CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
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Central Coast Regional Water Quality Control Board
(http://www.waterboards.ca.gov/centralcoast)

ORDER NUMBER R3-2022-0004
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NUMBER CA0048127

WASTE DISCHARGE REQUIREMENTS
FOR THE CITY OF LOMPOC REGIONAL WASTEWATER RECLAMATION PLANT

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

Discharger	City of Lompoc
Indirect Discharger	Vandenberg Space Force Base Vandenberg Village Community Services District
Name of Facility	City of Lompoc Regional Wastewater Reclamation Plant
Facility Address	1801 West Central Avenue Lompoc, CA 93436 Santa Barbara County

Table 1. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated domestic wastewater	34.663056°	-120.481944°	San Miguelito Creek
002	Secondary and tertiary treated recycled domestic wastewater	-	-	Reclamation Use

This Order was adopted on:	**February 17, 2022.**
This Order shall become effective on:	**May 1, 2022.**
This Order shall expire on:	**April 30, 2027.**

The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations and an application for reissuance of a National Pollutant Discharge Elimination System permit no later than **180 days prior to the Order expiration date.** The U.S. Environmental Protection Agency and the California Regional Water Quality Control Board, Central Coast Region have classified this discharge as follows: **Major**.

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

Matthew T. Keeling Digitally signed by Matthew T. Keeling
Date: 2022.04.21 12:10:34 -07'00'

Matthew T. Keeling, Executive Officer

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1. FACILITY INFORMATION

Information describing the City of Lompoc (Discharger) Regional Wastewater Reclamation Plant (Facility) is summarized on the cover page and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

2.1. **Legal Authorities.** This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order.

2.2. **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.

2.3. **Provisions and Requirements Implementing State Law.** Some provisions/requirements in this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

2.4. **Water Reclamation Requirements for Recycled Water Production and Use.** This Order allows the production and use of disinfected secondary and tertiary recycled wastewater in compliance with applicable state and local requirements regarding the production and use of reclaimed wastewater, including those requirements established by the California Department of Public Health in title 22, sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria. Additionally, this Order includes water reclamation requirements for the Facility pursuant to the State Water Resources Control Board's (State Water Board's) Division of Drinking Water (DDW) recommendations submitted to the Central Coast Water Board. The distribution and offsite reuse of recycled water produced by the Facility is subject to the State Water Board's General Water Reclamation Requirements for Recycled Water Use (State Water Board Order No. WQ 2016-0068-DDW), or other applicable permit, dependent on final use.

2.5. **Response to Climate Change.** Climate change refers to observed changes in regional weather patterns such as temperature, precipitation, and storm frequency and size. At the local scale, within urbanized areas, climate change may directly impact groundwater and surface water supply; drainage, flooding, and erosion patterns; and ecosystems and habitat. This shift in climate, combined with California's growing population, has increased reliance on pumping, conveying, treating, and heating water, increasing the water sector's greenhouse gas emissions. The State Water Board's Resolution No. 2017-0012, "Comprehensive Response to Climate Change," requires a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities. Aligning with Resolution No. 2017-0012, this Order supports beneficial reuse of the Facility's treated effluent to offset potable water supplies for irrigation and dedicated in-stream flows to support critical creek habitat. This Order incorporates requirements for the Facility to beneficially reuse treated effluent to diversify the State's water supply portfolio to prepare for uncertainties in water resources due to the changing climate. Additionally, to incorporate proactive planning for the future, this Order requires the Discharger to identify and plan for hazards and vulnerabilities at this Facility related to flooding, temperature, and influent flow and loading fluctuations exacerbated by climate change.

2.6. **Human Right to Water.** California Water Code section 106.3 established the policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004, which adopts the human right to water as a core value and affirms the realization of the human right to water and protecting human health as the Central Coast Water Board's top priorities. Consistent with the human right to water stated in California Water Code section 106.3, subdivision (a), and the Central Coast Water Board's Resolution No. R3-2017-0004, this Order promotes actions that advance the human right to water and discourages actions that delay or impede opportunities for communities to secure safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order implements recently updated mercury water quality objectives which are more stringent than previous objectives, in order to more adequately protect beneficial uses related to water and fish consumption.

2.7. **Disadvantaged Community Status.** On January 26, 2017, the Central Coast Water Board approved Resolution No. R3-2017-0004, *Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Central Coast Water Board Programs and Activities,* which adopts the human right to water as a core value and affirms the realization of the human right to water and protecting human health as the Central Coast Water Board's top priorities. To meet the objectives of the Resolution, staff has evaluated the disadvantaged community status for the Discharger. Based on 2018 census data, the California Department of Water

Resources Disadvantaged Community (DAC) Mapping Tool[1] identifies ten block groups as disadvantaged communities and nine block groups as severely disadvantaged communities in the City of Lompoc, including over one half of the population as disadvantaged and severely disadvantaged communities. The Facility and discharge point are located nearby, but not within, disadvantaged block groups. The tool currently defines a disadvantaged community as a census block with a median household income between $42,737 and $56,982 and a severely disadvantaged community as a census block with a median household income less than $42,737. The potential costs to the Discharger and associated communities associated with the new requirements is supported by the water quality and beneficial use protection and restoration benefits, including the protection of public health. In addition, the TSO will provide temporary relief to the Discharger and associated communities from potential mandatory minimum penalties while the Discharger implements corrective actions in response to the new effluent limitations.

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

2.9. **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 R3-2011-0211 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Coast Water Board from taking enforcement action for violations of the previous Order.

3. DISCHARGE PROHIBITIONS

3.1. Discharge of treated wastewater at a location or in a manner, other than as described by this Order at Discharge Points 001 and 002, is prohibited.

3.2. The discharge of any waste not specifically regulated by this Order, excluding stormwater regulated by General Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Stormwater Associated with Industrial Activities), is prohibited.

[1] The DAC Mapping Tool is used to inform statewide Integrated Water Resources Management (IRWM), Sustainable Groundwater Monitoring Act (SGMA), and California Water Plan implementation efforts and can be found at the following website: https://gis.water.ca.gov/app/dacs/.

3.3. The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision 1.7 (Bypass), is prohibited.

3.4. Creation of a condition of pollution, contamination, or nuisance, as defined by section 13050 of the California Water Code, is prohibited.

3.5. The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat.

3.6. The discharge of radioactive substances is prohibited.

3.7. The monthly average dry weather effluent flow shall not exceed 5.0 million gallons per day (MGD), aggregated at Discharge Point 001.

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. Effluent Limitations – Discharge Point 001

4.1.1. **Final Effluent Limitations – Discharge Point 001**

4.1.1.1. 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 2. Effluent Limitations at Discharge Point 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD) 5-day at 20 degrees Celsius (°C)	Milligram per liter (mg/L)	10	15	20		
BOD 5-day at 20°C	Pounds per day (lbs/day) [1]	420	630	830		
Total Suspended Solids (TSS)	mg/L	10	15	20		

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
TSS	lbs/day[1]	420	630	830		
pH[2],[3]	standard units				6.5	8.3
Oil and Grease	mg/L	5		10		
Settleable Solids	milliliter per liter (mL/L)	0.1		0.3		
Turbidity	Nephelo-metric Turbidity Units (NTU)	10		20		
Un-ionized Ammonia	mg/L		0.025			
Nitrate (as Nitrogen (N))	mg/L			10		
Nitrate + Nitrite (as N)	mg/L	10		20		
Molybdenum [5]	micro-gram per liter (µg/L)	25		35		
Chromium (VI), Total Recoverable	µg/L	8.1		16		
Acute Toxicity	% survival	[4]				
Chronic Toxicity	Chronic Toxicity Units (TUc)	1.0				

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

[2] Applied as an instantaneous effluent limitation.

[3] 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).

[4] Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition) to the survival of control organisms, as defined in section V of Attachment E to this Order.

[5] Central Coast Water Board Resolution No. R3-2008-0025 recognized the natural high background levels of molybdenum and modified the effluent limits as reflected in this Order.

4.1.1.2**. Percent Removal**: The average monthly percent removal of BOD 5-day at 20°C and total suspended solids shall not be less than 85 percent.

4.1.1.3. **Floating Material:** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

4.1.1.4. ***E. Coli***

4.1.1.4.1. *E. coli* concentrations in the effluent shall not exceed 100 Most Probable Number (MPN)/100 mL, as a 6-week rolling geometric mean; and

4.1.1.4.2. *E. coli* in the effluent shall not exceed 320 MPN/100 mL in more than 10 percent of samples collected in a calendar month, calculated in a static manner.

4.1.1.5 **Salinity:** The discharge of tertiary treated wastewater shall comply with the following effluent limitations:

Table 3. Effluent Limitations

Parameter	Units	Annual Mean[1]
Total Dissolved Solids (TDS)	mg/L	1,100
Sodium	mg/L	270

Parameter	Units	Annual Mean[1]
Chloride	mg/L	250
Sulfate	mg/L	350
Boron	mg/L	0.4

1 Compliance with the effluent limitations is based on a 12-month running mean.

4.1.2. Interim Effluent Limitations – Not Applicable

4.2. Land Discharge Specifications – Not Applicable

4.3. Recycling Specifications – Discharge Point 002

As specified below, this Order conditionally authorizes the Discharger to act as the producer of recycled (or reclaimed) water and to reuse recycled water onsite at the Facility and for other purposes. The Discharger is responsible for compliance with all applicable requirements associated with the production and onsite use of recycled water as specified within this Order. The City filed a California Code of Regulations, title 22 engineering report in November 2017 that described recycled water quality as "disinfected secondary-2.2" (as defined in title 22, section 60301.220) and submitted a Notice of Intent (NOI) on November 2, 2017, to enroll under the State Water Board General Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW). The engineering report was accepted by the Division of Drinking Water (DDW) on December 13, 2017, and the Notice of Applicability (NOA) was issued on January 25, 2018. The program was revised and accepted by DDW on November 22, 2019, and a revised NOA was issued on May 20, 2020.The distribution and offsite reuse of recycled water produced by the Facility is subject to State Water Board Order No. WQ 2016-0068-DDW, or other applicable permit, dependent on final use.

Prior to delivery to a use site that requires a level of treatment as defined in title 22, section 60301.230 disinfected tertiary recycled water, the City of Lompoc shall update and resubmit the engineering report to adequately address the requirements in Title 22 for tertiary recycled water. The ultraviolet (UV) disinfection system shall demonstrate the capability to meet section 60301.230 via onsite commissioning and the city shall submit a testing protocol for approval to accomplish this. Uses that require tertiary treatment are defined in title 22.

4.3.1. Reclamation and use of treated wastewater shall adhere to applicable requirements of California Water Code sections 13500-13577 (Water Reclamation); and California Code of Regulations, title 17 sections 7583-7586,

title 17 sections 7601-7605, and title 22 sections 60301-60355 (Uniform Statewide Recycling Criteria).

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

4.3.3. Disinfected tertiary recycled water shall be as defined by title 22, section 60301.230.

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

4.3.5. Beginning on the effective date of this Order, the Discharger shall maintain compliance with the following limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the attached MRP.

Table 4. Recycled Water Discharge Specifications

Parameter	Units	Average Monthly	Weekly Average
BOD_5	mg/L	10	20
TSS	mg/L	10	20
Nitrate, as N	mg/L	5[1]	10

[1] The average monthly limitation for current uses of secondary treated recycled water is 10 mg/L.

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

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

4.3.6.2. 5 NTU more than 5 percent of the time within a 24-hour period, and

4.3.6.3. 10 NTU at any time.

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

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

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

4.3.7.3. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL for disinfected tertiary recycled water.

4.3.8. Freeboard shall always exceed two feet in all recycled water storage ponds owned or operated by the Discharger.

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

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

4.3.11. Recycled water disinfected with chlorine shall have a chlorine concentration time modal contact time (CT) value of not less than 450 mg-min/L at all times with a modal contact time of at least 90 minutes based on a flow of 9.0 MGD. Monthly average flow of chlorinated recycled water shall not exceed 15 MGD or the total monthly demand of the users.

4.3.12. The Discharger shall adhere to the operating conditions for the ultraviolet (UV) system.

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

4.3.14. All recycled water reservoirs and other areas with public access shall be posted with signs in English and an international symbol to warn the public that recycled wastewater is being stored or used.

4.3.15. Recycled water systems at the Facility shall be properly labeled and regularly inspected to ensure proper operation, absence of leaks, and absence of illegal connections.

5. RECEIVING WATER LIMITATIONS

5.1. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan) and are a required part of this Order. The discharge shall not cause a violation of the following receiving water limitations in San Miguelito Creek or the Santa Ynez River, which is immediately downstream. The discharge from the wastewater treatment facility shall comply with the following in the receiving waters:

5.1.1. 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.

5.1.2. 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.

5.1.3. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

5.1.4. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affects beneficial uses.

5.1.5. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.

5.1.6. 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.

5.1.7. 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.

5.1.8. 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.

5.1.9. 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.

5.1.9.1. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20 percent.

5.1.9.2. Where natural turbidity is between 50 and 100 NTU, increases shall not exceed 10 NTU.

5.1.9.3. Where natural turbidity is greater than 100 NTU, increases shall not exceed 10 percent.

5.1.10. 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 in fresh water.

5.1.11. Dissolved oxygen concentrations in receiving waters shall not be reduced below 7.0 mg/L at any time.

5.1.12. Natural temperature of receiving waters shall not be altered unless it can be demonstrated to the satisfaction of the Central Coast Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature be increased by more than 5° Fahrenheit (F) above natural receiving water temperature.

5.1.13. 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 life in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same waterbody in areas unaffected by the waste discharge.

5.1.14. 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.

5.1.15. 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.

5.1.16. Waters shall not contain organic substances in concentrations greater than those listed in the table below:

Table 5. Organic Substances Water Quality Criteria

Parameter	Units	Water Quality Objective
Methylene Blue Activated Substances	mg/L	0.2
Total Phenols	mg/L	0.1
Polychlorinated Biphenyls (PCBs)[1]	µg/L	0.3
Phthalate Esters	µg/L	0.002

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

5.1.17. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent which 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 title 22 California Code of Regulations, division 4, chapter 15, article 5, sections 64442 and 64443.

5.1.18. 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.

5.1.19. The concentrations of metals listed in the table below shall not be exceeded for the protection of aquatic life.

Table 6. Hardness Dependent Metals Criteria

Parameter	Units	Receiving Water Hardness >100 mg/L calcium carbonate ($CaCO_3$)	Receiving Water Hardness <100 mg/L $CaCO_3$
Cadmium	mg/L	0.003	0.0004

Parameter	Units	Receiving Water Hardness >100 mg/L calcium carbonate ($CaCO_3$)	Receiving Water Hardness <100 mg/L $CaCO_3$
Chromium	mg/L	0.05	0.05
Copper	mg/L	0.03	0.01
Lead	mg/L	0.03	0.03
Mercury	mg/L	0.0002	0.0002
Nickel	mg/L	0.4	0.1
Zinc	mg/L	0.2	0.004

5.1.20. 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 3, Table 3-3 of the Basin Plan.

5.1.21. Cadmium shall not exceed 0.003 mg/L, when hardness in receiving waters is greater than 100 mg/L as $CaCO_3$, nor shall cadmium exceed 0.0004 mg/L when hardness in receiving waters is equal to or less than 100 mg/L as $CaCO_3$.

5.1.22. *E. coli* concentration shall not exceed 100 MPN/100 mL as a 6-week rolling geometric mean, calculated weekly. A statistical threshold value (STV) of 320 MPN/100 mL for *E. coli* shall not be exceeded by more than 10 percent of samples collected in a calendar month, calculated in a static manner.

5.1.23. Discharges shall not cause receiving water to exceed the water quality objectives for the Santa Ynez Drainage Hydrologic Unit (Lompoc Sub-Area) specifically identified by Table 3-5 of the Basin Plan, as shown in the table below. Objectives shown are annual mean values. Objectives are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources.

