; or staffing levels.

9. A summary of the annual pretreatment budget, including the costs of pretreatment program functions and equipment purchases.

10. A summary of public participation activities to involve and inform the public.

11. Reports shall be signed by a principal executive officer, ranking elected official, or other duly authorized employee if such employee is responsible for overall operation of the

POTW. Signed copies of these reports shall be submitted to the USEPA and the State Board at the following addresses:

State Water Resources Control Board
Regulation Unit
P.O. Box 100
Sacramento, CA 95812-0100

US EPA, Region 9
Clean Water Act Compliance Office
75 Hawthorne Street
(WTR-7)
San Francisco, CA 94105-3901

For reporting to the Central Coast Water Board, reports shall be uploaded using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/ciwqs/index.html).

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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 CIWQS Program website. 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 monthly and annual SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-6. Monitoring Periods and Reporting Schedule

SMR Name	Permit Section for Monitoring & Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report- Monthly	MRP Sections III (Influent), IV (Effluent) and VIII (Receiving Water)	Monthly	First day of second calendar month following period of sampling (first report due February 1st 2015)
NPDES Monitoring Report- Quarterly	MRP Section IV (Effluent) and VIII (Receiving Water)	Quarterly	February 1, May 1, August 1, and November 1st (first report due Feb 1st 2015)
NPDES Monitoring Report- Annual	MRP Section IV (Effluent), V (Toxicity) and VIII (Receiving Water)	Annually	February 1st, (first report due Feb 1st 2015 following October 2014 sampling)
Summary Report[1]	Attachment D, Standard Provision VIII.D.8 and Salt and Nutrient Management Plan Order Section VI.C.3.a	Annually	February 15th
Facilities Evaluation	Order Section VI.C.2.b Special Provisions	Once per permit	March 1, 2017
Effluent pH Evaluation	Order Section VI.C.2.c Special Provisions	Once per permit	February 1, 2016
Pretreatment-Quarterly	Order Section IX.B (pretreatment)	Quarterly	February 1, May 1, August 1, and November 1st (first report due Feb 1st 2015)
Pretreatment-Annual	Order Section IX.B (pretreatment)	Annually	February 1st
Biosolids (Sludge) Technical Report	MRP Section IX.A (Biosolids)	Annually	February 19th

[1] Based on Discharger's request, the standard February 1st deadline for this Summary Report has been revised to February 15th to accommodate work on year-end sampling and pretreatment reporting.

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

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

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

b. Sample results less than the RL, 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. 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. Discharger shall include electronic pdfs of all lab data sheets and chain of custodies for analytical data as attachments to the SMRs. Additionally, any calculations used to provide calculated values (e.g., removal efficiencies, coliform medians, average monthly values, average weekly values, intake credits, etc.) shall be attached such that the data and/or assumptions used can be validated.

   c. In the SMR, the Discharger shall clearly identify violations of the WDRs and 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. At any time during the term of this permit, the State or Central Coast Water Board may notify the Discharger to electronically submit DMRs. Until such notification is given specifically for the submittal of DMRs, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official U.S. EPA pre-printed DMR forms (EPA Form 3320-1) or on self-generated forms that follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. Unless otherwise noted, with the next SMR, the Discharger shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section V. C, of the Order.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section I 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 400107001**
Discharger	**City of San Luis Obispo**
Name of Facility	**Water Resource Recovery Facility**
Facility Address	**35 Prado Road**
	San Luis Obispo, CA 93401
	David Hix
Facility Contact, Title and Phone	**David Hix, Deputy Director, Utilities, Wastewater, (805) 781-7039**
Authorized Person to Sign and Submit Reports	**David Hix, Deputy Director, Utilities, Wastewater, (805) 781-7039**
Mailing Address	**879 Morro Street, San Luis Obispo, CA 93401**
Billing Address	**SAME**
Type of Facility	**POTW**
Major or Minor Facility	**Major**
Threat to Water Quality	**2**
Complexity	**A**
Pretreatment Program	**Y**
Recycling Requirements	**Master Permit for Reclamation Order No. R3-2003-0081**
Facility Permitted Flow	**5.1 million gallons per day (MGD)**
Facility Design Flow	**5.1 million gallons per day (MGD)**
Watershed	**Estero Bay Hydrologic Unit**
Receiving Water	**San Luis Obispo Creek**
Receiving Water Type	**Inland surface water**

A. The City of San Luis Obispo (hereinafter Discharger) is the owner and operator of the City of San Luis Obispo Water Resource Recovery Facility (hereinafter Facility), a wastewater treatment facility.

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

B. The Facility discharges wastewater to San Luis Obispo Creek, a water of the United States. The Discharger was previously regulated by Order No. R3-2002-0043, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0049224, adopted on March 31, 2002, and modified on March 25, 2005, which has been administratively extended. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on November 29, 2006.

II. FACILITY DESCRIPTION

The Discharger owns and operates a wastewater collection, treatment, and disposal system for the City of San Luis Obispo, California Polytechnic State University, and the San Luis Obispo Airport, including a population of approximately 40,000 individuals. The WRF design daily average flow capacity is 5.1 million gallons per day (MGD).

A. Description of Wastewater and Biosolids Treatment and Controls

The Discharger owns and operates a publicly owned treatment works. The treatment system consists of mechanical screening, grit removal, primary settling, biofiltration, secondary settling, nitrification, final settling, cooling using evaporative cooling towers, dual media filtration, and chlorination/dechlorination.

Solids are thickened in a dissolved air flotation thickener and stabilized in anaerobic digesters. During the drier parts of the year the sludge is placed in drying beds, dried and stockpiled to await disposal. A belt press is used for the remainder of the year. Biosolids are hauled off-site by a contractor for composting. Finished compost is sold to agricultural, horticultural, and/or landscape operations.

California Polytechnic State University and the San Luis Obispo County Airport retain ownership and direct responsibility for wastewater collection and transport systems up to the point of discharge into the wastewater treatment plant and/or interceptors owned and operated by the City of San Luis Obispo. It is incumbent upon these local sewering entities to protect the environment to the greatest degree possible and ensure their local collection systems, as well as the receiving sewerage system, are protected and utilized properly. This responsibility includes preventing overflows and may include restricting or prohibiting the volume, type, or concentration of wastes that might be added to the system.

B. Discharge Points and Receiving Waters

The Facility is located in Section 10, T31S, R12E, MDB&M, as shown in Attachment B to this Order. Treated municipal wastewater is discharged at Discharge Point 001 to San Luis Obispo Creek, a water of the United States, at a latitude of 35° 14' 10" N and longitude 120° 40' 45" W.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order (i.e., January 2008 through December 2012) are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitations				Monitoring Data (January 2008-December 2012		
		Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum	Highest Monthly Average	Highest Weekly Average	Highest Daily Discharge
BOD_5	mg/L	10	30	50	---	13.6	13.7	NA
	lb/day	[1]	[2]	[3]	---	374	804	NA
	% removal	Not less than 85% removal rate				93.1[4]	NA	NA
TSS	mg/L	10	30	75	---	19	24.9	NA
	lb/day	[2]	[3]	[5]	---	673	2099	NA
	% removal	Not less than 85% removal rate				95.6[6]	NA	NA
Oil and Grease	mg/L	5	---	10	---	6	NA	16
	lb/day	[7]	---	[8]	---	405	NA	1372
Dissolved Oxygen	mg/L	---	---	---	4.0	NA	NA	0.3[9]
pH	s.u.	Between 6.5 and 8.3 at all times				6.6 to 7.8		
Fecal Coliform	MPN/100 mL	---	2.2	---	---	---	22	---
Total Coliform	MPN/100 mL	---	23	---	240	---	7.9	130
Settleable Solids	mL/L	0.1	---	---	---	NA	NA	< 0.1
Chlorodibromomethane [10]	µg/L	0.4	---	0.8	---	NA	NA	13.8
Dichlorobromomethane [10]	µg/L	0.6	---	1.1	---	NA	NA	30.8
Selenium	µg/L	4.1	---	8.2	---	4.1	NA	4.1
Bromoform	µg/L	4.3	---	8.6	---	1.9	NA	1.9
Cyanide	µg/L	4.3	---	8.6	---	4.0	NA	4.0
Aluminum	µg/L	---	---	---	1,000	NA	NA	40
Barium	µg/L	---	---	---	1,000	NA	NA	36.2
Fluoride	µg/L	---	---	---	2,000	NA	NA	900
cis-1,2-Dichloroethylene	µg/L	---	---	---	6	NA	NA	NA
Methyl-tert-butyl ether	µg/L	---	---	---	13	NA	NA	< 1
Styrene	µg/L	---	---	---	100	NA	NA	< 0.5
Trichlorofluoromethane	µg/L	---	---	---	150	NA	NA	< 1
1,1,2-	µg/L	---	---	---	1,200	NA	NA	< 0.5

Parameter	Units	Effluent Limitations				Monitoring Data (January 2008-December 2012		
		Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum	Highest Monthly Average	Highest Weekly Average	Highest Daily Discharge
Trichloro-1,2,2-Trifluoroethane								
Xylenes	µg/L	---	---	---	1,750	NA	NA	0.5
Alachlor	µg/L	---	---	---	2	NA	NA	< 0.2
Atrazine	µg/L	---	---	---	3	NA	NA	< 0.5
Bentazon	µg/L	---	---	---	18	NA	NA	< 2
Carbofuran	µg/L	---	---	---	18	NA	NA	< 5
2,4-D	µg/L	---	---	---	70	NA	NA	< 2
Dalapon	µg/L	---	---	---	200	NA	NA	< 10
Dibromochloropropane	µg/L	---	---	---	0.2	NA	NA	NA
Di (2-ethylhexyl) adipate	µg/L	---	---	---	400	NA	NA	< 5
Di (2-ethylhexyl) phthalate	µg/L	---	---	---	4	NA	NA	NA
Dinoseb	µg/L	---	---	---	7	NA	NA	< 1
Diquat	µg/L	---	---	---	20	NA	NA	< 2
Endothall	µg/L	---	---	---	100	NA	NA	< 40
Ethylene Dibromide	µg/L	---	---	---	0.05	NA	NA	NA
Glyphosate	µg/L	---	---	---	700	NA	NA	< 20
Methoxychlor	µg/L	---	---	---	40	NA	NA	< 0.1
Molinate	µg/L	---	---	---	20	NA	NA	< 2
Oxamyl	µg/L	---	---	---	200	NA	NA	< 5
Picloram	µg/L	---	---	---	500	NA	NA	< 1
Simazine	µg/L	---	---	---	4	NA	NA	< 1
Thiobencarb	µg/L	---	---	---	70	NA	NA	< 1
2, 4, 5-TP (Silvex)	µg/L	---	---	---	50	NA	NA	< 1

Footnotes to Table F-4:

Source: San Luis Obispo Water Reclamation Facility Modified Order No. R3-2002-0043. Effluent data from January 2008 to December 2012 retrieved from CIWQS and ICIS.

[1] Determined by multiplying 10 mg/L times the measured flow rate discharged to San Luis Obispo Creek.
[2] Determined by multiplying 30 mg/L times the measured flow rate discharged to San Luis Obispo Creek.
[3] Determined by multiplying 50 mg/L times the measured flow rate discharged to San Luis Obispo Creek.
[4] This value represents the lowest reported value of the minimum percent removal of BOD.
[5] Determined by multiplying 75 mg/L times the measured flow rate discharged to San Luis Obispo Creek.
[6] This value represents the lowest reported value of the minimum percent removal of TSS.
[7] Determined by multiplying 5 mg/L times the average monthly measured flow rate discharged to San Luis Obispo Creek.
[8] Determined by multiplying 10 mg/L times the monthly average daily maximum measured flow rate discharged to San Luis Obispo Creek.

[9] This value represents the lowest reported value of the minimum dissolved oxygen reported concentrations.
[10] Final effluent limitations contained in Time Schedule Order R3-2010-0013.
mg/L = milligrams per liter
µg/L= micrograms per liter
lb/day = pounds per day
ND = non-detect
NA = not available

D. Compliance Summary

A review of the available effluent monitoring data, submitted in the Discharger's self-monitoring reports for the period from January 2008 through December 2012, indicate that the Discharger had effluent limitation violations for BOD, TSS, oil and grease, and fecal coliform. The values reported in exceedance of effluent limitations are summarized in the table below.

Table F-3. Compliance Summary

Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
March 2008	7-sample median	Fecal Coliform	22	2.2	MPN/100 ml
July 2008	Monthly Average	BOD	13.6	10	mg/L
December 2008	Monthly Average	TSS	19	10	mg/L
November 2009	Monthly Average	Oil & Grease	6	5	mg/L
January 2010	Daily Maximum	Oil & Grease	16	10	mg/L
December 2010	Monthly Average	TSS	10.3	10	mg/L

E. Planned Changes

The Discharger will be upgrading the facility to address both nitrogen and trihalomethanes in order to meet the final effluent limitations in this permit. Nitrogen removal will address the new limitations incorporated as part of the implementation of the San Luis Obispo Creek Nutrient Total Maximum Daily Load (see discussion in Attachment F Section IV.C.3). Changes to the disinfection process will prevent the formation of trihalomethanes in the effluent. The City is in the process of studying and designing the upgrades. The City has adopted a rate structure in anticipation of facility upgrades. City staff will be working with the Central Coast Water Board during the duration of this permit term to implement those upgrades.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters.

B. California Environmental Quality Act (CEQA)

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

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

1. **Water Quality Control Plan.** The Central Coast Water Board has adopted the *Water Quality Control Plan for the Central Coastal Basin* (hereinafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. In addition, the Basin Plan implements State Water Board Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Facility discharges to San Luis Obispo Creek. Beneficial uses applicable to San Luis Obispo Creek (below W. Marsh Street) are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	**San Luis Obispo Creek (below W. Marsh Street)**	Existing: Municipal and domestic (MUN); agricultural supply (AGR); ground water recharge (GWR); water contact recreation (REC1); non-contact water recreation (REC2); wildlife habitat (WILD); cold fresh water habitat (COLD); warm fresh water habitat (WARM); migration of aquatic organisms (MIGR); fish spawning, reproduction, and/or early development (SPWN); freshwater replenishment (FRESH); commercial and sport fishing (COMM). Intermittent: None. Potential: None.

Groundwater throughout the Central Coast Region is suitable for agricultural water supply, municipal and domestic water supply, and industrial use. Requirements of this Order implement the Basin Plan.

2. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the NTR and to the priority pollutant objectives established by the Central Coast Water Board in the Basin Plan. The SIP became

effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

5. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Central Coast Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

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

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

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

CWA section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d) listed water bodies and pollutants, the Regional Water Boards must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources. The U.S. EPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The 2010 303(d) list identifies San Luis Obispo Creek, below West Osos Street is listed for chloride, chlorpyrifos, nitrate, nutrients, pathogens, and sodium.

A TMDL for nitrate (reported analytically as nitrate-nitrogen) has been developed for the San Luis Obispo Creek, below West Marsh Street. Effluent limitations for nitrate-nitrogen are implemented in this Permit based on the Central Coast Water Board Resolution R3-2005-0106 (TMDL for nitrate-nitrogen).

E. Other Plans, Policies and Regulations

1. **Storm Water Management.** For the control of storm water discharged from the site of the wastewater treatment facilities, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resource Control Board's Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001,

Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, if applicable.

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

3. **Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. Pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution 2009-0011, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff. The policy was added to establish participation in development of a regional groundwater basin/sub-basin salt/nutrient management plan.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. §122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 C.F.R. §122.44 (d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using U.S. EPA criteria guidance published under CWA Section 304 (a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

Several specific factors affecting the development of limitations and requirements in this Order are discussed below.