Table 7. Salinity Water Quality Objectives

Parameter	Units	Annual Mean
TDS	mg/L	1,000
Chloride	mg/L	100
Sulfate	mg/L	350
Boron	mg/L	0.4
Sodium	mg/L	100

5.2. 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 to determine if it is the cause of exceedances in the groundwater.

5.2.1. Groundwater shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses.

5.2.2. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent which 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 title 22 California Code of Regulations, division 4, chapter 15, article 5, sections 64442 and 64443.

5.2.3. The Discharger shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwater as determined by comparison of samples collected from wells located up-gradient and down-gradient of the waters affected by the discharge.

5.2.4. The median concentration of coliform organisms in groundwater, over any seven-day period, shall be less than 2.2 organisms per 100 mL.

5.2.5. 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.

5.2.6. 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 3-1 of the Basin Plan.

5.2.7. 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 chapter 3, Table 3-2 of the Basin Plan.

5.2.8. Groundwater shall not contain constituents greater than the following concentrations established in Table 3-6 of the Basin Plan for groundwaters within the Lompoc Plain Sub Area of the Santa Ynez Valley Groundwater Basin. Objectives shown are annual median values. Objectives based on preservation of existing quality or water quality enhancement believed attainable following control of point sources.

Table 8. Groundwater Objectives

Parameter	Units	Annual Median
TDS	mg/L	1,250
Chloride	mg/L	250
Sulfate	mg/L	500
Boron	mg/L	0.5
Sodium	mg/L	250
Nitrogen	mg/L	2.0

6. PROVISIONS

6.1. Standard Provisions

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

6.1.2. The Discharger shall comply with Central Coast Water Board Standard Provisions in Attachment D. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply.

6.2. Monitoring and Reporting Program (MRP) Requirements

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

6.3. Special Provisions

6.3.1. **Reopener Provisions**

6.3.1.1. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

6.3.1.2. This Order may be reopened and modified in accordance with NPDES regulations at 40 Code of Federal Regulations (CFR) parts 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any U.S. EPA approved, new, state water quality objective.

6.3.1.3. This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a State Implementation Policy (SIP) water quality objective.

6.3.2. **Special Studies, Technical Papers and Additional Monitoring Requirements**

6.3.2.1. **Toxicity Reduction Requirements**

If the discharge consistently exceeds an effluent limitation for toxicity specified by section 4.1 of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan.

A TRE is a study conducted in a step-wise process designed to identify the 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. 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.

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

Table 9. Toxicity Reduction Evaluation Schedule

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

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

6.3.2.1.1. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE Whole Effluent Toxicity (WET) monitoring schedule;

6.3.2.1.2. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and

6.3.2.1.3. A schedule for these actions.

6.3.3. **Best Management Practices and Pollution Prevention**

6.3.3.1. **Pollutant Minimization Program**

6.3.3.1.1. 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 detected not quantifiable (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:

6.3.3.1.1.1. A sample result is reported as DNQ and the effluent limitation is less than the reporting limit (RL); or

6.3.3.1.1.2. A sample result is reported as non-detect (ND) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section 10.2.4.

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

6.3.3.1.2.1. 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;

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

6.3.3.1.2.3. 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;

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

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

6.3.3.1.2.5.1. All PMP monitoring results for the previous year;

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

6.3.3.1.2.5.3. A summary of all actions undertaken pursuant to the control strategy; and

6.3.3.1.2.5.4. A description of actions to be taken in the following year.

6.3.4. **Construction, Operation and Maintenance Specifications**

6.3.4.1. The Facility shall be operated as specified under Standard Provision 1.4 of Attachment D.

6.3.5. **Special Provisions for Publicly Owned Treatment Works (POTWs)**

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

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

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

6.3.5.2. **Pretreatment.** The Discharger shall be responsible for the performance for all pretreatment requirements contained in 40 CFR part 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by the U.S. EPA, or other appropriate parties, as provided in the CWA, as amended (33 USC 1351 et seq.). The Discharger shall implement and enforce its approved POTW Pretreatment Program. The Discharger's approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. U.S. EPA or the Central Coast Water Board may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the CWA.

The Discharger shall enforce the requirements promulgated under sections 307 (b), 307 (c), 307 (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 CFR part 403, including, but not limited to the following:

6.3.5.2.1. Implement the necessary authorities as provided in 40 CFR section 403.8 (f) (1);

6.3.5.2.2. Enforce the pretreatment requirements under 40 CFR sections 403.5 and 403.6;

6.3.5.2.3. Implement the programmatic functions as provided in 40 CFR section 403.8 (f) (2); and

6.3.5.2.4. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR section 403.8 (f) (3).

6.3.5.3. **Discharges of Stormwater.** For the control of stormwater 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 2014-0057-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Stormwater Associated with Industrial Activities Excluding Construction Activities*.

6.3.5.4. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems** The Order requires coverage by and compliance with applicable provisions of State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order). 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. This provision is retained from the previous Order. The Discharger is enrolled under the General Permit.

6.3.5.5. **Resource Recovery from Anaerobically Digestible Material.** If the Discharger will receive hauled-in anaerobically digestible material for injection into an anaerobic digester, the Discharger shall notify the Central Coast Water Board and develop and implement Standard Operating Procedures for this activity. The Standard Operating Procedures shall be developed prior to receiving hauled-in anaerobically digestible material. The Standard Operating Procedures shall address material handling, including unloading, screening, or other processing prior to anaerobic digestion; transportation; spill prevention; and spill response. In addition, the Standard Operating Procedures shall address avoidance of the introduction of materials that could cause interference, pass-through, or upset of the treatment processes; avoidance of prohibited material; vector control; odor control; operation and maintenance; and the disposition of any solid waste segregated from introduction to the digester. The Discharger shall train its staff on the Standard Operating Procedures and shall maintain records for a minimum of five years for each load received, describing the hauler, waste type, and quantity received. In addition, the Discharger shall maintain records for a minimum of five years for the disposition, location, and quantity of cumulative pre-digestion-segregated solid waste hauled offsite.

6.3.6. **Other Special Provisions**

6.3.6.1. **Salt and Nutrient Management**

6.3.6.1.1 The Discharger shall continue to update and implement an ongoing Salt Management Program, with the intent of reducing mass loading of salts in treated effluent and attainment of applicable water quality objectives for salts in the Lompoc Plain Sub-Basin Area of the Santa Ynez River Valley Groundwater Drainage Basin. Additionally, the Discharger shall continue to develop and implement a Nutrient Management Program, with the intent of reducing mass loading of nutrients in treated effluent and attainment of applicable water quality objectives for nutrients in the same basin.

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

6.3.6.1.3 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.

6.3.6.1.4 As part of the Salt and Nutrient Management Program, the Discharger shall submit an annual report describing salt and nutrient reduction efforts as described in the section 9.3 of the MRP (Attachment E).

6.3.6.1.5 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 salt/nutrient management plan implemented under the provisions of State Water Board Resolution No. 2018-0057 (Recycled Water Policy).

6.3.6.2. **Climate Change Adaptation Program.** With the Report of Waste Discharge that is due October 9, 2026, the Discharger shall submit a Climate Change Adaptation Program[2] to the Central Coast Water Board Executive Officer describing the Discharger's long-term approach for identifying and addressing climate change hazards and vulnerabilities at the Facility, including all associated infrastructure (e.g., treatment facilities, conveyances to discharge points, discharge facilities). The Climate Change Adaptation Program shall, at a minimum, include the following components:

6.3.6.2.1. Hazards and Vulnerabilities – Identify climate change hazards, at a minimum accounting for the hazards listed below, applicable to the Facility. Using up-to-date tools, data, and guidance from the State of California (e.g., Cal-Adapt,[3] reports from the Climate-Safe Infrastructure Working Group, the

[2] In place of a static document, the Discharger may develop a living document and/or set of tools that fulfills the components outlined for the Climate Change Adaptation Program.

[3] Cal-Adapt is an online resource with downscaled climate project data. It provides users with easily accessible projections and more detailed downloadable data supporting a range of needs and array of climate models and emissions scenarios. Cal-Adapt offers climate projections for the major stressors facing California, including the following: temperature averages and extremes, precipitation averages and extremes, sea-level rise, wildfires, and drought. The Governor's Office of Planning and Research (OPR) recommends agencies use Representative Concentration Pathway (RCP) 8.5 for analyses considering

Climate Adaptation Planning Guide, California Climate Assessment Regional Reports), assess the Facility's vulnerability to identified hazards that could cause reduction, loss, or failure of treatment processes and/or critical structures at the Facility. Identify and justify the resources (e.g., models and tools, design parameters) used to inform identification of these hazards and vulnerabilities.

6.3.6.2.1.1. Precipitation Pattern Changes

6.3.6.2.1.1.1. Drought – Decreased influent quantity and quality

6.3.6.2.1.1.2. Peak Events – Flooding and increased influent quantity

6.3.6.2.1.2. Temperature fluctuations and extremes

6.3.6.2.1.3. Increased wildfires

6.3.6.2.1.4. Increased power outages

6.3.6.2.2. Resiliency Actions – Identify actions to build facility and operational resilience to identified vulnerabilities, accounting for options that minimize resource impacts.

6.3.6.2.3. Adaptation Strategy – Develop and implement a strategy to complete Resiliency Actions, at a minimum encompassing the following:

6.3.6.2.3.1. Prioritization – Prioritized Resiliency Actions based on risks to water quality, but also accounting for costs and benefits.

6.3.6.2.3.2. Schedule and Milestones – Timeframes to complete prioritized Resiliency Actions and/or climate change hazard triggers to inform when the Discharger shall implement actions. Milestones to complete critical steps for prioritized Resiliency Actions, designed to demonstrate measurable progress at a steady, or accelerated, completion pace over the established timeframes.

6.3.6.2.3.3. Financial Planning – Projected costs necessary to implement and sustain Resiliency Actions and a strategy to procure funds.

6.3.7. **Compliance Schedules – Not Applicable**

7. COMPLIANCE DETERMINATION

7.1. General

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

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impacts through 2050, because there are minimal differences between emissions scenarios during the first half of the 21st century.

7.2. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple samples analyses and the data set contains one or more reported determinations of DNQ, or ND, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

7.2.1. 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.

7.2.2. 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.

7.3. Average Monthly Effluent Limitation (AMEL)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

7.4. Average Weekly Effluent Limitation (AWEL)

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

7.5. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that

parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

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:

$$\text{Arithmetic mean } (\mu) = \frac{\Sigma x}{n}$$

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 one 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 reporting limit (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 wasteload allocation (WLA) as used in United States Environmental Protection Agency (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 minimum level (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 California 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:

$$\text{median} = \frac{X_{(n+1)}}{2}$$

If n is even, then:

$$\text{median} = \frac{X_{\frac{n}{2}} + X_{\frac{n}{2}+1}}{2}$$

(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 reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 Code of Federal Regulations (CFR) part 136, Attachment B.

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 California 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 California 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 Resources Control Board (State Water Board) or California Regional Water Quality Control Board, Central Coast Region (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 State

Implementation Policy (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 a Central Coast Water Board Water Quality Control Plan for the Central Coastal Basin (Basin Plan).

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

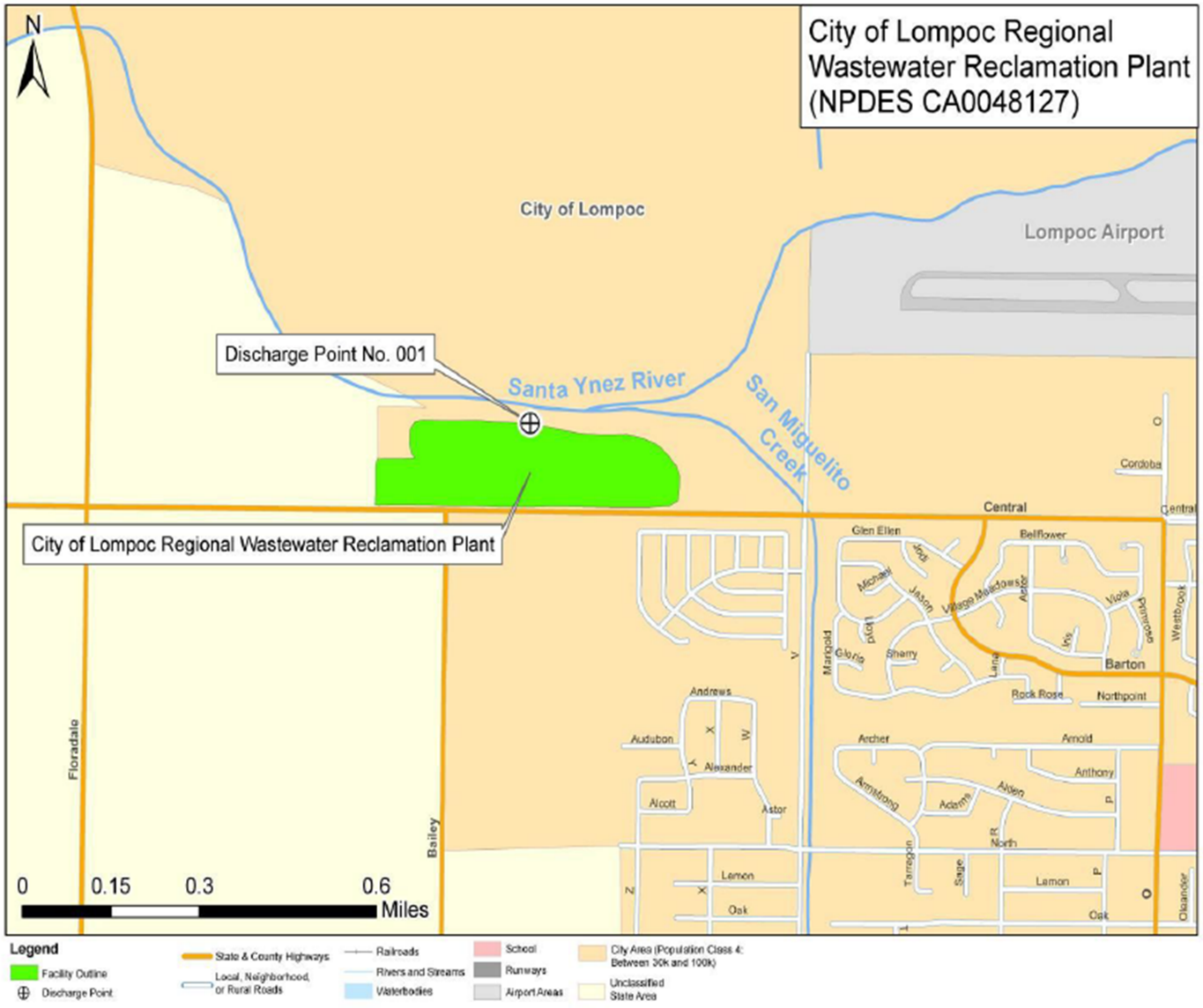
$$\text{Standard Deviation } (\sigma) = \frac{\Sigma(X-\mu)^2}{(n-1)^{0.5}}$$

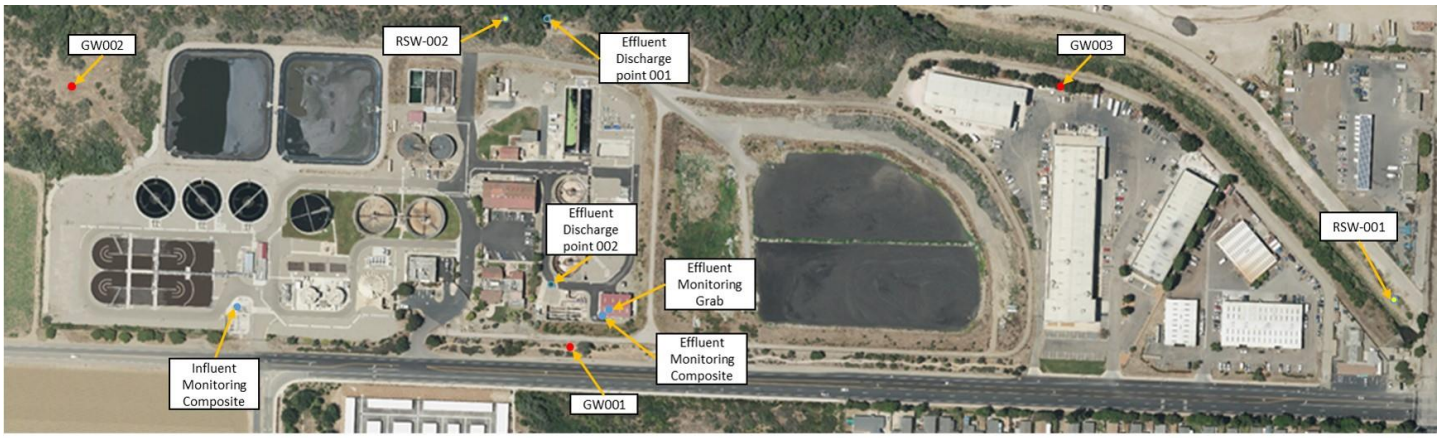
where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

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

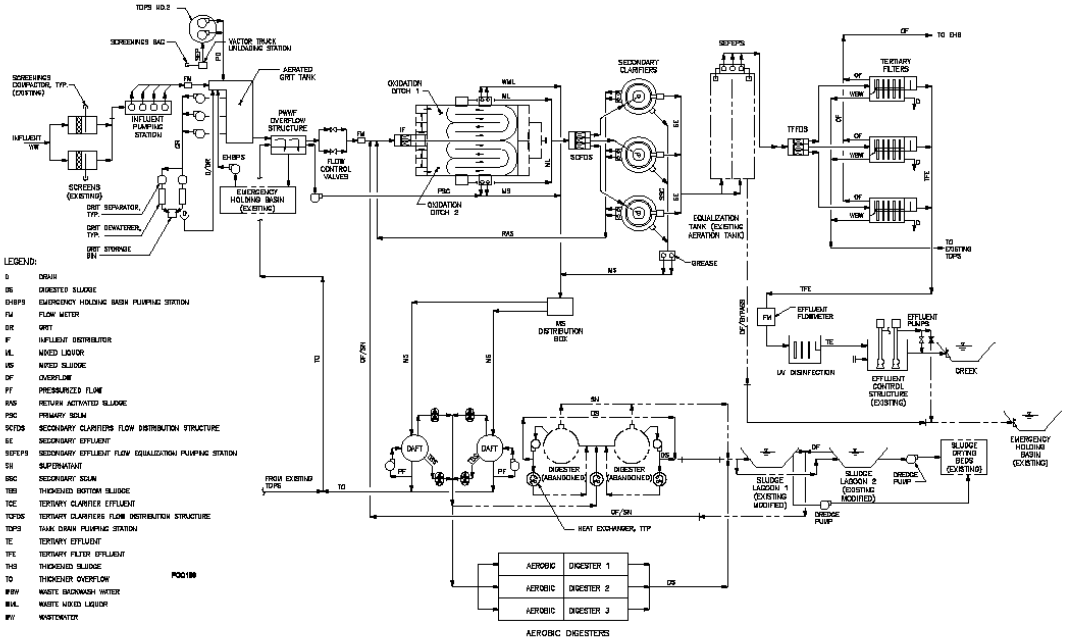
Map 1: Facility Location and Discharge Point

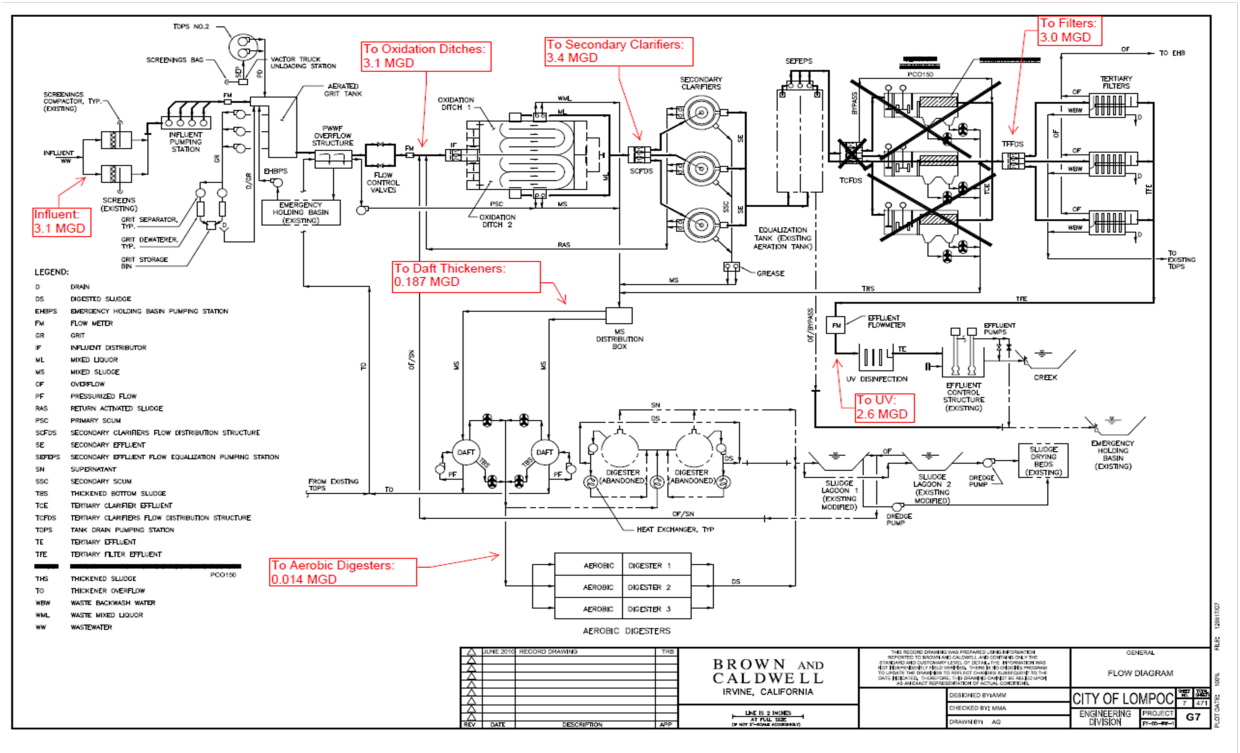




- Influent Monitoring Composite
- Effluent Monitoring Composite
- Effluent Monitoring Grab
- Effluent Discharge Point 001 (Tertiary Treated Domestic Wastewater)
- Effluent Discharge Point 002 (Tertiary Treated Recycled Domestic Wastewater)
- GW001: Ground Water 001
- GW002: Ground Water 002
- GW003: Ground Water 003
- RSW-001: Receiving Water 001
- RSW-002: Receiving Water 002

ATTACHMENT C – FLOW SCHEMATIC





ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

1.1.1. The Discharger must comply with all terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (Water Code) and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 Code of Federal Regulations (C.F.R.) 122.41(a); Water Code sections 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

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

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).)

1.3. Duty to Mitigate

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

1.4. 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 include 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).)

1.5. Property Rights

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

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

1.6. Inspection and Entry

The Discharger shall allow the California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board), State Water Resources Control Board (State Water Board), United States Environmental Protection Agency (U.S. EPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. 1318(a)(4)(B); 40 C.F.R. 122.41(i); Water Code sections 13267, 13383):

1.6.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. 1318(a)(4)(B)(i); 40 C.F.R. 122.41(i)(1); Water Code sections 13267, 13383);

1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. 1318(a)(4)(B)(ii); 40 C.F.R. 122.41(i)(2); Water Code sections 13267, 13383);

1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. 1318(a)(4)(B)(ii); 40 C.F.R. 122.41(i)(3); Water Code sections 13267, 13383); and

1.6.4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. 1318(a)(4)(B); 40 C.F.R. 122.41(i)(4); Water Code sections 13267, 13383.)

1.7. Bypass

1.7.1. Definitions

1.7.1.1. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. 122.41(m)(1)(i).)

1.7.1.2. “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).)

1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. 122.41(m)(2).)

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

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

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

1.7.3.3. The Discharger submitted notice to the Central Coast Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 C.F.R. 122.41(m)(4)(i)(C).)

1.7.4. The Central Coast Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Coast Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 C.F.R. 122.41(m)(4)(ii).)

1.7.5. **Notice**

1.7.5.1. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Central Coast Water Board. As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. 122.22, and 40 C.F.R. part127. (40 C.F.R. 122.41(m)(3)(i).)

1.7.5.2. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Central Coast Water Board. As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. 122.22, and 40 C.F.R. part 127. (40 C.F.R. 122.41(m)(3)(ii).)

1.8. 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).)

1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. 122.41(n)(2).)

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

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

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

1.8.2.3. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting 5.5.2.2 below (24-hour notice) (40 C.F.R. 122.41(n)(3)(iii)); and

1.8.2.4. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance 1.3 above. (40 C.F.R. 122.41(n)(3)(iv).)

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

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. 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).)

2.2. 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).)

2.3. 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.)

3. STANDARD PROVISIONS – MONITORING

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

3.2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

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

4. STANDARD PROVISIONS – RECORDS

4.1. 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).)

4.2. Records of monitoring information shall include:

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

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

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

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

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

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

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

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

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

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger shall furnish to the Central Coast Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Central Coast Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Coast Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order.
(40 C.F.R. 122.41(h); Water Code sections 13267, 13383.)

5.2. Signatory and Certification Requirements

5.2.1. All applications, reports, or information submitted to the Central Coast Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. 122.41(k).)

5.2.2. 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).)

5.2.3. All reports required by this Order and other information requested by the Central Coast Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.2.2 above (40 C.F.R. 122.22(b)(1));

5.2.3.2. 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

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

5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted to the Central Coast Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. 122.22(c).)

5.2.5. Any person signing a document under Standard Provisions – Reporting 5.2.2 or 5.2.3 above shall make the following certification:

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

5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting 5.2, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R 122.22(e).)

5.3. Monitoring Reports

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

5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. 122.22, and 40 C.F.R. part 127. (40 C.F.R. 122.41(l)(4)(i).)

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

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

5.4. 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).)

5.5. Twenty-Four Hour Reporting

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

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2023, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Central Coast Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. 122.22, and 40 C.F.R. part 127. The Central Coast Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. 122.41(l)(6)(i).)

5.5.2. The following shall be included as information that must be reported within 24 hours:

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

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

5.5.3. The Central Coast Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. 122.41(l)(6)(ii)(B).)

5.6. 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)):

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

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

5.7. Anticipated Noncompliance

The Discharger shall give advance notice to the Central Coast Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. 122.41(l)(2).)

5.8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. The Central Coast Water Board may also require the Discharger to electronically submit reports not

related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. 122.41(l)(7).)

5.9 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 U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. 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, sections 13268, 13350, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. 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)):

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

7.1.1.1. 100 micrograms per liter (µg/L) (40 C.F.R. 122.42(a)(1)(i));

7.1.1.2. 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));

7.1.1.3. 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

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

7.1.2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this

Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. 122.42(a)(2)):

7.1.2.1. 500 micrograms per liter (µg/L) (40 C.F.R. 122.42(a)(2)(i));

7.1.2.2. 1 milligram per liter (mg/L) for antimony (40 C.F.R. 122.42(a)(2)(ii));

7.1.2.3. 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

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

7.2 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)):

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

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

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

8. CENTRAL COAST WATER BOARD STANDARD PROVISIONS

8.1. Central Coast Standard Provision – Prohibitions

8.1.1. Introduction of “incompatible wastes” to the treatment system is prohibited.

8.1.2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.

8.1.3. Discharge of “toxic pollutants” in violation of effluent standards and prohibitions established under section 307(a) of the CWA is prohibited.

8.1.4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.

8.1.5. Introduction of pollutants into the collection, treatment, or disposal system by and “indirect discharger” that:

8.1.5.1. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,

8.1.5.2. Flow through the system to the receiving water untreated; and,

8.1.5.3. Cause or “significantly contribute” to a violation of any requirement of this Order, is prohibited.

8.1.6. Introduction of “pollutant free” wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

8.2. **Central Coast Standard Provision – Provisions**

8.2.1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by Water Code section 13050.

8.2.2. 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.

8.2.3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.

8.2.4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.

8.2.5. Publicly owned wastewater treatment plans shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to title 23 of the California Administrative Code.

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

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

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

8.2.6.3. 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,

8.2.6.4. A substantial change in character, location, or volume of the discharge.

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

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

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

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

8.2.8.3. Access to new information that affects the germs of the permit, including applicable schedules;

8.2.8.4. Correction of technical mistakes or mistaken interpretations of law; and,

8.2.8.5. Other causes set forth under Sub-part D of 40 C.F.R. part 122.

8.2.9. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operative procedures, or other precautions. Preventative and

contingency plans for controlling and minimizing the effect of accidental discharges shall:

8.2.9.1. 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).

8.2.9.2. 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.

8.2.10. 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.

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

8.2.12. 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.

8.2.13. Production and use of reclaimed water is subject to the approval of the Central Coast Water Board. Production and use of reclaimed water shall be in conformance with recycling criteria established in chapter 3, title 22, of the California Administrative Code and chapter 7, division 7, of the Water Code. An engineering report pursuant to section 60323, title 22, of the California Administrative Code is required and a waiver or water recycling requirements from the Central Coast Water 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 the Central Coast Water Board.

8.3. **Central Coast Standard Provisions – General Monitoring Requirements**

8.3.1. 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 1.7.13.). 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 1.7.14.).

8.3.2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the Division of Drinking Water 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 Board and the California Department of Fish and Wildlife. If the laboratory used or proposed for use by the discharger is not certified by the Division of Drinking Water or, where appropriate, the Department of Fish and Wildlife due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:

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

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

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

8.3.3. 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.

8.3.4. 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.

8.4. **Central Coast Standard Provisions – General Reporting Requirements**

8.4.1. 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:

8.4.1.1. 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.).

8.4.1.2. 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.).

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

8.4.1.4. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – 8.3.1 above, and Federal Standard Provision – Monitoring 3.2. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.

8.4.1.5. 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.

8.4.2. 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.

8.4.3. The Discharger shall file a Report of Waste Discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.

8.4.4. 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:

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

8.4.4.2. 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 5.2, 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.

8.4.5. 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
U.S. EPA, Region 9
Attention: CWA Standards and Permits Office (WTR-5)
75 Hawthorne Street
San Francisco, California 94105

8.4.6. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing Discharger and proposed Discharger containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action 2.3.

8.4.7. Except for data determined to be confidential under CWA section 308 (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of U.S. EPA. Please also see Federal Standard Provision – Records 4.3.

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

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

8.4.8.2. 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.

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

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

8.4.8.5. The date of the facility’s Operation and Maintenance Manual (including contingency plans as described in Provision 8.2.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.

8.4.8.6. A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to section 8.3, General Monitoring Requirements.

8.4.8.7. 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.

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

8.5. **Central Coast Standard Provisions – General Pretreatment Provisions**

8.5.1. 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:

8.5.1.1. By the date specified therein;

8.5.1.2. Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,

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

8.6. **Central Coast Standard Provision – Enforcement**

8.6.1. 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.

8.6.2. 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.

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

8.7.1. 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.

8.7.2. “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".

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

8.7.4. "Duly Authorized Representative" is one where:

8.7.4.1. The authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision 5.2.;

8.7.4.2. 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,

8.7.4.3. The written authorization was submitted to the Central Coast Water Board.

8.7.5. 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 8.7.2. and instantaneous maximum limits.

8.7.6. "Hazardous substance" means any substance designated under 40 C.F.R. part 116 pursuant to section 311 of the CWA.

8.7.7. "Incompatible wastes" are:

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

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

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

8.7.7.4. 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,

8.7.7.5. 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.

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

8.7.9. "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.

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

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

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

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

8.7.11. 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 8.7.10, 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.

8.7.12. “Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision 8.7.10, 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.

8.7.13. "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.

8.7.14. "Monthly Average" (or "Weekly Average”, as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

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

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

8.7.15. "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.

8.7.16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

8.7.17. "Pollutant-free wastewater" means inflow and infiltration, stormwaters, and cooling waters and condensates which are essentially free of pollutants.