A. Discharge Prohibitions

1. **Discharge Prohibition III.A (No discharge at a location except as described by this Order):** The Order authorizes a single, specific point of discharge to surface waters, and the limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Central Coast Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at

locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA § 402's prohibition against discharges of pollutants except in compliance with the Act's permit requirements, effluent limitations, and other enumerated provisions. This prohibition has been retained from the previous Order.

2. **Discharge Prohibition III.B (No discharge of wastewaters to San Luis Obispo Creek containing bentazon, molinate, or thiobencarb):** This prohibition is the same as in the previous permit and is based on the requirements of the Basin Plan.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402 (a) (1) and USEPA regulations at 40 C.F.R. § 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 C.F.R. § 125.3.

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

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

Based on this statutory requirement, U.S. EPA developed secondary treatment regulations, which are specified in 40 C.F.R. part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 C.F.R. part 133.

2. Applicable Technology-Based Effluent Limitations

Title 40 C.F.R. § 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 C.F.R. § 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 C.F.R. § 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration and mass limitations are not necessary to protect the beneficial uses of the receiving waters.

a. **BOD and TSS.** Federal regulations, 40 C.F.R. part 133, establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD_5 and TSS. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirements, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The Central Coast Water Board has determined that tertiary treatment is necessary to protect the beneficial uses of the receiving stream, thus the final effluent limitations for BOD_5 and TSS are based on the technical capability of the tertiary process. The secondary and tertiary treatment standards for BOD_5 and TSS are indicators of the effectiveness of the treatment processes. The principal design parameter for wastewater treatment plants is the daily BOD_5 and TSS loading rates and the corresponding removal rate of the system. In applying 40 C.F.R. part 133 for weekly and monthly average BOD_5 and TSS limitations, the application of tertiary treatment processes results in the ability to achieve lower levels for BOD_5 and TSS than the secondary standards currently prescribed; the 30-day average BOD_5 and TSS limitations are 10 mg/L, the 7-day average BOD_5 and TSS limitations are 30 mg/L. These effluent limitations are based on the capability of a tertiary system. In addition to the average weekly and average monthly effluent limitations, daily maximum effluent limitation of 50 mg/L and 75 mg/L for BOD_5 and TSS, respectively, are included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities.

In addition, 40 C.F.R. § 133.102, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. If 85 percent removal of BOD_5 and TSS must be achieved by a secondary treatment plant, it must also be achieved by a tertiary (i.e., treatment beyond secondary level) treatment plant. This Order contains a limitation requiring an average of 85 percent removal of BOD_5 and TSS over each calendar month. These effluent limitations are carried over from Order No. R3-2002-0043.

b. **pH.** Federal Regulations, 40 C.F.R. part 133, establishes technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. This techonology-based effluent limitation is not as stringent as the WQBELs for pH as discussed in section IV.C of this Fact sheet; therefore, this Order establishes the more stringent WQBELs for pH.

c. **Flow.** According to the Report of Waste Discharge, the Facility is designed to provide a tertiary level of treatment for up to a design flow of 5.1 MGD. Order No. R3-2002-0043 permitted a daily flow of 5.2 MGD. This Order has established a maximum flow based on the design capacity of the Facility, thus, this Order contains an average dry weather daily discharge flow effluent limit of 5.1 MGD.

Further, in accordance with 40 C.F.R. § 122.45(b), mass-based effluent limitations are based on the facility design flow of 5.1 MGD.

The following table summarizes technology-based effluent limitations established by this Order.

Table F-5. Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	--	--	5.1	--	--
Biochemical Oxygen Demand (BOD_5) (5-day @ 20 Deg. C) [1]	mg/L	10	30	50	--	--
	lbs/day [2]	425	1,275	2,125	--	--
Total Suspended Solids [1]	mg/L	10	30	75	--	--
	lbs/day [2]	425	1,275	3,188	--	--
pH	standard units	--	--	--	6.0	9.0

[1] In addition to concentration-based limitations and mass-based limitations for BOD_5 and TSS, the Discharger is required to meet an 85 percent removal discharge specification.

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

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

where: Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (5.1 MGD)

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

The process for determining “reasonable potential” and calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin Plan, and achieve applicable WQOs and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the CTR and the NTR.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the requirements of 40 C.F.R. 122.44(d)(1)(vi), using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State’s narrative criterion, supplemented with other relevant information.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses described by the Basin Plan for San Luis Obispo Creek are presented in section III.C.1 of this Fact Sheet. Water quality criteria applicable to this receiving water are established by the CTR, the NTR, and by the Basin Plan. Reasonable potential for pollutants with applicable water quality criteria was evaluated for Discharge Point No. 001.

3. Determining the Need for WQBELs

NPDES regulations at 40 C.F.R. §122.44(d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

The SIP, statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants which show reasonable potential.

The SIP Section 1.3 requires the Regional Water Board to use all available valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis. The Central Coast Water Board analyzed the Discharger's data for priority pollutants and the nature of the discharge to determine if the discharge has Reasonable Potential. The RPA is based on effluent data retrieved from CIWQS and ICIS, as well as effluent data received from the Discharger for the period of January 2008 to October 2012.

Some freshwater water quality criteria for metals are hardness dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. The Discharger has not specifically collected hardness data for the receiving water. However, the Central Coast Water Board's Central Coast Ambient Monitoring Program has a nearby monitoring stations on San Luis Obispo Creek. The median hardness values from those stations are 400 and 330 mg/L as $CaCO_3$, respectively upgradient and downgradient from the discharge location. The Water Board used 330 mg/L as $CaCO_3$ as a conservative estimate of the receiving water hardness to determine hardness-based criteria.

To conduct the reasonable potential analysis, the Central Coast Water Board identified the maximum observed effluent (MEC) from effluent data provided by the Discharger and compared these data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. The Discharger did not collect background data (B) from the receiving water. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

Trigger 1. If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.

Trigger 2. If B is greater than C, and the pollutant is detected in effluent (MEC > ND), there is reasonable potential, and an effluent limitation is required. In this case, the Discharger did not collect background (B) data, so reasonable potential cannot be found by Trigger 2.

Trigger 3. After reviewing other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA section 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

The following table summarizes the RPA for each priority pollutant, toxic pollutant, or Title 22 pollutant that was measured in effluent collected for the period January 2008 to December 2012.

Table F-6. Summary of RPA Results

CTR#	Priority Pollutant	MEC or Minimum DL (1)(2) (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum (1)(2) DL (µg/L)	RPA Results (3)
1	Antimony	<1	6	---	No
2	Arsenic	<2	10	---	No
3	Beryllium	<0.2	4	---	No
4	Cadmium	<0.2	5.0	---	No
5a	Chromium (III)	<1	550	---	No
5b	Chromium (VI)	<10	11	---	No
6	Copper	19	25.9	**---**	No
7	Lead	5	14.5	**---**	No
8	Mercury	<0.02	0.05	---	No
9	Nickel	10	100	---	No
10	Selenium	4.1	5	---	No
11	Silver	<1	31.6	---	No
12	Thallium	<0.2	1.7	---	No
13	Zinc	50	200	---	No
14	Cyanide	4.0	5.2	---	No
15	Asbestos (Fibers/L)	<0.3	7,000,000	---	No
16	2,3,7,8-TCDD	$<6.8 \times 10^{-7}$	1.3×10^{-8}	---	No
17	Acrolein	<0.05	320	---	No
18	Acrylonitrile	<0.05	0.059	---	No
19	Benzene	<0.05	1	---	No
20	Bromoform	1.9	4.3	---	No
21	Carbon Tetrachloride	<0.05	0.25	---	No
22	Chlorobenzene	<0.05	70	---	No
23	**Chlorodibromomethane**	**20**	**0.401**	**---**	**Yes**
24	Chloroethane	<0.05	No Criteria	---	No
25	2-Chloroethylvinyl ether	<0.05	No Criteria	---	No
26	Chloroform	85.9	No Criteria	---	No
27	**Dichlorobromomethane**	**17.6**	**0.56**	**---**	**Yes**
28	1,1-Dichloroethane	<0.05	5	---	No
29	1,2-Dichloroethane	<0.05	0.38	---	No
30	1,1-Dichloroethylene	<0.05	0.057	---	No
31	1,2-Dichloropropane	<0.05	0.52	---	No
32	1,3-Dichloropropylene	<0.05	0.5	---	No
33	Ethylbenzene	<0.05	300	---	No
34	Methyl Bromide	<0.05	48	---	No
35	Methyl Chloride	0.9	No Criteria	---	Ud
36	Methylene Chloride	<0.05	4.7	---	No
37	1,1,2,2-Tetrachloroethane	<0.05	0.17	---	No
38	Tetrachloroethylene	<0.05	0.8	---	No
39	Toluene	1.0	150	---	No
40	1,2-Trans-Dichloroethylene	<0.05	10	---	No
41	1,1,1-Trichloroethane	<0.05	200	---	No
42	1,1,2-Trichloroethane	<0.05	0.6	---	No
43	Trichloroethylene	<0.05	2.7	---	No