8.7.18. "Primary Industry Category" means any industry category listed in 40 C.F.R. part 122, Appendix A.

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

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

8.7.20. "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.

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

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

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

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

8.7.22.3. 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

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

8.7.23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the CWA or under 40 C.F.R. part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions 5.5.).

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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

1. GENERAL MONITORING PROVISIONS

1.1. Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), in accordance with the provision of California Water Code section 13176, and must include quality assurance/quality control data with their reports.

1.2. 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 in this MRP 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.

1.3. 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.

1.3.1. *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. http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication421.pdf

1.3.2. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. https://www.usbr.gov/tsc/techreferences/mands/wmm/index.htm1.3.3. *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. https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication484v2.pdf

1.3.3. NPDES Compliance Inspection Manual, Chapter 6 – Flow Measurement, U.S. Environmental Protection Agency (U.S. EPA), Office of Water Enforcement, Publication Number 305-K-17-001, January 2017, 918 pp. https://www.epa.gov/compliance/compliance-inspection-manual-national-pollutant-discharge-elimination-system

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

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

1.6. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 C.F.R. part 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxic pollutants listed by the California Toxics Rule 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).

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

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

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		where representative samples of wastewater influent can be obtained
001	EFF-001	At a point where representative samples of tertiary treated wastewater effluent can be collected after all treatment and prior to contact with the receiving water Latitude: 34.663056° N Longitude: 120.481944° W
002	EFF-002	Location where a representative sample of secondary or tertiary treated effluent can be collected at the point of discharge from the recycled water distribution pipeline Latitude: 34.663056° N Longitude: 120.481944° W
--	RSW-001	A location upstream from Discharge Point No. 001 at V Street and Central Avenue
--	RSW-002	A location downstream approximately 20 yards from Discharge Point No. 001
--	GW-001	At the groundwater well located at the center of the southern perimeter of the Facility property line
--	GW-002	At the groundwater well located at the western perimeter of the Facility property line
--	GW-003	At the groundwater well located at 1641 West Central Avenue
--	BIO-001	Biosolids at the last point in the biosolids handling process where representative samples of residual solids from the treatment process can be obtained

The north latitude and west longitude information in Table E-1 are approximate for administrative purposes. EFF-001 and EFF-002 are the same location but were assigned different location names to identify the different disposal methods for data reporting purposes.

3. INFLUENT MONITORING REQUIREMENTS

3.1. Monitoring Location INF-001

3.1.1. The Discharger shall monitor influent to the facility at INF-001 as below:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	Million gallons per day (MGD)	Measured	1/Day
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)[2]	Milligram per liter (mg/L)	24-hour Composite	1/Month[1]
Total Suspended Solids (TSS)[2]	mg/L	24-hour Composite	1/Month[1]
Total Dissolved Solids (TDS)[2]	mg/L	24-hour Composite	1/Month[1]
Calcium (Ca)	mg/L	Grab	1/Year
Magnesium (Mg)	mg/L	Grab	1/Year
Sodium (Na)	mg/L	Grab	1/Year
Potassium (K)	mg/L	Grab	1/Year
Chloride (Cl)	mg/L	Grab	1/Year
Sulfate (SO_4)	mg/L	Grab	1/Year
Boron (B)	mg/L	Grab	1/Year
Bicarbonate (HCO_3)	mg/L	Grab	1/Year
Carbonate (CO_3)	mg/L	Grab	1/Year

[1] The Discharger shall report the average and maximum daily flows.

[2] Collection of BOD_5 and TSS samples shall occur on days that effluent samples are collected. BOD shall be monitored in the influent at the same time as it is monitored in the effluent.

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

4.1.1. The Discharger shall monitor effluent discharged at Monitoring Location EFF-001 as specified in Table E-3. If more than one analytical test method is listed for a

given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Metered	1/Day
Instantaneous Maximum Flow	MGD	Metered	1/Day
Mean Daily Flow	MGD	Calculated	1/Day
pH[1]	standard units	Grab	1/Week
Turbidity	Nephelo-metric Turbidity Units (NTU)	Metered or Grab	1/Week
Settleable Solids	milliliter per liter (ml/L)	Grab	5/Week
Chlorine, Total Residual[2]	mg/L	Grab	1/Week
Chlorine Used[2]	pounds per day (lbs/day)	Calculated	1/Day
Dissolved Oxygen	mg/L	Grab	1/Week
BOD_5	mg/L	24-hour Composite	1/Week
BOD_5	Percent removal	Calculated	1/Week
TSS	mg/L	24-hour Composite	1/Week
TSS	Percent removal	Calculated	1/Week
Chloride[2]	mg/L	24-hour composite	1/Quarter
Temperature[1]	°C	Grab	5/Week
Oil and Grease	mg/L	Grab	1/Quarter[3]
Sodium[2]	mg/L	24-hour Composite	1/Quarter
Sulfate[2]	mg/L	24-hour Composite	1/Quarter
Boron[2]	mg/L	24-hour Composite	1/Quarter
Total Dissolved Solids (TDS)[2]	mg/L	24-hour Composite	1/Quarter
Molybdenum	mg/L	24-hour Composite	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chromium (VI)	mg/L	24-hour Composite	1/Quarter
E. coli	MPN/100 mL	Grab	5/Week
Nitrate (as N)	mg/L	24-Hour Composite	1/Month
Nitrite (as N)	mg/L	24-Hour composite	1/Quarter
Organic Nitrogen (as N)	mg/L	24-Hour composite	1/Quarter
Ammonia (as N)	mg/L	Grab	1/Week
Un-ionized Ammonia (as N)	mg/L	Calculated	1/Week
Hardness (as CACO3)	mg/L	24-Hour composite	1/Quarter
Color	Color units	24-Hour composite	1/Quarter
Total Phosphorus	mg/L	24-Hour composite	1/Quarter
Chronic Toxicity[4]	TUc	24-Hour composite	1/Quarter
Acute Toxicity[4]	% Percent survival	Grab	1/Quarter
Calcium	mg/L	Grab	1/Year
Magnesium	mg/L	Grab	1/Year
Potassium	mg/L	Grab	1/Year
Bicarbonate	mg/L	Grab	1/Year
Carbonate	mg/L	Grab	1/Year
California Toxics Rule (CTR) Pollutants[5], [6]	µg/L	Grab	1/Year
Title 22 Pollutants[7], [8]	µg/L	Grab	1/Year

[1] 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.

[2] Compliance is based on 12-month running mean. Verification of excursion length shall be submitted with monthly monitoring report. Chlorine monitoring is only required when chlorine is used.

[3] Sampling frequency will increase to monthly if oil and grease effluent limitations are exceeded. Upon return to compliance monitoring can return to a quarterly monitoring frequency.

[4] Whole effluent acute and chronic toxicity monitoring shall be conducted according to the requirements established in sections 5.1 and 5.2, respectively, of this MRP.

[5] The California Toxics Rule (CTR) Pollutants are those listed by the CTR 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 calibration 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 its analytical laboratory shall select the lowest ML.

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

[7] The title 22 pollutants are those pollutants for which Maximum Contaminant Levels (MCLs) have been established at title 22, division 4, chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals) of the California Code of Regulations. 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, sections 64432 and 64445.1.

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

5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

5.1. Whole Effluent Acute Toxicity Testing

5.1.1. **Acute Toxicity Monitoring Requirements – Discharge Point No. 001**

5.1.1.1. Bioassays shall be performed to evaluate the toxicity of the discharge in accordance with the following procedures unless otherwise specified by the Central Coast Water Board's Executive Officer or designee:

5.1.1.2. The test species given below shall be used to measure acute toxicity:

Table E-4. Approved Tests – Acute Toxicity

Species	Effect	Test Duration (hours)	Reference
Fathead Minnow (*Pimephales promelas*)	Larval Survival	96	EPA/821-R-02-012 (Acute)

5.1.1.3. 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 Self Monitoring Report (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").

5.2. Whole Effluent Chronic Toxicity Testing

5.2.1. Chronic Toxicity Monitoring Requirements – Discharge Point No. 001

5.2.1.1. **Sampling.** The Discharger shall collect 24-hour composite samples of the effluent at monitoring locations EFF-001 as specified in Table E-3 above, for critical life stage toxicity testing as indicated below.

Table E-5. 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

5.2.1.2. **Test Species.** The test species shall include a vertebrate, an invertebrate, and an aquatic plant. After a three-month screening period, monitoring may be reduced to the most sensitive species. Screening phase chronic toxicity monitoring shall be conducted with the three species in the table above with approved test protocols. The Executive Officer may change the test species if data suggest that another test species is more appropriate to the discharge.

5.2.1.3. **Methods.** Sample collection, handling, and preservation shall be in accordance with U.S. EPA 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).

5.2.1.4. **Dilution Series.** The Discharger shall conduct tests at 100%, 75%, 50%, 25%, and 12.5%. 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.

5.2.2. **Chronic Toxicity Reporting Program**

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

5.2.2.1.1. Sample dates

5.2.2.1.2. Test initiation date

5.2.2.1.3. Test species

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

5.2.2.1.5. No Observed Effect Concentration (NOEC) values in percent effluent

5.2.2.1.6. Inhibition Concentrations (IC_{15}, IC_{25}, IC_{40}, and IC_{50} values) (or Effective Concentration (EC_{15}, EC_{25} ... etc.)) in percent effluent

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

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

5.2.2.1.9. NOEC and Lowest Observable Effect Concentration (LOEC) values for reference toxicant tests

5.2.2.1.10. IC_{50} or EC_{50} values for reference toxicant tests

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

5.2.2.2. **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 5.2.2.1., item numbers 5.2.2.1.1., 5.2.2.1.3., 5.2.2.1.5., 5.2.2.1.6. (IC_{25} or EC_{25}), 5.2.2.1.7., and 5.2.2.1.8.

5.3. **Quality Assurance.**

5.3.1. The Discharger shall conduct chronic toxicity tests at 100%, 75%, 50%, 25%, and 12.5%. The "%" represents percent effluent as discharged.

5.3.2. 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 a Lethal Concentration (LC50)).

5.3.3. 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.).

5.3.4. 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 permittee 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.

5.3.5. 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.

5.4. Accelerated Monitoring Requirements

5.4.1. When acute toxicity is detected in the effluent, or when the chronic toxicity effluent limitation of 1.0 TUc 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.

5.4.2. 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.

5.4.3. If implementation of the generic 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.

5.4.4. 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.

5.5. Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluation (TRE) Process

5.5.1. A TIE may be required if testing from the accelerated monitoring frequency indicates any of the following:

5.5.1.1. Two of the three accelerated toxicity tests are reported as failed tests meeting any of the conditions specified in Attachment E, section 5.4.

5.5.1.2. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.

5.5.1.3. 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.

5.5.2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the U.S. EPA, which include the following:

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

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

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

5.5.2.4. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (U.S. EPA, 1993b).

5.5.3. As part of the TIE investigation, the Discharger shall 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:

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

5.5.3.2. *Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program*, dated March 27, 2001, U.S. EPA Office of Wastewater Management, Office of Regulatory Enforcement.

6. LAND DISCHARGE MONITORING REQUIREMENTS-NOT APPLICABLE

7. RECYCLING MONITORING REQUIREMENTS

7.1. Monitoring Location EFF-002

7.1.1. The Discharger shall monitor recycled water at Monitoring Location EFF-002 as below:

Table E-6. Recycled Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency[2]
Daily Flow	MGD	Metered	Continuous
Total Coliform	MPN/100 mL	Grab	1/Day
Turbidity	NTU	Metered	Continuous
Dissolved Oxygen	mg/L	Grab	1/Day
Dissolved Sulfides	mg/L	Grab	3/Week
pH	standard units	Grab	1/Day
Total Chlorine Residual[1]	mg/L	Metered	Continuous

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

[2] Monitoring is not required during periods recycled water is not being produced for use outside of the Facility. The Discharger shall specify within the SMR if production of recycled water took place during the monitoring period.

7.1.2. In the event the Producer is unable to comply with the conditions of the water recycling requirements and prohibitions, the Producer shall immediately notify the Central Coast Water Board by telephone and submit a written follow-up report

with two weeks of the noncompliance. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps are being taken to prevent the problems from recurring.

7.1.3. An annual self-monitoring report shall be submitted to the Central Coast Water Board by April 1 of the following year. The report shall include the following:

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

7.1.3.2. Tabulations of the results of each required analysis by the Producer specified in Table E-6 by date, time, type of sample, and station.

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Monitoring Locations RSW-001 and RSW-002

8.1.1. The Discharger shall monitor the receiving water at Monitoring Locations RSW-001 and RSW-002 as follows

Table E-7. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]
Flow	MGD	Estimated	1/Quarter
pH	standard units	Grab	1/Quarter
Temperature	°C	Grab	1/Quarter
Turbidity	NTU	Grab	1/Quarter
Color	Color units	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
E. coli	MPN/100 mL	Grab	1/Quarter[2]
Nitrate (as N)	mg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]
Methylene Blue Activated Substances	mg/L	Grab	1/Year[3]
Ammonia, Total (as N)	mg/L	Grab	1/Quarter
Un-ionized Ammonia (as N)	mg/L	Calculated	1/Quarter
Hardness, as $CaCO_3$	mg/L	Grab	1/Quarter
Acute Toxicity	Pass/Fail	Grab	1/Quarter[4]
CTR Pollutants[5], [6]	µg/L	Grab	1/Year
Title 22 Pollutants[7], [8]	µg/L	Grab	1/Year

1 Monitoring of RSW-001 is only necessary when there are observable flows upstream. During quarters where there is no upstream flow, the Discharger shall state so in the monitoring report.
2 Based on a minimum of 5 samples for any 30-day period.
3 Monitoring frequency shall be decreased to twice during the permit cycle if initial sample results do not exceed Water Quality Control Plan for the Central Coastal Basin (Basin Plan) objectives set forth in Section 3.3.2.1.
4 Acute toxicity testing in receiving water shall be conducted concurrently with acute toxicity testing in effluent.
5 The CTR Pollutants are those listed by the CTR at 40 CFR 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).
6 Monitoring of receiving water for the CTR pollutants shall occur simultaneously with effluent monitoring for the CTR pollutants.
7 The title 22 pollutants are those for which primary MCLs have been established and which are listed in sections 64431-A and 64444-A of the California Code of Regulations, title 22, division 4, chapter 15. Where these pollutants are also identified as CTR Priority Pollutants, monitoring does not need to be duplicated.
8 Monitoring of receiving water for the title 22 Pollutants shall occur simultaneously with effluent monitoring for title 22 pollutants.

8.2. Groundwater Monitoring - GW-001, GW-002, and GW-003

8.2.1. The Discharger shall monitor groundwater at GW-001, GW-002, and GW-003 as follows. After depth to groundwater has been measured, wells shall be purged before samples are collected for analysis.

Table E-8. Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	Feet	Grab	2/Year[1]
Nitrate (as N)	mg/L	Grab	2/Year[1]
TDS	mg/L	Grab	2/Year[1]
Sodium	mg/L	Grab	2/Year[1]
Chloride	mg/L	Grab	2/Year[1]
Sulfate	mg/L	Grab	2/Year[1]
Boron	mg/L	Grab	2/Year[1]
pH	standard units	Grab	2/Year[1]
Title 22 Pollutants	µg/L	Grab	2/Year[1]

[1] Pollutants shall be monitored once in April and once in October.

9. OTHER MONITORING REQUIREMENTS

9.1. Biosolids, Monitoring, and Notification – BIO-001

9.1.1. A representative sample of biosolids shall be obtained from the last point in the handling process (i.e., in the drying beds just prior to removal or from a pond bottom). All constituents shall be analyzed annually for total concentrations for comparison with Total Threshold Limit Concentration (TTLC) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Limit Concentration (STLC) for that substance. Twelve (12) discrete representative samples shall be collected at separate locations in the biosolids ready for disposal. These 12 samples shall be composited to form one (1) sample for constituent analysis. For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan including number and location of sampling points and collect representative samples. The analysis shall test for the metals required in 40 C.F.R. 503.16 (for land application) or 503.26 (for surface disposal), using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA Publication SW-846, all applicable editions and updates), as required in 503.8(b)(4), at the minimum frequencies established therein, provided in the table below.

Table E-9. Amount of Biosolids and Frequency of Analysis

Amount[1] (dry metric tons/365-day period)	Minimum Sampling Frequency[2]
Greater than zero, but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year)
Equal to or greater than 1,500 but less than 15,000	Once per sixty days (six times per year)

Amount[1] (dry metric tons/365-day period)	Minimum Sampling Frequency[2]
Greater than 15,000	Once per month (twelve times per year)

[1] For land application, either the amount of bulk biosolids applied to the land or the amount prepared for sale or give-away in a bag or other container for application to the land (dry weight basis). If the Discharger's biosolids are directly land applied without further treatment by another preparer, biosolids shall also be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required. For surface disposal, the amount of biosolids placed on an active sludge unit (dry weight basis).

[2] Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis. With U.S. EPA approval the amount of biosolids and minimum sampling frequency can coincide with the testing regiment implemented for Cal recycle.

Biosolids shall be analyzed for the constituents in the table below.

Table E-10. Biosolids Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Quantity Removed	Tons or yd^3	Measured	During Removal
Location of Reuse/Disposal	General Public or Specific Site	--	--
Moisture Content	Percent	Grab	Per Table E-9 (above)
pH	standard units	Grab	Per Table E-9 (above)
Total Kjeldahl Nitrogen	mg/kg[1]	Grab	Per Table E-9 (above)
Ammonia (as N)	mg/kg[1]	Grab	Per Table E-9 (above)
Nitrite (as N)	mg/kg[1]	Grab	Per Table E-9 (above)
Total Phosphorus	mg/kg[1]	Grab	Per Table E-9 (above)
Oil and Grease	mg/kg[1]	Grab	Per Table E-9 (above)
Arsenic	mg/kg[1]	Grab	Per Table E-9 (above)
Boron	mg/kg[1]	Grab	Per Table E-9 (above)
Cadmium	mg/kg[1]	Grab	Per Table E-9 (above)
Copper	mg/kg[1]	Grab	Per Table E-9 (above)
Chromium (Total)	mg/kg[1]	Grab	Per Table E-9 (above)
Lead	mg/kg[1]	Grab	Per Table E-9 (above)
Mercury	mg/kg[1]	Grab	Per Table E-9 (above)
Molybdenum	mg/kg[1]	Grab	Per Table E-9 (above)

Parameter	Units	Sample Type	Minimum Sampling Frequency
Nickel	mg/kg[1]	Grab	Per Table E-9 (above)
Selenium	mg/kg[1]	Grab	Per Table E-9 (above)
Zinc	mg/kg[1]	Grab	Per Table E-9 (above)

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

9.1.2. 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 (unless transferred to another preparer who demonstrates pathogen reduction). 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 “(PFRP), the Discharger shall maintain daily records of the operating parameters to achieve this reduction.

The following applies when biosolids from the Discharger are directly land applied as Class B, without further treatment by a second preparer. If the Discharger demonstrates pathogen reduction by direct testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in the Amount/Frequency table above. If the Discharger demonstrates Class B pathogen reduction by testing for fecal coliform, at least seven grab samples must be drawn and analyzed during each monitoring event, and a geometric mean calculated from these seven samples. If the Discharger demonstrates Class A pathogen reduction by testing for fecal coliform and/or salmonella, plus one of the PFRP processes or testing for enteric viruses and helminth ova at least four samples of fecal coliform or salmonella must be drawn during each monitoring event. All four samples must meet the limits specified in 503.32(a).

9.1.3. 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).

9.1.4. 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 CWA section 307(a), as required in the pretreatment section of the permit for Publicly Owned Treatment Works (POTWs) with pretreatment programs. Class 1 facilities and federal facilities greater than 5 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.

9.1.5. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness. All constituents regulated under title 22 California Code or Regulations, division 5, chapter 11, article 3 shall be analyzed for

comparison with TTLC criteria. The waste extraction test shall be performed on any constituent when the total concentration of the waste exceeds ten times the STLC limit for that substance.

9.1.6. 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.

9.1.7. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (U.S. EPA Method 9095) at the frequency determined by Table E-9, or more often if necessary, to demonstrate that there are no free liquids.

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

9.1.8.1. *Notification of non-compliance*. The Discharger shall notify U.S. EPA Region 9, the State Water Board, and the Regional Water Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the noncompliance 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 Water Boards of any 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 Water Boards of any non-compliance within the same time frames.

9.1.8.2. If biosolids are shipped to another state or Native American lands, the Discharger must send notice at least 60 days prior to the shipment to the permitting authorities in the receiving state or Native American land (the U.S. EPA Regional Office for that area and the State/Native American authorities).

9.1.8.3. *For land application (in cases where Class B biosolids are directly applied without further treatment):* Prior to reuse of any biosolids from the Discharger's facility to a new or previously unreported site, the Discharger shall notify U.S. EPA, the Central Coast Water Board, and any other affected Regional Water Board. The notification shall include 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 concentrations limits, the Discharger (or its contractor) must pre-notify U.S. EPA, and determine the cumulative metals loading to that site to date, as required in 40 C.F.R. 503.12. 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.

9.1.8.4. *For surface disposal:* Prior to disposal to a new or previously unreported site, the Discharger shall notify U.S. EPA and the Central Coast Water Board. The notice shall include a description and a topographic map of the proposed site, depth to ground water, 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 ground water monitoring plan or description of why ground water monitoring is not required.

9.1.9. The Discharger shall submit an annual biosolids report to the U.S. EPA Region 9 Biosolids Coordinator and Central Coast Water Board by February 19th of each year (per U.S. EPA guidance and 40 C.F.R. part 503) for the period covering the previous calendar year. This report shall include:

9.1.9.1. Annual biosolids removed in dry tons and percent solids.

9.1.9.2. If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters, including a schematic diagram showing biosolids handling facilities. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.

9.1.9.3. A description of disposal methods, including the following information as applicable related to the disposal methods used at the facility. If more than one method is used, include the percentage and tonnage of annual biosolids production disposed by each method.

9.1.9.3.1. For landfill disposal include: 1) the Regional Water Board waste discharge requirement (WDR) numbers that regulate the landfills used, 2) the present classifications of the landfills used, 3) the results of any ground water monitoring, 4) certifications of management practices, and 5) the names and locations of the facilities receiving biosolids.

9.1.9.3.2. For land application include: 1) the location of the site(s), 2) the Regional Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), 4) certifications of management practices and site restrictions, and 5) subsequent uses of the land.

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

9.1.9.4. Copies of analytical data required by other agencies (i.e. U.S. EPA or County Health Department) and licensed disposal facilities (i.e. landfill, land application, or composting facility) for the previous year.

9.1.9.5. 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.

9.1.9.6. Names mailing address, 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 amounts delivered to each.

9.1.9.7. For all biosolids used or disposed at the Discharger's facility, the site and management practice information and certification required in 40 C.F.R. 503.17 and 503.27.

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

9.1.9.9. Reports shall be submitted to:

Regional Biosolids Coordinator
U.S. EPA (WTR-7)
75 Hawthorne St.
San Francisco, CA 94105-3901

Executive Officer
Central Coast Water Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

9.2. Pretreatment Monitoring

By February 1 of each year, the Discharger shall submit an Annual Report to the State Water Board, Central Coast Water Board, and U.S. EPA describing the Discharger's pretreatment activities over the previous 12 months. In the event that the Discharger is not in compliance with any pretreatment condition of this Order or resulting from pretreatment audits or compliance inspections, then the Discharger shall also include the reasons for noncompliance and state how and when the Discharger will comply with such conditions and requirements. This report shall contain, but not be limited to, the following information:

9.2.1. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the plant's effluent and sludge as provided in the relevant sections of this MRP. The Discharger shall also provide any influent, effluent, or sludge monitoring data for nonpriority pollutants which the Discharger believes may be causing or contributing to interference, pass-through, or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 C.F.R. part 136 and amendments thereto.

9.2.2. 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 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.

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

9.2.4. 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.

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

9.2.4.2. Consistently achieving compliance;

9.2.4.3. Inconsistently achieving compliance;

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

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

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

9.2.4.7. The Discharger does not know the industrial user's compliance status.

A report describing the compliance status of any industrial user characterized by descriptions in Items 9.2.4.4.3. through 9.2.4.4.7., above, shall be submitted quarterly from the annual report date to the State Water Board, Central Coast Water Board, and U.S. EPA. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order. Quarterly reports shall be submitted May 1, August 1, and November 1. The fourth quarter report shall be incorporated in the Annual Report (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.

9.2.4.8. 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 the following:

9.2.4.8.1. 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

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

9.2.4.9. 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.

9.2.4.9.1. 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;

9.2.4.9.2. 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;

9.2.4.9.3. 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;

9.2.4.9.4. Criminal actions regarding the industrial users' 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;

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

9.2.4.9.6. Restriction of flow to the POTW; and

9.2.4.9.7. Disconnection from discharge to the POTW.

9.2.4.10. 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:

9.2.4.10.1. The program's administrative structure;

9.2.4.10.2. Local industrial discharge limitations;

9.2.4.10.3. Monitoring program and monitoring frequencies;

9.2.4.10.4. Legal authority or enforcement policy;

9.2.4.10.5. Funding mechanisms;

9.2.4.10.6. Resource requirements; and

9.2.4.10.7. Staffing levels.

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

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

9.2.4.13. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report. The pretreatment quarterly and annual reports shall be signed by a principal executive officer, ranking elected official, or other duly authorized employee who is responsible for the overall operation of the Discharger (POTW - 40 C.F.R. section 403.12(m)). The Discharger shall submit signed copies of the reports to the State Water Board and the Regional Water Board electronically through the SMR module of CIWQS. Signed copies of the reports shall also be submitted electronically to U.S. EPA at R9Pretreatment@epa.gov or as instructed otherwise.

9.3. Salt and Nutrient Management Plan Reporting

By February 1 of each year, the Discharger shall submit an Annual Report describing salt and nutrient reduction efforts. The report shall include, at a minimum:

9.3.1. Salt Component

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

9.3.1.2. Analysis of wastewater evaporation/salt concentration effects;

9.3.1.3. Analysis of groundwater monitoring results for salts constituents and associated trends;

9.3.1.4. 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);

9.3.1.5. A summary of existing salt reduction measures; and,

9.3.1.6. Recommendations and time schedules for implementation of any additional salt reduction measures.

9.3.2. Nutrient Component

9.3.2.1. 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;

9.3.2.2. Analysis of wastewater treatment facility ability to facilitate nitrification and denitrification, or other means of nitrogen removal;

9.3.2.3. Analysis of groundwater monitoring results for nitrogen constituents and trends;

9.3.2.4. 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);

9.3.2.5. A summary of existing nitrogen loading reduction measures; and,

9.3.2.6. Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.

9.4. Volumetric Monitoring of Wastewater and Recycled Water

9.4.1. Monthly volume of wastewater collected and treated by the wastewater treatment plant.

9.4.2. Monthly volume of wastewater treated, specifying level of treatment, including treated wastewater discharged.

9.4.3. Monthly volume of treated wastewater discharged, monthly volume of recycled water distributed for reuse, and annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 use categories.

10. REPORTING REQUIREMENTS

10.1. General Monitoring and Reporting Requirements

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

10.2. Self-Monitoring Reports (SMRs)

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

10.2.2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections 3-9. The Discharger shall submit 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.

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

Table E-11. Monitoring Periods and Reporting Schedule

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequency	SMR Due Date
NPDES Monitoring Report – Continuous, Daily,	MRP Sections 3 (Influent), 4 (Effluent) and 5 (Whole Effluent Toxicity)	Monthly	First day of second calendar month following

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequency	SMR Due Date
Weekly, Monthly			period of sampling
NPDES Monitoring Report - Quarterly	MRP Sections 4 (Effluent) and 8.1 (Receiving Water)	Quarterly	May 1st August 1st November 1st February 1st
NPDES Monitoring Report – Semi-annual	MRP Section 8.2 (Groundwater)	Semi-annually	August 1st February 1st
NPDES Monitoring Report – Once per Permit Term	MRP Sections 4 (Effluent) and 8.1 (Receiving Water)	Once per permit term	180 days prior to permit expiration date
Recycled Water Monitoring Report	MRP Section 7.1 (Recycled Water Monitoring)	Annually	April 1, the year following
Recycled Water Volumetric Monitoring	MRP Section 9.4 (Volumetric Reporting of Wastewater and Recycled Water)	Annually	April 30th, the year following sampling Note: This report is submitted using the GeoTracker system, not CIWQS
Biosolids Monitoring Report	MRP Section 9.1 (Biosolids Monitoring)	Annually	February 19th, the year following sampling
Pretreatment Report	MRP Section 9.2 (Pretreatment Monitoring)	Annually	February 1st, the year following sampling

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequency	SMR Due Date
Summary Report	Attachment D, Standard Provision, 8.4.8 (page D-16)	Annually	January 30th, the year following
Salt and Nutrient Management Plan Annual Report	MRP Section 9.3 (Salt and Nutrient Management Plan Reporting)	Annually	February 1, the following year
Climate Change Adaptation Program	Section 6.3.6.2 (Climate Change Adaptation Program)	Once per permit term	180 days prior to permit expiration date
ROWD Application	Permit renewal application	Once per permit term	180 days prior to permit expiration date

10.2.4. **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:

10.2.4.1. 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).

10.2.4.2. 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.

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

10.2.4.4. 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.

10.2.5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A. For purposes of reporting and administrative enforcement by the Central Coast Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

10.2.6. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “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:

10.2.6.1. 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.

10.2.6.2. 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.

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

10.2.7.1. 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.

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

10.2.7.3. The Discharger shall electronically self-report all violations of the waste-discharge requirements using the CIWQS self-reported violations function.

10.3. Discharge Monitoring Reports (DMRs)

10.3.1. DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring

Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at: (http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring).

10.4. Other Reports

10.4.1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, and PMP, required by Special Provisions – 6.3. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – 6.3.7. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

10.4.2. The Discharger shall report the volumetric monitoring requirements as specified in Other Monitoring Requirements - 9.4 to the State Water Board by April 30 of each calendar year. The Discharger shall electronically certify and submit this annual report containing the required data via the State Water Board's Internet GeoTracker system at http://geotracker.waterboards.ca.gov/. Information about the volumetric reporting of wastewater and recycled water and the Recycled Water Policy is available at the Recycled Water Policy Volumetric Annual Reporting website at http://www.waterboards.ca.gov/recycledwaterpolicy.

10.4.3. With the Report of Waste Discharge submitted for reissuance of this Order, the Discharger shall submit a Climate Change Adaptation Program as specified in section 6.3.6.2 of this Order.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section 2.2 of this Order, the California Regional Water Quality Control Board, Central Coast Region (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 applicable to this Discharger.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	3 420105001
Discharger	City of Lompoc
Indirect Dischargers	Vandenberg Space Force Base Vandenberg Village Community Services District
Name of Facility	City of Lompoc Regional Wastewater Reclamation Plant
Facility Address	1801 West Central Avenue Lompoc, CA 93436 Santa Barbara County
Facility Contact, Title and Phone	Dong Hyun Chon, Ph.D., P.E., Wastewater Superintendent, 805-875-8415
Authorized Person to Sign and Submit Reports	Dong Hyun Chon, Ph.D., P.E., Wastewater Superintendent, 805-875-8415
Mailing Address	100 Civic Center Plaza, P.O. Box 8001, Lompoc, CA 93436
Billing Address	100 Civic Center Plaza, P.O. Box 8001, Lompoc, CA 93436
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A

Pretreatment Program	Yes
Recycling Requirements	Producer
Facility Permitted Flow	5.0 million gallons per day (MGD)
Facility Design Flow	5.5 MGD
Watershed	Santa Ynez Drainage Hydrologic Unit
Receiving Water	San Miguelito Creek, which is tributary to the Santa Ynez River
Receiving Water Type	Inland surface water

1.1. The City of Lompoc (hereinafter Discharger) is the owner and operator of the City of Lompoc Regional Wastewater Reclamation Plant (hereinafter Facility), a publicly owned treatment works (POTW).