CTR#	Priority Pollutant	MEC or Minimum DL (1)(2) (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum (1)(2) DL (µg/L)	RPA Results (3)
44	Vinyl Chloride	<0.05	0.5	---	No
45	2-Chlorophenol	<0.05	120	---	No
46	2,4-Dichlorophenol	<0.05	93	---	No
47	2,4-Dimethylphenol	<0.05	540	---	No
48	2-Methyl- 4,6-Dinitrophenol	<0.05	13.4	---	No
49	2,4-Dinitrophenol	<0.05	70	---	No
50	2-Nitrophenol	<0.05	No Criteria	---	Ud
51	4-Nitrophenol	<0.05	No Criteria	---	Ud
52	3-Methyl 4-Chlorophenol	<0.05	No Criteria	---	Ud
53	**Pentachlorophenol**	**1.2**	**0.28**	**---**	**Yes**
54	Phenol	<0.05	21,000	---	No
55	2,4,6-Trichlorophenol	<0.05	2.1	---	No
56	Acenaphthene	<0.05	1,200	---	No
57	Acenaphthylene	<0.05	No Criteria	---	Ud
58	Anthracene	<0.05	9,600	---	No
59	Benzidine	<0.05	0.00012	---	No
60	Benzo(a)Anthracene	<0.05	0.0044	---	No
61	Benzo(a)Pyrene	<0.05	0.0044	---	No
62	Benzo(b)Fluoranthene	<0.05	0.0044	---	No
63	Benzo(ghi)Perylene	<0.05	No Criteria	---	Ud
64	Benzo(k)Fluoranthene	<0.05	0.0044	---	No
65	Bis(2-Chloroethoxy)Methane	<0.05	No Criteria	---	Ud
66	Bis(2-Chloroethyl)Ether	<0.05	0.031	---	No
67	Bis(2-Chloroisopropyl)Ether	<0.05	1400	---	No
68	Bis(2-Ethylhexyl)Phthalate	<0.05	1.8	---	No
69	4-Bromophenyl Phenyl Ether	<0.05	No Criteria	---	Ud
70	Butylbenzyl Phthalate	<0.05	3000	---	No
71	2-Chloronaphthalene	<0.05	1700	---	No
72	4-Chlorophenyl Phenyl Ether	<0.05	No Criteria	---	Ud
73	Chrysene	<0.05	0.0044	---	No
74	Dibenzo(a,h)Anthracene	<0.05	0.0044	---	No
75	1,2-Dichlorobenzene	<0.05	600	---	No
76	1,3-Dichlorobenzene	<0.05	400	---	No
77	1,4-Dichlorobenzene	<0.05	5	---	No
78	3,3 Dichlorobenzidine	<0.05	0.04	---	No
79	Diethyl Phthalate	<0.05	23,000	---	No
80	Dimethyl Phthalate	<0.05	313,000	---	No
81	Di-n-Butyl Phthalate	<0.05	2,700	---	No
82	2,4-Dinitrotoluene	<0.05	0.11	---	No
83	2,6-Dinitrotoluene	<0.05	No Criteria	---	Ud
84	Di-n-Octyl Phthalate	<0.05	No Criteria	---	Ud
85	1,2-Diphenylhydrazine	<0.05	0.04	---	No
86	Fluoranthene	<0.05	300	---	No
87	Fluorene	<0.05	1,300	---	No
88	Hexachlorobenzene	<0.05	0.00075	---	No
89	Hexachlorobutadiene	<0.05	0.44	---	No
90	Hexachlorocyclopentadiene	<0.05	50	---	No
91	Hexachloroethane	<0.05	1.9	---	No
92	Indeno(1,2,3-cd)Pyrene	<0.05	0.0044	---	No

CTR#	Priority Pollutant	MEC or Minimum DL (1)(2) (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum (1)(2) DL (µg/L)	RPA Results (3)
93	Isophorone	<0.05	8.4	---	No
94	Naphthalene	<0.05	No Criteria	---	Ud
95	Nitrobenzene	<0.05	17	---	No
96	**N-Nitrosodimethylamine**	**12**	**0.00069**	**---**	**Yes**
97	N-Nitrosodi-n-Propylamine	<0.05	0.005	---	No
98	N-Nitrosodiphenylamine	<0.05	5	---	No
99	Phenanthrene	<0.05	No Criteria	---	Ud
100	Pyrene	<0.05	960	---	No
101	1,2,4-Trichlorobenzene	<0.05	5	---	No
102	Aldrin	<0.05	0.00013	---	No
103	alpha-BHC	<0.05	0.0039	---	No
104	beta-BHC	<0.05	0.014	---	No
105	gamma-BHC	<0.05	0.019	---	No
106	delta-BHC	<0.05	No Criteria	---	Ud
107	Chlordane	<0.05	0.00057	---	No
108	4,4'-DDT	<0.05	0.00059	---	No
109	4,4'-DDE	<0.05	0.00059	---	No
110	4,4'-DDD	<0.05	0.00083	---	No
111	Dieldrin	<0.05	0.00014	---	No
112	alpha-Endosulfan	<0.05	0.056	---	No
113	beta-Endolsulfan	<0.05	0.056	---	No
114	Endosulfan Sulfate	<0.05	110	---	No
115	Endrin	<0.05	0.036	---	No
116	Endrin Aldehyde	<0.05	0.76	---	No
117	Heptachlor	<0.05	0.00021	---	No
118	Heptachlor Epoxide	<0.05	0.0001	---	No
119-125	PCBs sum	<0.05	0.00017	---	No
126	Toxaphene	<0.05	0.0002	---	No
Drinking Water Quality Objectives					
	Aluminum	40	1,000	---	No
	Barium	36.2	1,000	---	No
	Fluoride	900	1,000	---	No
	Nitrate (as NO3) (mg/L) (4)	**260**	**45**	**---**	**Yes**
	Nitrate+Nitrite (sum as N) (mg/L)	**58.7**	**10**	**---**	**Yes**
	Nitrite (as N) (mg/L)	<0.1	1	---	No
	Methyl-tert-butyl-ether	<1	13	---	No
	Styrene	<0.5	100	---	No
	Alachlor	<0.2	2	---	No
	Atrazine	<0.5	1	---	No
	Bentazon	<2	18	---	No
	Carbofuran	<5	18	---	No
	2,4-D	<2	70	---	No
	Dalapon	<10	200	---	No
	Dibromochloropropane	---	0.2	---	No
	Di (2-ethylhexyl) adipate	<5	400	---	No
	Dinoseb	<1	7	---	No
	Diquat	<2	20	---	No