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.

1.2. The Facility discharges wastewater to San Miguelito Creek, which is a tributary to the Santa Ynez River, a water of the United States.

1.3. When applicable, state law requires dischargers to file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under California Water Code section 1211. This is not an NPDES permit requirement.

1.4. The Discharger was previously regulated by Order No. R3-2011-0211 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048127 adopted on December 1, 2011. The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on July 13, 2016.

1.5. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits. Because the Discharger met the requirements of California Code of Regulations, title 23, section 2235.4, Order No. R3-2011-0211, NPDES Permit No. CA0048127 was administratively continued.

2. FACILITY DESCRIPTION

2.1. Description of Wastewater and Biosolids Treatment and Controls

The City of Lompoc Regional Wastewater Reclamation Plant is a municipal wastewater collection, treatment, and disposal facility that discharges tertiary treated wastewater to San Miguelito Creek. Located at the northwest corner of the City of Lompoc adjacent to San Miguelito Creek, the Facility provides sewerage service to approximately 53,494 municipal and industrial users from the City of Lompoc, Vandenberg Space Force Base, and Vandenberg Village Community Services District (VVCSD). The wastewater generated from the service area is approximately 90 percent domestic and 10 percent from commercial, light industrial and military sources. The design flow capacity of the Facility is 5.5 MGD. The Facility has used ultraviolet (UV) disinfection since November 2009.

The Discharger currently operates and retains responsibility for the wastewater collection system within the City of Lompoc, which includes two lift stations. Vandenberg Space Force Base and Vandenberg Village Community Services District retain ownership and direct responsibility for wastewater collection and transport up to the point of discharge to the Facility.

Biosolids from the Facility are thickened in two dissolved air floatation thickeners before being fed to aerobic digesters. The digested material is transferred to a facultative lagoon before being dried in sludge drying beds. The dried sludge is then shipped offsite for composting.

2.2. Discharge Points and Receiving Waters

Tertiary treated wastewater is discharged from Discharge Point No. 001 to San Miguelito Creek, approximately 400 yards upstream of its confluence with the Santa Ynez River. During dry months, the combined flow of San Miguelito Creek and effluent from the Facility is the only flow in the Santa Ynez River downstream of the Facility. During high flows, the Santa Ynez River periodically flows over its banks combining with San Miguelito Creek so that discharge from the Facility is directly to the Santa Ynez River. Discharge Point No. 001 to the San Miguelito Creek is located at 34.663056° N Latitude; 120.481944° W Longitude. No dilution has been granted for this discharge.

2.3. Summary of Existing Requirements and Self Monitoring Report 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 (from January 13, 2012, to January 12, 2017) of the previous Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Flow (dry weather)	MGD	5.0	---	---	3.34	---	8.03[1]
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	milligrams per liter (mg/L)	10	15	20	65.5	4.2	3.5
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	percent removal	≥85			98.52 – 99.65[2]		
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	pounds per day (lbs/day)	420	630	830	82.4	119.3	88.12
Total Suspended Solids (TSS)	mg/L	10	15	20	2.3	3	3.6
Total Suspended Solids (TSS)	percent removal	≥85			98.6 – 99.84[2]		
Total Suspended Solids (TSS)	lbs/day	420	630	830	50.64	65.36	94
Oil and Grease	mg/L	5		10	4		4
Settleable Solids	milliliter per liter per hour (mL/L/hr)	0.1		0.3	<0.1		0.2
pH	standard units	6.5 – 8.3[3]			6.62 – 7.65[4]		
Un-ionized Ammonia	mg/L		0.025		0.004	0.075	0.114

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Nitrate, Total (as N)	mg/L			10			9.93
Bis(2-ethylhexyl) Phthalate	µg/L	1.8		3.6	<0.81		<0.81
Aluminum	mg/L	1.0					.040
Acute Toxicity	percent survival			[5]	[6]		[6]
Chronic Toxicity	Toxic Units Chronic (TUc)			1.0			4
Fecal Coliform Bacteria	Most probable number (MPN)/100 mL	200[7]/ 400[8]			<2[9]		<2[10]

Salinity Effluent Limitations

Parameter	Units	Annual Mean[11]	Highest Annual Mean
Total Dissolved Solids (TDS)	mg/L	1,100	1,078
Sodium	mg/L	270	242
Chloride	mg/L	250	230

1 Reported as instantaneous maximum.
2 The numbers represent the range of lowest to highest reported values.
3 Applied as an instantaneous effluent limitation.
4 Representative values contain the lowest instantaneous minimum to the highest instantaneous maximum.
5 Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms,* Fifth Edition, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition) to the survival of control organisms, as defined in section V of Attachment E to this Order.
6 This is the minimum percent survival value which was reported as 95 percent.
7 Fecal coliform concentrations, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 organisms/100 mL.
8 Fecal coliform concentrations shall not exceed 400 organisms/100 mL for more than 10 percent of the samples in a 30-day period.
9 Log mean of minimum of five samples in 30 days.
10 10 percent of the samples in a 30-day period.
11 Compliance with the effluent limitations are based on a 12-month running mean.

2.4. Compliance Summary

The following discussion is a summary of the violations that occurred during the term and administrative extension of Order No. R3-2011-0211. During the time period from January 2012, to January 2022, the Discharger incurred 39 chronic toxicity violations, one nitrate violation, three oil and grease violations, five un-ionized ammonia violations, one BOD violation, one bis(2-ethylhexyl) phthalate violations, and four failure to monitor or record violations.

The chemical parameter violations and failure to monitor violations over the nine-year span were intermittent and the Discharger took actions to correct problems so that they would not recur. Although these violations are not ongoing and are not a current concern, the chronic toxicity violations have been a long-term issue that has been difficult for the Discharger to resolve. The chronic toxicity violations are based on an inhibition of the growth rate of the green alga *Selenastrum capricornutum*. The Discharger has implemented a Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE) in order to determine the cause of the chronic toxicity results. Recent TIE/TRE results provided in a TRE Progress Update point to non-polar organics as potentially causing the toxicity, and additional work is ongoing to address the issue. The TRE Progress Update reported a recent change in the pattern of toxicity, moving from consistently present to intermittent present, with seven of 20 samples being toxic since February 2020. The Discharger is continuing with the TRE and TIE to identify and eliminate the source of chronic toxicity.

2.5. Planned Changes

The Discharger has not indicated that any changes to the Facility are anticipated during the term of the Order.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. 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),implementing regulations promulgated by the U.S. Environmental Protection Agency (U.S. EPA), and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA)

Under California Water Code section 13389, this action to adopt an NPDES permit for the discharge of waste to surface waters is exempt from the California

Environmental Quality Act (CEQA) provisions in Public Resources Code, division 13, chapter 3. With respect to the recycling specifications and groundwater limitations, this action is exempt from the provisions of CEQA pursuant to title 14, California Code of Regulations, section 15301, class 1 exemption for permitting of existing facilities with no expansion of existing use.

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

3.3.1. **Water Quality Control Plan.** The Central Coast Water Board adopted its *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. 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. Beneficial uses established by the Basin Plan for San Miguelito Creek and the Santa Ynez River are presented below:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	San Miguelito Creek	Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Ground Water Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Wildlife Habitat (WILD); Cold Freshwater Habitat (COLD); Warm Freshwater Habitat (WARM); Spawning, Reproduction, and/or Early Development (SPWN); Commercial and Sport Fishing (COMM)
From San Miguelito Creek	Santa Ynez River	Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial process supply (PRO); Industrial service supply (IND); Ground Water Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Wildlife Habitat (WILD); Cold Freshwater Habitat (COLD); Warm Freshwater Habitat (WARM); Migration of aquatic organisms (MIGR);

Discharge Point	Receiving Water Name	Beneficial Use(s)
		Spawning, Reproduction, and/or Early Development (SPWN); Rare, threatened, or endangered species (RARE); Freshwater replenishment (FRSH); Commercial and Sport Fishing (COMM)

Groundwater throughout the Central Coast Region has designated beneficial uses of agricultural water supply, municipal and domestic water supply, and industrial use. Requirements of this Order implement the Basin Plan.

3.3.2. **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) January 7, 1971, and amended the plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan.

3.3.3. **Sediment Quality.** The State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality on September 16, 2008, and it became effective on August 25, 2009. This plan supersedes other narrative sediment quality objectives, and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries. Requirements of this Order implement sediment quality objectives of this Plan.

3.3.4. **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.

3.3.5. **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.

On May 2, 2017, the State Water Board adopted and approved Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and

Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (SIP Part 2). With SIP Part 2's approval, the State Water Board approved one new narrative and four new numeric mercury water quality objectives to apply to those inland surface waters, enclosed bays, and estuaries of the state that have any of the following beneficial use designations: COMM, CUL, T-SUB, WILD, MAR, RARE, WARM, COLD, EST, or SAL. The provisions of SIP Part 2 are to be implemented through NPDES permits and WDRs, among other actions the Regional Water Boards may take. The SIP, including its new applicable revisions from SIP Part 2 for mercury, establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP and SIP Part 2.

3.3.6. **Domestic Water Quality.** In compliance with California Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet water quality objectives established in the Basin Plan that are based on drinking water maximum contaminant levels and designed to protect human health and ensure that water is safe for domestic use.

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

3.3.8. **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.

3.3.9. **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 sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C. sections 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 applicable requirements of the Endangered Species Act.

3.3.10. **Sewage Sludge and Biosolids.** This Order does not authorize any act that results in violation of requirements administered by U.S. EPA to implement 40 C.F.R. part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 C.F.R. part 503 that are under U.S. EPA's enforcement authority.

3.4. Impaired Waterbodies on the CWA section 303(d) List

CWA section 303(d) requires states to identify and make a list of specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all CWA section 303(d) listed water bodies and pollutants, the Central Coast Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources.

The U.S. EPA approved the State's 2018 303(d) list of impaired water bodies on June 9, 2021. The 2018 303(d) list identifies San Miguelito Creek as being impaired for toxicity, nitrate, dissolved oxygen, fecal coliform, chloride, sodium, temperature, and pH. Additionally, the 2018 303(d) list identifies the Santa Ynez River below the City of Lompoc as being impaired for chloride, *E. coli*, fecal coliform, low dissolved oxygen, nitrate, sedimentation/siltation, sodium, temperature, pH, toxicity, and TDS.

This Order includes requirements for the Discharger to not cause or contribute to these impairments. This Order requires the Discharger to meet effluent limitations, protective of Basin Plan water quality objectives, for discharges from the Facility to San Miguelito Creek and the Santa Ynez River for toxicity, nitrate, dissolved oxygen, *E. coli*, TDS, sedimentation/siltation, chloride, sodium, and pH.

The Order requires the Discharger to control mineral concentrations in the effluent by enforcing limits on discharges to the sewer system and to continue to implement a pretreatment program. Implementation of this plan is the responsibility of the City of Lompoc. Vandenberg Space Force Base and Vandenberg Village Community Services District 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 Lompoc.

TMDLs establish WLAs for point sources and LAs for non-point sources that are intended to achieve the water quality standards for the impaired waterbodies. Currently, there are no adopted TMDLs applicable to the Facility. A nutrient TMDL project is under development and scheduled for completion by April 2022. Other TMDLs are not scheduled for completion before 2027. Reporting by the Central Coast Ambient Monitoring Program and the Cooperative Monitoring Program for agriculture show nitrate concentrations (measured as nitrate plus nitrite) have generally improved in the Lower Santa Ynez River since the 2009 facility upgrades

and now rarely exceed the water quality objective for nitrate, which is the drinking water maximum contaminant level (10 mg/L as nitrogen).

3.5. Other Plans, Polices and Regulations

3.5.1. **Statewide General NPDES Permit, Waste Discharge Requirements for Stormwater Associated with Industrial Activities Excluding Construction Activities (State Water Board Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001)**. The State Water Board Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, adopted April 1, 2014, amended August 4, 2015, and November 6, 2018, and effective July 1, 2015, is applicable to POTWs with a design capacity greater than 1.0 MGD. The purpose of State Water Board Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001 is to regulate stormwater discharges associated with industrial activities. For the control of stormwater discharged from the Facility, the Discharger will discharge under the State Water Board Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities.

3.5.2. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The State Water Board Order No. 2006-0003-DWQ, 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 or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of State Water Board Order No. 2006-0003-DWQ 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 State Water Board Order No. 2006-0003-DWQ.

3.5.3. **State Water Board Recycled Water Policy.** The Water Quality Control Policy for Recycled Water (Recycled Water Policy) was adopted by the State Water Board on December 11, 2018, and became effective on April 8, 2019. The purpose of the Recycled Water Policy is to encourage the safe use of recycled water in a manner that is protective of public health and the environment. This Order implements the Recycled Water Policy by supporting the production of recycled water and requiring volumetric reporting of wastewater and recycled water to the State Water Board. The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. This Order requires the Discharger to continue to commit funding and in-kind resources to facilitate development of a regional groundwater basin/sub-basin salt/nutrient management plan that implements the Recycled Water Policy.

3.5.4 **Statewide General Water Reclamation Requirements for Recycled Water Use (State Water Board Order WQ 2016-0068-DDW).** State Water Board Order WQ 2016-0068-DDW, adopted on June 7, 2016, is applicable to recycled water projects where recycled water is used or transported for non-potable uses. The

distribution and offsite reuse of recycled water produced by the Facility is subject to State Water Board Order No. WQ 2016-0068-DDW, or other applicable permit, dependent on final use.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

4.1. Discharge Prohibitions

4.1.1. **Discharge Prohibition 3.1. (No discharge at a location or in a manner except as described by the 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, review of 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 section 402's prohibition against discharges of pollutants except in compliance with the CWA's permit requirements, effluent limitations, and other enumerated provisions. This prohibition is retained from the previous permit.

4.1.2. **Discharge Prohibition 3.2. (The discharge of any waste not specifically regulated by this Order is prohibited).** Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described to the Central Coast Water Board during the process of permit reissuance. This prohibition has been retained from the previous Order.

4.1.3. **Discharge Prohibition 3.3. (The overflow, bypass, or overspray of wastewater from the Discharger's facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision 1.7. (Bypass), is prohibited).** The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 C.F.R. section 122.41(m) or an unauthorized discharge, which

poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by this Order. This prohibition has been retained from the previous Order.

4.1.4. **Discharge Prohibition 3.4. (Creation of a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code, is prohibited).** The Basin Plan requires that the disposal of wastewater in streams be accomplished in a manner that safeguards public health and prevents nuisance conditions. This prohibition is retained from the previous permit.

4.1.5. **Discharge Prohibition 3.5. (The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat).** This prohibition is retained from the previous Order.

4.1.6. **Discharge Prohibition 3.6. (The discharge of radioactive substances is prohibited).** This prohibition has been retained from the previous Order.

4.1.7. **Discharge Prohibition 3.7. (The monthly average dry weather effluent flow shall not exceed 5.0 million gallons per day (MGD), aggregated at Discharge Point 001).** This prohibition has been retained from the previous Order.

4.2. Technology-Based Effluent Limitations

4.2.1. **Scope and Authority**

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. When the U.S. EPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA section 402(a)(1) and U.S. EPA regulations at 40 C.F.R. section 125.3 authorize the use of best professional judgement (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. section 125.3.

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 as summarized below:

Table F-4. Secondary Treatment Requirements

Parameter	Units	30-Day Average	7-Day Average
BOD_5 [1]	mg/L	30	45
TSS[1]	mg/L	30	45
pH	standard units	6.0[2]	9.0[3]

[1] The 30-day average percent removal shall not be less than 85 percent.
[2] Instantaneous minimum value.
[3] Instantaneous maximum value.

4.2.2. **Applicable Technology-Based Effluent Limitations**

40 C.F.R. section122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 C.F.R. section 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. section 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, as well as 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.

4.2.2.1. The following table summarizes technology-based effluent limitations established by this Order at Discharge Point 001.