CTR#	Priority Pollutant	MEC or Minimum DL (1)(2) (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background or Minimum (1)(2) DL (µg/L)	RPA Results (3)
	Endothall	<40	100	---	No
	Ethylene Dibromide	---	0.05	---	Ud
	Glyphosate	<20	700	---	No
	Methoxychlor	<0.1	30	---	No
	Molinate	<2	20	---	No
	Oxamyl	<5	50	---	No
	Picloram	<1	500	---	No
	Simazine	<1	4	---	No
	Thiobencarb	<1	70	---	No
	2, 4, 5-TP (Silvex)	<1	50	---	No
	Trichlorofluoromethane	<1	150	---	No
	1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	1,200	---	No
	Xylenes	0.5	1,750	---	No
	Tributyltin	---	No Criteria	---	Ud
	Total PAHs	---	No Criteria	---	Ud
	Strontium-90 (pCi/L)	---	8	---	Ud
	Tritium (pCi/L)	---	20,000	---	Ud
	Ra-226/228 (pCi/L)	---	5	---	Ud
	Gross Alpha (pCi/L)	---	15	---	Ud
	Gross Beta (pCi/L)	---	No Criteria	---	Ud
	U (pCi/L)	---	20	---	Ud
Board 3 Basin Plan WQOs for Agricultural Water Use					
	Manganese	22.6	200	---	No
	Cobalt	0.5	50	---	No
	Iron	110	5000	---	No
	Lithium	17	2500	---	No
	Molybdenum	---	10	---	Ud
	Vanadium	<1	100	---	No
	Boron	300	750	---	No

Footnotes for Table F-5:

(1) The MEC or maximum background concentration is the actual detected concentration. Where detection values were available and the pollutant was not detected, the detection value was provided with a "<" before it. Where the pollutant was non-detect and a detection value was not available, "ND" was entered.

(2) Cells marked with "---" indicate that no effluent data or background data are available for that constituent.

(3) RPA Results = Yes, if MEC => WQO/WQC, or if B > WQO/WQC and constituent is detected;
= No, if MEC and B are < WQO/WQC or all effluent data are undetected;
= Undetermined (Ud), if no criteria have been promulgated or no effluent data available;

(4) Converted from nitrate (as N).

Reasonable potential has been determined for chlorodibromomethane, dichlorobromomethane, pentachlorophenol, N-nitrosdimethylamine, nitrate, and nitrate+nitrite. WQBELs have been established for chlorodibromomethane, dichlorobromomethane, and N-nitrosdimethylamine based on the procedures identified within Section 1.4 of the SIP, as discussed in section IV.C.4 below.

Pentachlorophenol did not ultimately have WQBELs established due to data quality uncertainties. The Discharger provided comment on initial RPA results and noted that they erroneously reported the single detection of pentachlorophenol in October 2012 as

1.2 µg/L. The Discharger should have reported the results as detected, not quantified (DNQ). According to Section 2.4 of the SIP, when the analytical result is above the method detection limit but below the minimum level, the result shall be reported as DNQ and the estimated concentration reported. If pentachlorophenol had been reported as DNQ in this instance, the RPA would have yielded a "no reasonable potential" conclusion and an effluent limit would not be established. However, increased monitoring for pentachlorophenol has been added to the proposed Order to address the data uncertainty presented by the DNQ result. If future monitoring data indicate a reasonable potential to exceed the water quality objective for pentachlorophenol, an effluent limitation may be established.

The Central Coast Water Board developed a WQBEL for nitrate-nitrogen, which has an available wasteload allocation under a Total Maximum Daily Loads (TMDL) in Resolution No. R3-2005-0106 on September 9, 2005. The effluent limitation for this pollutant was established regardless of whether there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Central Coast Water Board developed a WQBEL for this pollutant pursuant to 40 C.F.R. § 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

This Order contains a WQBEL for nitrate-nitrogen, established based on the available wasteload allocation of 10 mg/L-N for the Facility contained in Resolution No. R3-2005-0106. As required by 40 C.F.R. § 122.44(d)(1)(vii), the Central Coast Water Board shall ensure there is a WQBEL for nitrate-nitrogen in the WDRs that is consistent with the assumptions and requirements of the available wasteload allocation. Based on the water quality monitoring done at the time of the TMDL adoption, which set the wasteload allocation at the level necessary to attain water quality standards, the Central Coast Water Board has determined that the WQBEL is consistent with the assumptions of the TMDL. Similarly, compliance with the effluent limitation will satisfy the requirements of the TMDL.

A separate WQBEL has not been established for nitrate+nitrite. The Discharger has provided a consistent data set indicating nitrite is not detected in its effluent (and this is consistent with municipal wastewater secondary treatment facilities in general), and therefore establishing a WQBEL for nitrate+nitrite would be duplicative of the nitrate effluent limit discussed above. The Central Coast Water Board has determined the TMDL-based effluent limit is sufficiently protective of the water quality objectives for nitrate+nitrite.

4. WQBEL Calculations

Final WQBELs for chlorodibromomethane, dichlorobromomethane, and N-nitrosdimethylamine have been determined using the methods described in Section 1.4 of the SIP.

Step 1: For each water quality criterion/objective, an effluent concentration allowance (ECA) is calculated from the following equation to account for dilution and background levels of each pollutant.

ECA = C + D (C - B), where

C = the applicable water quality criterion (adjusted for receiving water hardness and expressed as total recoverable metal, if necessary)

D = the dilution credit (here D = 0, as the Central Coast Water Board has no information with which to justify credit for dilution)

B = the background concentration

Step 2: For each ECA based on an aquatic life criterion, the long-term average discharge condition (LTA) is determined by multiplying the ECA times a factor (multiplier), which adjusts the ECA to account for effluent variability. The multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. When the data set contains less than 10 sample results, or 80 percent or more of the data are reported as non-detect (ND), the CV is set equal to 0.6. Derivation of the multipliers is presented in Section 1.4 of the SIP.

Step 3: WQBELs, including an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) are calculated using the most limiting (the lowest) LTA. The LTA is multiplied times a factor that accounts for averaging periods and exceedance frequencies of the effluent limitations, and for the AMEL, the effluent monitoring frequency. Here, the sampling frequency is set equal to 4 (n = 4). The 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. Table 2 of the SIP presents the MDEL and AMEL multipliers as a function of the CV. When the data set contains less than 10 sample results, or when 80 percent or more of the data set is reported as non-detect (ND), the CV is set equal to 0.6. Otherwise, the CV is calculated as the standard deviation divided by the mean.

Step 4: When the most stringent water quality criterion is a human health criterion (i.e., chlorodibromomethane, dichlorobromomethane, and N-nitrosdimethylamine), the AMEL is set equal to the ECA, and the MDEL is calculated by multiplying the ECA times the ratio of the MDEL multiplier to the AMEL multiplier. Final WQBELs for chlorodibromomethane, dichlorobromomethane, and N-nitrosdimethylamine are determined as follows.

Table F-9. Calculation of Human Health WQBELs

Pollutant	ECA	MDEL/AMEL Multiplier	MDEL (µg/L)	AMEL (µg/L)
Chlorodibromomethane	0.401	4.96/1.96 = 2.53	1.0	0.40
Dichlorobromomethane	0.56	2.43/1.39 = 1.74	1.0	0.56
N-nitrosdimethylamine	0.00069	3.11/1.55 = 2.01	0.0014	0.00069

5. Whole Effluent Toxicity (WET)

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

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

The previous Order included narrative effluent limitations for toxicity to ensure compliance with the Basin Plan narrative objective. The effluent limitation has been retained from the previous Order.

Numeric chronic WET effluent limitations have not been included in this Order. The SIP contains implementation gaps regarding the appropriate form and implementation of chronic toxicity limits. This has resulted in the petitioning of a NPDES permit in the Los Angeles Region[1] that contained numeric chronic toxicity effluent limitations. To address the petition, the State Water Board adopted WQO 2003-012 directing its staff to revise the toxicity control provisions in the SIP. The State Water Board states the following in WQO 2003-012, *"In reviewing this petition and receiving comments from numerous interested persons on the propriety of including numeric effluent limitations for chronic toxicity in NPDES permits for publicly-owned treatment works that discharge to inland waters, we have determined that this issue should be considered in a regulatory setting, in order to allow for full public discussion and deliberation. We intend to modify the SIP to specifically address the issue. We anticipate that review will occur within the next year. We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits."* The process to revise the SIP is currently underway. Proposed changes include clarifying the appropriate form of effluent toxicity limits in NPDES permits and general expansion and standardization of toxicity control implementation related to the NPDES permitting process. Since the toxicity control provisions in the SIP are currently under revision, it is inappropriate to carry over numeric effluent limitations for chronic toxicity. Therefore, this Order establishes a narrative toxicity effluent limitation and a numeric toxicity triggers consistent with the previous chronic toxicity effluent limitation which will require that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 C.F.R. § 122.44(k).

To ensure compliance with the Basin Plan's narrative toxicity objective, the Discharger is required to conduct acute and chronic WET testing, as specified in the Monitoring and Reporting Program (Attachment E, section V). Furthermore, the Special Provision contained at VI.C.2.a of this Order requires the Discharger to investigate the causes of, and identify and implement corrective actions to reduce or eliminate effluent toxicity. If the discharge demonstrates toxicity, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) in accordance with an approved TRE workplan. The numeric chronic toxicity monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to perform accelerated chronic toxicity monitoring, as well as, the threshold to initiate a TRE if effluent toxicity has been demonstrated.

[1] In the Matter of the Review of Own Motion of Waste Discharge Requirements Orders R4-2002-0121 [NPDES No. CA0054011] and R4-2002-0123 [NPDES No. CA0055119] and Time Schedule Orders R4- 2002-0122 and R4-2002-0124 for Los Coyotes and Long Beach Wastewater Reclamation Plants Issued by the California Regional Water Quality Control Board, Los Angeles Region SWRCB/OCC FILES A-1496 and 1496(a).

6. Basin Plan

a. **Coliform.** The beneficial uses of the receiving surface water include municipal and domestic supply and water contact recreation. The California Department of Public Health (DPH) has developed reclamation criteria, CCR, Division 4, Chapter 3 (Title 22), for the reuse of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of similar public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered, and that the effluent total coliform levels not exceed 2.2 MPN/100 mL as a 7-day median; 23 MPN/100 mL, not to be exceeded more than once in a 30-day period; and 240 MPN/100 mL, at any time.

Title 22 also requires that recycled water used as a source of water supply for non-restricted recreational impoundments be disinfected tertiary recycled water that has been subjected to conventional treatment. A non-restricted recreational impoundment is defined as *"…an impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities.*" Title 22 is not directly applicable to surface waters; however, the Central Coast Water Board finds that it is appropriate to apply an equivalent level of treatment to that required by DPH's reclamation criteria because the receiving water is used for irrigation of agricultural land and for contact recreation purposes. The stringent disinfection criteria of Title 22 are appropriate since the undiluted effluent may be used for the irrigation of food crops and/or for body-contact water recreation. Coliform organisms are intended as an indicator of the effectiveness of the entire treatment train and the effectiveness of removing other pathogens.

The previous Order includes effluent limitations for fecal coliform organisms of 2.2 MPN/100 mL as a 7-day median (in contrast to the Title 22 requirement based on the more conservative total coliform organisms). The consideration for this deviation was based on studies at the Facility during rapid changes in influent wastewater strength and flowrate (e.g., when California Polytechnic State University (Cal Poly) begins sessions or when power supply is interrupted). Those studies showed that, during these events, the Facility can temporarily experience an increased growth of non-pathogenic *Klebsiella* species of coliform bacterium within the cooling towers. That growth would result in total coliform detections with low-to-no fecal coliform component. In other words, the Facility still maintained the desired effectiveness at removing pathogenic coliform species. According to 2013 monitoring data, these events occurred two times; once in June during a power outage and once in September when Cal Poly began sessions. Fecal coliforms in both instances were below a 2.2 MPN/100 mL 7-sample median. These infrequent, non-pathogenic total coliform exceedances of a 2.2 MPN/100 mL median do not represent a failure of the disinfection system. Based on these studies, the existing effluent limitations have been retained and are protective of the beneficial uses for San Luis Obispo Creek. These effluent limits are generally consistent with other inland surface water discharge permits within the region.

b. **Dissolved Oxygen.** In order to protect the beneficial uses of San Luis Obispo Creek, Order No. R3-2002-0043 established an effluent limitation for dissolved oxygen, prohibiting the discharge from containing a dissolved oxygen concentration of less than 4.0 mg/L or so low that it adversely affects beneficial uses. Due to federal and State anti-backsliding regulations, dissolved oxygen remains a pollutant

of concern for this discharge and the effluent limitation from the previous Order is carried over.

c. **Nitrate-Nitrogen.** San Luis Obispo Creek is included on the 303(d) List as impaired for nutrients. Central Coast Water Board Resolution R3-2005-0106 establishes TMDLs for nitrate-nitrogen for discharges to San Luis Obispo Creek. The TMDL specifies a wasteload allocation for the City of San Luis Obispo Water Reclamation Facility effluent of 9,740 lbs NO_3 (as N)/month. This wasteload allocation will be accomplished by establishing a nitrate-nitrogen effluent monthly average limit of 10 mg/L. Further, the implementation section of the TMDL specifies that the Central Coast Water Board will incorporate an effluent limit for nitrate-nitrogen in the City of San Luis Obispo's NPDES permit for the Water Reclamation Facility, consistent with the allocations described in the wasteload allocations section at the first permit renewal following TMDL approval by the Central Coast Water Board.

Thus, this Order implements the wasteload allocation as specified in Central Coast Water Board Resolution No. R3-2005-0106.

Based on 40 C.F.R. § 122.44 (d.1.vii.B.) effluent limitations developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 C.F.R. § 130.7.

pH. Federal regulations, 40 CFR 133, establish technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. However, the Basin Plan establishes a WQO for pH of between 6.5 to 8.3 standard units for the protection of receiving waters with the beneficial use of Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), and Water Recreation (REC1 and REC2). The Basin Plan establishes a WQO for pH between 7.0 to 8.5 standard units for the beneficial use of Freshwater Habitat (COLD and WARM) and Fish Spawning (SPWN). The previous Order established an effluent limitation of 6.5 to 8.3. However, since San Luis Obispo Creek has MUN, AGR, REC1, REC2, COLD, WARM, and SPWN beneficial uses, a pH effluent limitation of 7.0 to 8.3 may be appropriate in order to protect all beneficial uses. The Discharger shall complete an Effluent pH Evaluation by February 1, 2016, to assess opportunities for effluent pH adjustments consistent with more stringent Basin Plan water quality objectives for receiving water (i.e., 7.0-8.3 standard units), impact on receiving water and environment, cost to pH adjust, and expected frequency and duration that effluent pH would drop below 7.0 s.u. under current operations. Central Coast Water Board staff will review the data to consider whether a more stringent pH effluent limit would indeed be more protective of water quality objectives or if existing pH effluent limits are adequately protective of receiving water quality objectives.

d. **Oil and Grease.** The Basin Plan establishes a narrative effluent limitation for oil and grease, which states, *"Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."*

The previous Order contained an AMEL and MDEL of 5.0 mg/L and 10 mg/L, and corresponding mass-based effluent limitations, respectively. These

effluent limitations are typical of similar facilities that discharge secondary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the concentration-based effluent limitations from the previous Order. Mass-based limitations have been removed from the proposed Order. This change does not represent backsliding as the Order contains a flow limitation, which when combined with a concentration-based effluent limitation, provides equivalent protection for this water quality objective.

e. **Settleable Solids.** The Basin Plan establishes a narrative effluent limitation for settleable solids, which states, *"Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses."*