Table F-5. Technology-Based Effluent Limitations – Discharge Point 001

Parameter	Units	30-Day Average	7-Day Average	Maximum Daily
BOD_5[1]	mg/L	10	15	20
BOD_5	lbs/day [2]	420	630	830
Total Suspended Solids (TSS)[1]	mg/L	10	15	20
TSS	lbs/day[2]	420	630	830
pH	standard units	6.0[3]	9.0[4]	
Flow	MGD	5.0		

[1] The average monthly percent removal of BOD_5 and TSS, as measured at Monitoring Location EFF-001shall not be less than 85 percent.

[2] Mass loading limits were calculated using the following formulas: lbs/day = pollutant concentration (mg/L) * permitted flow (5.0 MGD) * conversion factor (8.34)

[3] Instantaneous minimum value.

[4] Instantaneous maximum value.

4.2.2.1.1. **BOD_5 and TSS.** All technology-based effluent limitations are retained from the previous permit. Federal regulations at 40 CFR part 133 establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD_5 and TSS. A daily maximum effluent limitation for BOD_5 and TSS is also included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. Tertiary treatment is necessary to protect the beneficial uses of the receiving stream and the final effluent limitations for BOD_5 and TSS are based on the technical capability of the tertiary processes. In addition, 40 CFR section 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.

4.2.2.1.2. **pH.** 40 CFR 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 technology-based effluent limitation is not as stringent as the water quality-based effluent limitations (WQBELs) for pH as discussed in section 4.3.6.4. of this Fact Sheet, therefore, this Order establishes the more stringent WQBELs for pH.

4.2.2.1.3. **Flow.** The Facility was designed to provide a secondary level of treatment for up to an average dry weather design flow of 5.5 MGD and has a permitted flow of 5.0 MGD. The Discharger has not requested an increase in permitted flow and has not submitted an antidegradation analysis supporting an increase in permitted flow. Therefore, this Order retains an average monthly discharge flow effluent limit of 5.0 MGD.

4.3. Water Quality-Based Effluent Limitations (WQBELs)

4.3.1. Scope and Authority

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

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

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

4.3.2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses described by the Basin Plan for San Miguelito Creek and the Santa Ynez River are presented in section 3.3.1 of this Fact Sheet. Water quality criteria applicable to this receiving water are established by the CTR, the NTR, and by the Basin Plan.

4.3.3. Determining the Need for WQBELs

NPDES regulations at 40 CFR section 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.

This Order uses data for the CTR pollutants and the toxic pollutants with WQOs established in the Basin Plan from January 2012 until January 2017. Additional data was available for un-ionized ammonia, boron, chronic toxicity, bis(2-ethylhexyl) phthalate, and total nitrate.

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. Since San Miguelito Creek varies greatly in flow depending on the season and is often effluent dominated during dry season, the Central Coast Water Board considered both upstream and downstream receiving water hardness data when conducting the reasonable potential analysis (RPA). Using the most conservative approach, Central Coast Water Board staff used the most stringent hardness of 245 mg/L (as CaCO3), which occurred upstream of Discharge Point No. 001.

To conduct the RPA, the Central Coast Water Board identified the maximum observed effluent (MEC) and background (B) concentrations for each priority, toxic pollutant from receiving water and effluent data provided by the Discharger and compared this data to the most stringent applicable water quality criterion (C) for each pollutant from the NTR, CTR, and the Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

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

4.3.3.2. **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.

4.3.3.3. **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 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

For mercury in particular, Part 2 of the SIP revised the above methodology as follows.

4.3.3.4. **Most stringent water quality objective.** The RPA is to use a water column concentration from SIP Part 2's Table 1 based on the receiving water body type and beneficial use(s) to identify the most stringent mercury water quality objective. For San Miguelito Creek, the applicable water column concentration is 0.0443 ug/L total mercury. This water column concentration is to be used as the "C" value in the RPA for mercury. This change in methodology changes the water quality objective from 0.05 ug/L in the previous orders to 0.0443 ug/L in this Order.

4.3.3.5. **Maximum Effluent Concentration.** Instead of using the highest observed mercury effluent concentration, the MEC is to be determined as an arithmetic mean of all mercury samples during a calendar year. For this RPA, the highest calendar year arithmetic mean based on the revised methodology for mercury in effluent was 0.0276 ug/L. The Discharger collects effluent mercury samples on a yearly basis.

4.3.3.6. **Maximum ambient background concentration.** Instead of using the highest observed mercury concentration in the upstream receiving water (referred to as "B"), the value of B is to be determined as an arithmetic mean of all mercury samples during a calendar year. For this RPA, the highest calendar year arithmetic mean based on the revised methodology for mercury in the receiving water was 0.0443 µg/L. However, note the revised methodology uses one half the detection limit for samples that are reported as non-detect by the laboratory. The receiving water upstream samples detected mercury above the detection limits (0.0022 µg/L), so the annual average represents one half the detection limit for those samples. The Discharger collects receiving water mercury samples every other year.

4.3.3.7. **Determination.** A mercury WQBEL is not required unless the MEC is greater than C. However, if B is greater than C and mercury is detected in the effluent, effluent monitoring is required. A mercury WQBEL is not required for this discharge because the MEC (i.e., the highest calendar year average concentration with using one half the mercury detection limits when non-detect) was less than C and the effluent monitoring was non-detect. Therefore, according to Part 2 of the SIP, no mercury effluent limitation is required. Annual monitoring for mercury will be retained from the previous Order.

The following table summarizes the RPA for each priority, toxic, or title 22 pollutant for which data was available from January 2012 through January 2017.

Table F-6. Summary of RPA Results

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
Priority Pollutants						

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
Antimony	µg/L	5	0.734	6	0.882	No
Arsenic	µg/L	5	0.984	10	6.53	No
Beryllium	µg/L	5	<0.043	4	0.695	No
Cadmium	µg/L	5	0.05	4.98	0.171	No
Chromium (III)	µg/L	5	<0.028	431.18	<0.028	No
Chromium (VI)	µg/L	5	9.81	10	12.6	Yes
Copper	µg/L	5	19	20.06	17	No
Lead	µg/L	5	0.767	9.96	7.8	No
Mercury	µg/L	4	0.0276	0.0443	0.0443	No
Nickel	µg/L	5	9.97	100	11.4	No
Selenium	µg/L	5	0.94	10	1.37	No
Silver	µg/L	5	0.086	18.96	0.121	No
Thallium	µg/L	5	<0.014	1.7	0.016	No
Zinc	µg/L	6	80	200	80	No
Cyanide	µg/L	4	2.56	5.2	4.0	No
Asbestos	Fibers /L	4	<0.2	7,000,000	313.5	No
2,3,7,8 TCDD	µg/L	4	<6.23e-7	0.000000013	0.0000013	No
Acrolein	µg/L	4	<4.1	320	<12	No
Acrylonitrile	µg/L	4	<0.46	0.06	<0.5	No
Benzene	µg/L	4	<0.04	1	<0.04	No
Bromoform	µg/L	4	<0.042	4.3	<0.042	No
Carbon Tetrachloride	µg/L	4	<0.025	0.25	<0.025	No
Chlorobenzene	µg/L	4	<0.047	70	<0.047	No
Chlorodibromomethane	µg/L	4	<0.03	0.40	<0.03	No
Chloroethane	µg/L	4	<0.14	No Criteria	<0.14	Uc
2-Chloroethylvinyl ether	µg/L	4	<0.79	No Criteria	<2.2	Uc
Chloroform	µg/L	4	0.848	No Criteria	0.63	Uc
Dichlorobromomethane	µg/L	4	<0.026	0.56	<0.026	No
1,1-Dichloroethane	µg/L	4	<0.05	5	<0.05	No
1,2-Dichloroethane	µg/L	4	<0.036	0.38	<0.036	No

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
1,1-Dichloroethylene	µg/L	4	<0.036	0.06	<0.036	No
1,2-Dichloropropane	µg/L	4	<0.037	0.52	<0.037	No
1,3-Dichloropropylene	µg/L	4	<0.052	0.50	<0.052	No
Ethylbenzene	µg/L	4	<0.045	300	<0.045	No
Methyl Bromide	µg/L	4	<0.24	48	<0.24	No
Methyl Chloride	µg/L	4	<0.17	No Criteria	<0.17	Uc
Methylene Chloride	µg/L	3	<0.052	4.7	<0.052	No
1,1,2,2-Tetrachloroethane	µg/L	4	<0.095	0.17	<0.095	No
Tetrachloroethylene	µg/L	4	<0.099	0.8	<0.099	No
Toluene	µg/L	4	0.8	150	0.171	No
1,2-Trans-Dichloroethylene	µg/L	4	<0.061	10	<0.61	No
1,1,1-Trichloroethane	µg/L	4	<0.082	200	<0.082	No
1,1,2-Trichloroethane	µg/L	4	<0.035	0.6	<0.035	No
Trichloroethylene	µg/L	4	<0.11	2.7	<0.11	No
Vinyl Chloride	µg/L	4	<0.15	0.5	<0.15	No
2-Chlorophenol	µg/L	4	<1	120	<1.0	No
2,4-Dichlorophenol	µg/L	4	<0.75	93	<0.79	No
2,4-Dimethylphenol	µg/L	4	<0.76	540	<1.1	No
4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	µg/L	4	<0.43	13.4	<0.46	No
2,4-Dinitrophenol	µg/L	4	<0.22	70	<2.3	No
2-Nitrophenol	µg/L	4	<0.7	No Criteria	<1.1	Uc
4-Nitrophenol	µg/L	5	<0.67	No Criteria	<1.1	Uc
3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	µg/L	4	<0.86	No Criteria	<1.2	Uc
Pentachlorophenol	µg/L	6	<0.91	0.28	<0.91	No
Phenol	µg/L	4	<0.88	1	2.05	No

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
2,4,6-Trichlorophenol	µg/L	4	<0.47	2.1	<0.9	No
Acenaphthene	µg/L	4	<0.47	1,200	<0.5	No
Acenaphthylene	µg/L	4	<0.39	No Criteria	<0.53	Uc
Anthracene	µg/L	4	<0.43	9,600	<0.48	No
Benzidine	µg/L	4	<1.8	0.0001	<1.8	No
Benzo(a)Anthracene	µg/L	4	<0.34	0.0044	<0.43	No
Benzo(a)Pyrene	µg/L	4	<0.07	0.0044	<0.4	No
Benzo(b)Fluoranthene	µg/L	4	<0.37	0.0044	<0.43	No
Benzo(ghi)Perylene	µg/L	4	<0.23	No Criteria	<0.4	Uc
Benzo(k)Fluoranthene	µg/L	4	<0.17	0.0044	<0.5	No
Bis(2-Chloroethoxy)Methane	µg/L	4	<0.54	No Criteria	<0.56	Uc
Bis(2-Chloroethyl)Ether	µg/L	4	<0.51	0.03	<0.52	No
Bis(2-Chloroisopropyl)Ether	µg/L	4	<0.41	1,400	<0.53	No
Bis(2-Ethylhexyl) Phthalate	µg/L	15	0.45	1.8	<1.2	No
4-Bromophenyl Phenyl Ether	µg/L	4	<0.22	No Criteria	<0.46	Uc
Butylbenzyl Phthalate	µg/L	4	<0.29	3,000	<0.66	No
2-Chloronaphthalene	µg/L	4	<0.48	1,700	<0.63	No
4-Chlorophenyl Phenyl Ether	µg/L	2	<0.62	No Criteria	<0.62	Uc
Chrysene	µg/L	4	<0.074	0.0044	<0.51	No
Dibenzo(a,h)Anthracene	µg/L	4	<0.19	0.0044	<0.37	No
1,2-Dichlorobenzene	µg/L	8	<0.052	600	<0.47	No
1,3-Dichlorobenzene	µg/L	8	<0.051	400	<0.45	No

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
1,4-Dichlorobenzene	µg/L	8	<0.054	5	<0.47	No
3,3 Dichlorobenzidine	µg/L	4	<0.43	0.04	<0.69	No
Diethyl Phthalate	µg/L	4	<0.34	23,000	<0.53	No
Dimethyl Phthalate	µg/L	4	<0.31	313,000	<0.43	No
Di-n-Butyl Phthalate	µg/L	4	<0.35	2,700	<0.66	No
2,4-Dinitrotoluene	µg/L	4	<0.49	0.11	<0.56	No
2,6-Dinitrotoluene	µg/L	4	<0.55	No Criteria	<0.55	Uc
Di-n-Octyl Phthalate	µg/L	4	<0.31	No Criteria	<0.51	Uc
1,2-Diphenylhydrazine	µg/L	4	<0.47	0.04	<0.52	No
Fluoranthene	µg/L	4	<0.44	300	<0.53	No
Fluorene	µg/L	4	<0.51	1,300	<0.62	No
Hexachlorobenzene	µg/L	9	<0.0008	0.00075	<0.47	No
Hexachlorobutadiene	µg/L	5	<0.37	0.44	<0.45	No
Hexachlorocyclopentadiene	µg/L	9	<0.0047	50	<0.49	No
Hexachloroethane	µg/L	4	<0.38	1.9	<0.43	No
Indeno(1,2,3-cd)Pyrene	µg/L	4	<0.38	0.0044	<0.39	No
Isophorone	µg/L	4	<0.41	8.4	<0.53	No
Naphthalene	µg/L	5	<0.44	No Criteria	<0.55	Uc
Nitrobenzene	µg/L	4	<0.47	17	<0.65	No
N-Nitrosodimethylamine	µg/L	4	<0.47	0.00069	<0.6	No
N-Nitrosodi-n-Propylamine	µg/L	4	<0.47	0.01	<0.54	No
N-Nitrosodiphenylamine	µg/L	4	<0.53	5	<0.74	No
Phenanthrene	µg/L	4	<0.45	No Criteria	<0.5	Uc
Pyrene	µg/L	4	<0.46	960	<0.53	No

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
1,2,4-Trichlorobenzene	µg/L	4	<0.46	5.0	<0.48	No
Aldrin	µg/L	9	<0.00054	0.00013	<0.0053	No
alpha-BHC	µg/L	5	<0.0013	0.004	<0.0013	No
beta-BHC	µg/L	5	<0.0015	0.01	<0.0015	No
gamma-BHC	µg/L	4	0.00588	0.02	<0.0013	No
delta-BHC	µg/L	5	<0.0018	No Criteria	<0.0018	Uc
Chlordane	µg/L	7	<0.011	0.00057	<0.16	No
4,4'-DDT	µg/L	5	<0.0041	0.00059	<0.0041	No
4,4'-DDE	µg/L	5	<0.0013	0.00059	<0.0013	No
4,4'-DDD	µg/L	5	<0.0013	0.00083	<0.0013	No
Dieldrin	µg/L	9	<0.0015	0.00014	<0.0028	No
alpha-Endosulfan	µg/L	5	<0.0021	0.06	<0.0021	No
beta-Endolsulfan	µg/L	5	<0.0021	0.06	<0.0021	No
Endosulfan Sulfate	µg/L	5	<0.0012	110	<0.0012	No
Endrin	µg/L	9	<0.0013	0.04	<0.0043	No
Endrin Aldehyde	µg/L	5	<0.0019	0.76	<0.0019	No
Heptachlor	µg/L	9	<0.0018	0.00021	<0.0083	No
Heptachlor Epoxide	µg/L	9	<0.00077	0.00010	<0.003	No
PCBs sum	µg/L	1	<0.5	0.00017	<0.5	No
Toxaphene	µg/L	8	<0.073	0.00020	<0.27	No
Non-Priority Pollutants						
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	1	<0.072	1,200	<0.072	No
2,4-D	µg/L	6	<0.5	70	<1.2	No
2,4,5-TP (Silvex)	µg/L	6	<0.18	10	<0.25	No
Aluminum	µg/L	5	40	1,000	512	No
Alachlor	µg/L	6	<0.0045	2	<0.17	No
Atrazine	µg/L	6	<0.063	1	<0.19	No
Barium	µg/L	5	16.4	1,000	119	No
Bentazon	µg/L	5	<0.28	18	<0.37	No
Carbofuran	µg/L	4	<0.49	18	<0.62	No
cis-1,2-Dichloroethylene	µg/L	4	<0.049	6	<0.049	No
Cobalt	µg/L	N/A	N/A	50	N/A	Ud