The previous Order contained an average monthly effluent limitation (AMEL) of 0.1 mL/L. This effluent limitation is typical of similar facilities that discharge secondary treated wastewater and is necessary to protect the narrative water quality objective. Therefore, this Order retains the effluent limitation for settleable solids from the previous Order.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for selenium, cyanide, bromoform, aluminum, barium, fluoride, cis-1,2-Dichloroethylene, methyl-tertiary-butyl-ether, styrene, trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, xylenes, alachlor, atrazine, bentazon, carbofuran, 2,4-D, dalapon, dibromochloropropane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, ethylene dibromide, glyphosate, methoxychlor, molinate, oxamyl, picloram, simazine, thiobencarb, and 2,4,5-TP (Silvex). The existing Order (R3-2002-0043) final effluent limitations for selenium, cyanide, bromoform, aluminum, barium, fluoride, cis-1,2-Dichloroethylene, methyl-tertiary-butyl-ether, styrene, trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, xylenes, alachlor, atrazine, bentazon, carbofuran, 2,4-D, dalapon, dibromochloropropane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, ethylene dibromide, glyphosate, methoxychlor, molinate, oxamyl, picloram, simazine, thiobencarb, and 2,4,5-TP (Silvex). Effluent limitations for selenium, cyanide, bromoform, aluminum, barium, fluoride, cis-1,2-Dichloroethylene, methyl-tertiary-butyl-ether, styrene, trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, xylenes, alachlor, atrazine, bentazon, carbofuran, 2,4-D, dalapon, dibromochloropropane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, ethylene dibromide, glyphosate, methoxychlor, molinate, oxamyl, picloram, simazine, thiobencarb, and 2,4,5-TP (Silvex) are discontinued in this Order and chlorodibromomethane and dichlorobromomethane effluent limitations are revised in this Order based on the consideration of new information (i.e., current discharge monitoring data and reasonable potential analysis). This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Antidegradation Policies

Provisions of the Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 C.F.R. § 131.12 and by State Water Board Resolution 68-16. This Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise assure maintenance of the existing quality of receiving waters.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on flow, BOD, and TSS. Restrictions on flow, BOD, and TSS are discussed in section VI.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. § 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. § 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

4. Summary of Final Effluent Limitations – Discharge Point 001

Final effluent limitations were determined by comparing the technology-based effluent limitations (including the effluent limitations established in Order No. R3-2002-0043) and the WQBELs and applying the most stringent limitations for each individual parameter. Effluent limitations for BOD_5 and TSS are technology based and are carried over from Order No. R3-2002-0043. Effluent limitations for chlorodibromomethane, dichlorobromomethane, N-Nitrosodimethylamine, dissolved oxygen, coliform, nitrate-nitrogen, total residual chlorine, settleable solids, oil and grease, and pH are based on applicable water quality criteria. Effluent limitations for selenium, cyanide, bromoform, aluminum, barium, fluoride, cis-1,2-Dichloroethylene, methyl-tertiary-butyl-ether, styrene, trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, xylenes, alachlor, atrazine, bentazon, carbofuran, 2,4-D, dalapon, dibromochloropropane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, ethylene dibromide, glyphosate, methoxychlor, molinate, oxamyl, picloram, simazine, thiobencarb, and 2,4,5-TP (Silvex) are discontinued in this Order because the discharge did not demonstrate reasonable potential to cause or contribute to an exceedance of a water quality standard.

The effluent limitation established for flow is based on the design flow capacity of the Facility. Mass-based effluent limitations, as required, were calculated based upon the permitted design daily discharge flow of 5.1 MGD.

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

Table F-10. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis[1]
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
CONVENTIONALS							
Biochemical Oxygen Demand (BOD_5) (5-day @ 20 Deg. C) [2]	mg/L	10	30	50	--	--	C.F.R.
	lbs/day [3]	425	1,275	2,125	--	--	
Oil and Grease	mg/L	5	--	10	--	--	PO
pH	s.u.	--	--	--	6.5	8.3	BP
Total Suspended Solids [2]	mg/L	10	30	75	--	--	C.F.R.
	lbs/day [3]	425	1,275	2,125	--	--	
Chlorodibromomethane	µg/L	0.40	--	1.0	--	--	CTR
Dichlorobromomethane	µg/L	0.56	--	1.0	--	--	CTR
N-Nitrosodimethylamine	µg/L	0.00069	--	0.0014	--	--	CTR
Dissolved Oxygen	mg/L	--	--	--	4.0 [4]	--	PO
Flow	MGD	--	--	5.1	--	--	DC
Nitrate (as N)	mg/L	10	--	--	--	--	TMDL
Settleable Solids	mL/L	0.1	--	--	--	--	PO
Coliform	MPN/100 mL	[5]					DPH
Total Residual Chlorine	µg/L	[6]					BP

[1] C.F.R. – Based on federal regulations contained in 40 C.F.R. part 133.
BP – Based on water quality objectives contained in the Basin Plan.
CTR – Based on water quality criteria contained in the California Toxics Rule, and applied as specified in the SIP.
DC – Based on the design capacity of the facility.
PO – Based on the previous order (Order No. R3-2002-0043, modified 2005).
TMDL – Based on applicable TMDL.
DPH – Based on California Department of Public Health reclamation criteria for the reuse of wastewater.

[2] In addition to concentration-based limitations and mass-based limitations for BOD_5 and TSS, the Discharger is required to meet an 85 percent removal discharge specification.

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

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L) where:
Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (5.1 MGD)

[4] The discharge shall not have a dissolved oxygen concentration less than 4.0 mg/L or so low that it adversely affects beneficial uses.

[5] The median number of fecal coliform organisms in the effluent shall not exceed 2.2 MPN/100 mL as determined by the results of bacteriological analyses for the last 7-days on which samples were taken. No more than one sample shall exceed 23 MPN/100 mL total coliform in any 30-day period. The maximum number of total coliform organisms in any sample shall not exceed 240 MPN/100 mL.

[6] Compliance determinations for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with effluent limitations for total chlorine residual, the following conditions shall be satisfied:

1) The total time during which the total chlorine residual values are above 0.01 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month.

2) No individual excursion from 0.01 mg/L shall exceed 30 minutes; and
3) No individual excursion shall exceed 2 mg/L.

If grab sampling is used instead of continuous analysis:
1) The total number of excursions above 0.1 mg/L shall be no more than one individual excursion in any calendar month.
2) No individual excursion from 0.1 mg/L shall exceed 30 minutes, and must include results of no fewer than 2 grab samples.
3) No individual excursion shall exceed 2.0 mg/L.

b. **Toxicity.** The discharge shall not contain substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, or animal (particularly fish or aquatic) life.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications

The Discharger currently produces and distributes tertiary treated recycled water within the City of San Luis Obispo. Recycled water is regulated under the City's existing Master Reclamation Permit Order No. R3-2003-081, and therefore no additional specifications are applicable under this permit.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Specific WQOs established by the Basin Plan to meet this goal for all inland surface waters are included as Receiving Water Limitations in section V.A of the Order. All receiving water limitations are retained from the previous Order.

Dissolved oxygen limitation has been revised to be 7 mg/L year-round. The previous permit has seasonal dissolved oxygen limits of 5 and 7 mg/L. This was inconsistent with the Basin Plan water quality objectives, as the beneficial uses for San Luis Obispo Creek were not seasonally specified. The revision to 7 mg/L is consistent with the Basin Plan water quality objectives for spawning and cold water habitat. The revision is more restrictive than the previous seasonal limitation.

The un-ionized ammonia limitation has been corrected as un-averaged limitation. The previous permit incorrectly associated a footnote indicating a running annual average limitation for unionized ammonia from Table 3.7 in the Basin Plan. However, that footnote only applies to total dissolved solids, boron, sulfate, sodium, and chloride. The revision is more restrictive than the previous limitation.

B. Groundwater

Groundwater limitations included in section V.B of the Order include general objectives as established in Chapter 3, Section II.A.4 of the Basin Plan and specific numeric WQOs for groundwater within the San Luis Obispo Creek sub area of the Estero Bay groundwater unit as established in Table 3-8 of the Basin Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

NPDES regulations at 40 C.F.R. § 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 also authorize the Central Coast Water Board to require technical and monitoring reports. Rationale for

the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

A. Influent Monitoring

Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (BOD_5 and TSS percent reduction requirements). Monthly monitoring for BOD_5 and TSS have been carried over from Order No. R3-2002-0043. Continuous flow monitoring has been established to monitor flow rates in relation to the design capacity of the Facility.

B. Effluent Monitoring

Effluent monitoring is required to determine compliance with effluent limitations contained in this Order and to determine contributions, if any, by the Discharger to receiving water exceedances above water quality objectives. In addition, annual effluent monitoring for priority toxic pollutants, Basin Plan pollutants, and Title 22 pollutants has been established to evaluate reasonable potential of the Discharger's effluent to exceed water quality objectives/criteria during the next permit renewal process. Effluent monitoring requirements (i.e., sample type and frequency) have been carried over from Order No. R3-2002-0043, for the most part. Monitoring for selenium, cyanide, and bromoform has been reduced from monthly to annual, included with the annual monitoring requirement for all other priority pollutants. Monitoring for pentachlorophenol, and n-nitrosodimethylamine has been increased from annually to quarterly to resolve data quality uncertainties and determine compliance with the n-nitrosodimethylamine effluent limitation established in this Order. Monitoring for molybdenum has been established in this Order because it is a Basin Plan pollutant of concern and was not included in Order No. R3-2002-0043. An annual effluent monitoring requirement has been added to the Monitoring and Reporting Program (Attachment E).

C. Whole Effluent Toxicity Testing Requirements

Section 4 of the SIP requires a chronic toxicity effluent limitation in permits for all discharges that will cause, have reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The SIP further requires that to determine compliance with the chronic aquatic life toxicity objective, the Central Coast Water Board shall require the use of short-term chronic toxicity tests. In addition, the Basin Plan establishes a narrative water quality objective for toxicity. Thus, to determine reasonable potential for toxicity and monitor compliance with water quality objectives for toxicity, annual monitoring of whole effluent toxicity (WET) (chronic and acute) has been carried over from Order No. R3-2002-0043.

D. Receiving Water Monitoring

1. **Surface Water**

The Basin Plan establishes water quality objectives for surface waters located within the Central Coast Region for the protection of beneficial uses. Receiving water monitoring is carried over from Monitoring and Reporting Program R3-2002-0043 to monitor compliance with the receiving water limitations contained in this Order.

2. **Groundwater**

Consistent with the previous permit, groundwater monitoring requirements have not been included.

E. Other Monitoring Requirements

1. **Solids/Biosolids Monitoring**

Biosolids monitoring is required to ensure compliance with the biosolids disposal requirements. Biosolids disposal requirements are imposed pursuant to 40 C.F.R. part 503 to protect public health and prevent groundwater degradation. Biosolids monitoring shall be reported in the annual report in accordance with 40 C.F.R. part 503. Biosolids monitoring requirements have been retained from the previous Order.

2. **Pretreatment Monitoring**

Pretreatment monitoring shall be reported in the Annual Report in accordance with requirements of 40 C.F.R. § 403.8. Pretreatment monitoring requirements have been retained from the previous Order.

3. **Salt and Nutrient Management Plan Reporting**

Salt and Nutrient Management Plan reporting requirements have been established in this Order to help identify and reduce salt and nutrient loading in the effluent. This salt/nutrient management report shall be included as part of the Annual Report.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. §122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. §122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. §123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. §§122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

The Order may be modified in accordance with the requirements set forth at 40 C.F.R. parts 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

2. Special Studies and Additional Monitoring Requirements

a. **Toxicity Reduction Requirements**

The Order retains the requirement to perform a TRE, if the acute toxicity limitation is exceeded or if chronic toxicity is detected in the effluent above 1 TUc. When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitations established by the Order, the Discharger is required to resample and retest. When all monitoring results are available, the Executive Officer can determine

whether to initiate enforcement action, whether to require the Discharger to implement TRE requirements, or whether other measures are warranted.

b. **Facilities Evaluation**

The report of waste discharge submitted states that the City's average dry weather flow is approximately 4.5 MGD and that the facility has a design capacity of 5.1 MGD. The current average dry weather flow therefore represents 88% of the design capacity. Based on that data, it appears that the monthly average daily flow will or may reach design capacity during the term of this permit. Pursuant to Central Coast Standard Provisions, the Discharger shall evaluate the need for future expansion of the Facility to accommodate future growth within the City of San Luis Obispo. The evaluation shall quantify future flows to the plant from indirect dischargers, California State Polytechnic University and San Luis Obispo County Airport, and future annexations to the City of San Luis Obispo. This evaluation shall be completed with the planned Facility upgrades to be completed during the term of this permit and submitted to the Central Coast Water Board with the Engineering Report for the Facility upgrades.

3. Best Management Practices and Pollution Prevention

a. **Salt and Nutrient Management Program**

Section G of the previous Order (R3-2002-0043) required the Discharger to conduct a Salt Management Study to control levels of TDS, chloride, sodium, sulfate, and boron (collectively referred to as salts) in discharges from the Facility and attain applicable WQOs for salts in the San Luis Obispo Creek Sub-Basin of the Estero Bay Drainage Basin. The Discharger shall develop and implement a Nutrient Management Program as part of the Salt and Nutrient Management Program, as discussed in section VI.C.3.a of this Order, based on the Recycled Water Policy discussed in section III.E.3 of this Fact Sheet.

4. Construction, Operation, and Maintenance Specifications

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Management**

The use and disposal of biosolids is regulated under federal and State laws and regulations, including permitting requirements and technical standards included in 40 C.F.R. part 503. The Discharger is required to comply with the standards and time schedules contained in 40 C.F.R. part 503.

Title 27, CCR, Division 2, Subdivision 1, Section 20005 establishes approved methods for the disposal of collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes. Requirements to ensure the Discharger disposes of solids in compliance with State and federal regulations have been included in this Order. These requirements have been retained from the previous Order.

b. **Pretreatment Requirements**

The federal CWA, Section 307(b), and federal regulations, 40 C.F.R. part 403, require publicly owned treatment works to develop and implement an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants, which will interfere with treatment plant operations or

sludge disposal, and prevent pass through of pollutants that exceed water quality objectives, standards or permit limitations. Pretreatment requirements are imposed pursuant to 40 C.F.R. part 403.

6. Other Special Provisions

a. **Discharges of Storm Water.** Discharges of storm water from POTWs with a design capacity greater than 1.0 MGD are eligible for coverage under General State Water Board Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Dischargers of Storm Water Associated with Industrial Activities Excluding Construction Activities. The design capacity of the Facility is greater than 1.0 MGD. Therefore, the Discharger shall seek coverage under General Permit No. CAS000001 for all storm water discharges. This is retained from the previous Order.

b. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order 2006-0003-DWQ).** The Order requires coverage by and compliance with applicable provisions of General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order 2006-0003-DWQ). This General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section VI.C.5. For instance, the 24-hour reporting requirements in this Order are not included in the General Order. The Discharger must comply with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into the facility were required to obtain enrollment for regulation under the General Order by December 1, 2006. This provision is retained from the previous Order.

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board is considering the issuance of WDRs that will serve as an NPDES permit for the City of San Luis Obispo Water Resource Recovery Facility. As a step in the adoption process, Central Coast Water Board staff has developed tentative WDRs and is encouraging public participation in the WDRs adoption process.

A. Notification of Interested Parties

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

The public had access to the agenda and any changes in dates and locations through the Central Coast Water Board's website at http://www.waterboards.ca.gov/centralcoast/

B. Written Comments

Interested persons are invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments are due either in person or by mail to the Executive Officer at the Central Coast Water Board at the address on the cover page or via electronic mail to centralcoast@waterboards.ca.gov.

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments are due at the Central Coast Water Board office by 5:00 p.m. on **July 25, 2014**.

C. Public Hearing

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

Date:	**September 25-26, 2014**
Time:	**8:30 a.m.**
Location:	**Central Coast Water Board Offices** **895 Aerovista Drive, Suite 101** **San Luis Obispo**

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

D. Reconsideration of Waste Discharge Requirements

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

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

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

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Central Coast Water Board by calling (805) 549-3147.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Central Coast Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Katie DiSimone at (805) 542-4638 or katie.disimone@waterboards.ca.gov or Sheila Soderberg at (905) 549-3592 or sheila.soderberg@waterboards.ca.gov.