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
Dalapon	µg/L	6	<0.5	200	<3.6	No
Dibromochloropropane	µg/L	N/A	N/A	0.2	N/A	Ud
Di(2-ethylhexyl)adipate	µg/L	5	<0.1	400	<5.0	No
Dinoseb	µg/L	6	<0.31	0.007	<0.53	No
Diquat	µg/L	5	<0.08	20	<0.12	No
Endothall	µg/L	5	<16	100	<0.16	No
Ethylene Dibromide	µg/L	N/A	N/A	0.02	N/A	Ud
Glyphosate	µg/L	5	6.4	700	7.12	No
Iron	µg/L	N/A	N/A	5,000	N/A	Ud
Lithium	µg/L	N/A	N/A	2,500	N/A	Ud
Manganese	µg/L	N/A	N/A	200	N/A	Ud
Methoxychlor	µg/L	9	<0.00046	30	<0.017	No
Methyl-tert-butyl ether	µg/L	4	<0.042	13	<0.042	No
Molinate	µg/L	6	<0.051	20	<0.19	No
Molybdenum	µg/L	5	19.5	10	21.3	Yes
Oxamyl	µg/L	5	4.36	50	<0.48	No
Picloram	µg/L	6	<0.17	500	<0.57	No
Simazine	µg/L	6	<0.061	4.0	<0.21	No
Styrene	µg/L	4	<0.061	100	<0.061	No
Thiobencarb	µg/L	6	<0.11	70	<0.2	No
Trichlorofluoromethane	µg/L	4	<0.072	150	<0.072	No
Vanadium	µg/L	1	<2.0	100	<2.0	No
Xylenes	µg/L	3	<0.16	1,750	<0.16	No
Un-ionized Ammonia	mg/L	199	0.114	0.025	0.15	Yes
Boron	mg/L	36	0.78	0.4	1.3	Yes
Chloride	mg/L	35	248	100	237	Yes
Fluoride	mg/L	4	0.2	1,000	0.227	No
Nitrate, Total (as N)	mg/L	116	9.93	10	10.7	Yes
Ethylene Dibromide	µg/L	N/A	N/A	0.02	N/A	Ud
Nitrate + Nitrite (as N)	mg/L	N/A	N/A	10	N/A	Yes

Parameter	Units	N[1]	MEC[2]	Most Stringent Criteria	Background	RPA Result[3]
Nitrite, Total (as N)	mg/L	148	0.57	1.0	N/A	No
Sodium	mg/L	35	257	100	285	Yes
Sulfate, Total (as SO4)	mg/L	40	367	350	598	Yes
TDS	mg/L	18	1,126	1,000	1,422	Yes

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

[2] If there is a detected value, the highest reported value is summarized in the table. If there are no detected values, if available, the lowest MDL is summarized in the table.

[3] RPA Results:
= Yes, if MEC > WQO/WQC, or B > WQO/WQC and MEC is detected;
= No, if MEC and B are < WQO/WQC or all effluent data are undetected;
= Undetermined, if no criteria have been promulgated (Uc), or for lack of data (Ud).

4.3.4. **WQBEL Calculations**

As detailed in Table F-6, reasonable potential has been determined for chromium (VI), molybdenum, boron, chloride, nitrate total, nitrate + nitrite, sodium, sulfate, TDS, and un-ionized ammonia. The following example demonstrates how WQBELs were established for this Order for chromium (VI).

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), when C > B, and
ECA = C when C ≤ B,
Where,

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

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

As discussed above, for this Order, dilution was not allowed; therefore:

ECA = C

For chromium (VI), the applicable water quality criteria are:

ECA_{acute}= 16.29 µg/L

$ECA_{chronic}$= 11.43 µg/L

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.

$LTA_{acute} = ECA_{acute} \times Multiplier_{acute\ 99}$

$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic\ 99}$

For chromium (VI), the following data was used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA $Multiplier_{acute\ 99}$	ECA $Multiplier_{chronic\ 99}$
5	0.6	0.32	0.53

LTA_{acute} = 16.29 µg/L x 0.32 = 5.21 µg/L

$LTA_{chronic}$ = 11.43 µg/L x 0.527 = 6.02 µg/L

Step 3: WQBELs, including an AMEL and a 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: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and MDEL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies

depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.
$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$

$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4). For chromium (VI), the following data was used to develop the AMEL and MDEL for aquatic life using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$
4	0.6	3.11	1.55

$AMEL_{aquatic\ life} = 5.23 \times 1.55 = 8.11\ \mu g/L$

$MDEL_{aquatic\ life} = 5.23 \times 3.11 = 16.3\ \mu g/L$

Calculation of human health AMEL and MDEL:

Step 5: For the ECA based on human health, set the AMEL equal to the $ECA_{human\ health}$
$AMEL_{human\ health} = ECA_{human\ health}$

For chromium (VI):

$AMEL_{human\ health} = 10\ \mu g/L$

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the $Multiplier_{MDEL}$ to the $Multiplier_{AMEL}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$MDEL_{human\ health} = AMEL_{human\ health} \times (Multiplier_{MDEL} / Multiplier_{AMEL})$

For chromium (VI), the following data were used to develop the $MDEL_{human\ health}$:

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$	Ratio
4	0.6	3.11	1.55	2.01

$MDEL_{human\ health}$ = 10 µg/L x 2.01 = 20.1 µg/L

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

For chromium (VI), the AMELhuman health and MDELhuman health were 10 µg/L and 20.1 µg/L respectively. Thus, the aquatic life criteria-based effluent limitations were more stringent and were considered in the Order.

4.3.5. **Whole Effluent Toxicity (WET)**

WET limitations protect receiving water 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 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 that are toxic to or that 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 effluent limitations for chronic and acute toxicity, which are retained in this Order. Additionally, monitoring results during the term of the previous Order show that chronic toxicity exceeded effluent limitations on numerous occasions. As such, reasonable potential to exceed the water quality objective for chronic toxicity exists.

The Discharger is also required to maintain a Toxicity Reduction Evaluation (TRE) workplan, as described in section VI.C.2.a of the Order, which describes the steps that the Discharger intends to follow in the event that the acute and/or chronic toxicity limitations are exceeded. When monitoring measures WET in the effluent above the limitations established by the Order, the Discharger must resample, if the discharge is continuing, and retest. The Central Coast Water Board Executive Officer will then determine whether to initiate enforcement action, whether to require the Discharger to implement a TRE, or to implement other measures.

The Discharger submitted a TRE Progress Update on February 11, 2021, that documented the toxicant characterization and identification efforts completed in 2020. The TRE Progress Update had the following conclusions:

1. The causative agent(s) contributing to effluent toxicity is likely organic and nonpolar.
2. The causative agent(s) contributing to effluent toxicity is persistent.

3. The causative agent(s) may be a degradation and transformation product sourced to the UV disinfection system. Likewise, the causative agent may be a UV generated radical, although the persistence of toxicity suggests this is less likely as radicals are typically unstable, short lived, and highly reactive.
4. The cause of toxicity does not appear to be related to a major ion imbalance, be that gross salinity or skew in major ion ratios.
5. The causative agent(s) does not appear to be readily oxidizable, volatile or surface active (i.e., surfactants).
6. The causative agent(s) does not appear to be a metal.

Additionally, the TRE Progress Update reported a recent change in the pattern of toxicity, moving from consistently present to intermittent present with seven of 20 samples being toxic since February 2020. The Discharger is continuing with the TRE and TIE to identify and eliminate the source of chronic toxicity.

4.3.6. **Basin Plan and Bacteria Provisions**

4.3.6.1. **Bacteria Provisions**. The Facility receives domestic wastewater and discharges to surface waters with the water contact recreation beneficial use (REC-1). Because of the nature of domestic wastewater, discharges from publicly owned treatment works with these discharge characteristics have the reasonable potential to cause or contribute to an exceedance of water quality criteria for bacteria.

On August 7, 2018, the State Water Board adopted Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy (Bacteria Provisions), which establishes bacteria water quality objectives for reasonable protection of people that recreate within all surface waters, enclosed bays, and estuaries of the state that have the water contact recreation beneficial use (REC-1). Under the statewide Bacteria Provisions, the water quality objective protective of the REC-1 beneficial use is, in waters where the salinity is less than one part per thousand (ppth) 95 percent or more of the time:

- The concentration of *E. coli* shall not exceed 100 colony forming units (cfu) per 100 milliliters (mL) as a six-week rolling geometric mean, calculated weekly.
- A statistical threshold value (STV) of 320 cfu/100 mL for *E. coli* shall not be exceeded by more than 10 percent of the samples collected in a calendar month and calculated in a static manner.

Order No. R3-2011-0211 established effluent limitations for fecal coliform bacteria based on applicable water quality objectives in the Basin Plan for the Santa Ynez River. The bacteria water quality objectives in the Bacteria Provisions supersede numeric water quality objectives for bacteria for the REC-1 beneficial use contained in a basin plan prior to February 4, 2019. Because Santa Ynez River salinity is less than one part per thousand (ppth) 95 percent or more of the time, this Order establishes *E. coli* effluent limitations for Discharge Point 001, based on the water quality objectives in the Bacteria Provisions, in place of the previous fecal coliform effluent limitations.

4.3.6.2. **Un-ionized Ammonia.** The Basin Plan establishes a water quality objective for un-ionized ammonia (NH3) of 0.025 mg/L. From January 13, 2012, until March 16, 2021, effluent concentrations of un-ionized ammonia ranged from 0.0007 mg/L to 0.075 mg/L, with nine out of 199 samples exceeding the Basin Plan objective of 0.025 mg/L un-ionized ammonia. While reasonable potential was found for un-ionized ammonia, these WQO exceedances all occurred in October 2012 due to faulty testing procedures. The Discharger has since implemented corrective procedures and only three exceedances have been observed since then. Therefore, the exceedances are not representative of the effluent un-ionized ammonia levels. The Basin Plan water quality objective for un-ionized ammonia (NH3) at Discharge Point No. 001 is retained from the previous Order.

4.3.6.3. **Nitrate.** The Basin Plan establishes a narrative water quality objective for biostimulatory substances, which states,

> "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."

Additionally, the Basin Plan incorporates the title 22 primary MCL for nitrate as nitrogen (10 mg/L) and the primary MCL for nitrate plus nitrite as nitrogen (10 mg/L).

Nitrogen may exist in a number of oxidation states within municipal wastewater, including nitrate. Nitrate is a common pollutant in effluent from wastewater treatment facilities that, when not properly controlled, may lead to excessive biostimulatory growth, negatively impacting the receiving water. As such, the title 22 primary MCL as a numeric effluent limitation of 10 mg/L for nitrate as nitrogen has been carried over from the previous order and the title 22 primary MCL as a numeric effluent limitation of 10 mg/L for nitrate plus nitrite as nitrogen has been incorporated. Additionally, because these pollutants showed reasonable potential, this Order requires the Discharger to continue to implement a Nutrient Management Program as described in section VII.E.3 of this Fact Sheet, with the ultimate goal of controlling levels of nutrients discharged from the Facility.

4.3.6.4. **pH.** This Order retains an effluent limitation of 6.5 to 8.3 from the previous Order, based on the water quality objective for the Municipal and Domestic Supply (MUN) beneficial use. For the protection of the COLD beneficial use, this Order applies a receiving water limitation of 7.0 to 8.3, with no change in normal ambient pH levels above 0.5. Receiving water sampling from 2015-2020 shows pH levels in downstream receiving waters above 7.0.

4.3.6.5. **Floating Material.** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum in concentrations that cause nuisance or adversely affect beneficial uses. This effluent limitation is consistent with the Basin Plan and retained from the previous Order.

4.3.6.6. **Settleable Solids.** The nature of domestic, commercial, and industrial wastewater received by the Facility and similar publicly owned treatment works have the reasonable potential to cause or contribute to an exceedance of water quality criteria for 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) and a maximum daily effluent limitation (MDEL) of 0.1 mL/L and 0.3 mL/L, respectively. These effluent limitations are typical of similar facilities that discharge tertiary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from Order No. R3-2011-0211.

4.3.6.7. **Oil and Grease.** The nature of domestic, commercial, and industrial wastewater received by the Facility and similar publicly owned treatment works has the reasonable potential to cause or contribute to an exceedance of water quality criteria for 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, respectively. These effluent limitations are typical of similar facilities that discharge tertiary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from Order No. R3-2011-0211.

4.3.6.8. **Turbidity.** The Basin Plan establishes a narrative effluent limitation for turbidity that states, "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses." The Basin Plan further establishes allowable numeric increases to the receiving water. The previous Order contained an AMEL and MDEL of 10 nephelometric turbidity units (NTU) and 20 NTU, respectively. These effluent limitations are typical of similar facilities that discharge tertiary treated wastewater and are necessary to protect the narrative water quality objective. This Order retains the effluent limitations from the previous Order.

4.3.6.9. **TDS, Sulfate, Chloride, Boron, and Sodium.** The effluent limitations for TDS, chloride, sulfate, boron and sodium as summarized below:

Table F-7. Effluent Limitations for Salinity

Parameter	Units	Annual Mean[1]
TDS	mg/L	1,100
Chloride	mg/L	250
Sodium	mg/L	270
Sulfate	mg/L	350
Boron	mg/L	0.4

[1] Compliance with the effluent limitations are based on a 12-month running mean.

This Order carries over the effluent limitations from the previous Order in Table F-7 for TDS, chloride, and sodium. Based on the results of the RPA, annual mean effluent limitations of 350 and 0.4 mg/L have been added for sulfate and boron, respectively. As described in the following discussion, there is no evidence to suggest the current discharge is causing San Miguelito Creek to exceed WQOs since background concentrations of the pollutants naturally exceed WQOs in Basin Plan Table 3-5. Implementation of the effluent limitations in Table F-7 will prevent further degradation and protect beneficial uses of San Miguelito Creek and Santa Ynez River.

4.3.6.9.1. **Basin Plan Water Quality Objectives.** The Basin Plan contains specific numeric surface WQOs within Table 3-5, presented as mean values for the Lompoc Sub-Area of the Santa Ynez Hydrologic Unit. According to the Basin Plan, "these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin." Section 3.3.3 of the Basin Plan also says:

> "It must be recognized that the mean values indicated in Table 3-5 are values representing gross areas of a water body. Specific water quality objectives for a particular area may not be directly related to the objectives indicated. Therefore, application of these objectives must be based upon consideration of the surface and groundwater quality naturally present…"

The language preceding Table 3-5 also indicates, "the issuance of requirements must be tempered by consideration of beneficial uses within the immediate influence of the discharge."

4.3.6.9.2. **Site Specific Water Quality.** The Discharger monitors both upstream and downstream of the discharge point to San Miguelito Creek at RSW-001 and RSW-002, respectively. Based on available data for TDS, sodium, and chloride, upstream receiving water data routinely exceeds the surface WQOs, indicating background levels for salts are elevated prior to contributions from Facility effluent. Additionally, groundwater recharge is a specified beneficial use for the receiving water; thus, surface water discharge may impact groundwater quality. Since April 2012, approximate RSW-001 and RSW-002 annual mean concentrations for TDS, chloride, and sodium are shown in Table F-8.

Table F-8. Receiving Water Data

Site	TDS (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Boron (mg/L)
	RSW 001	**RSW 001**	**RSW 001**	**RSW 001**
RSW-001 year 2012	984	125	157	0.33
RSW-001 year 2013	1,380	230	230	0.37
RSW-001 year 2014	1,080	123.5	142.5	0.51

RSW-001 year 2015	959	65	49.3	0.37
RSW-001 year 2016	1,297	202.5	255	0.355
	RSW 002	**RSW 002**	**RSW 002**	**RSW 002**
RSW-002 year 2012	999.3	195	205.3	0.45
RSW-002 year 2013	1,016.50	197	214.75	0.58
RSW-002 year 2014	1,023	195.5	213.75	0.55
RSW-002 year 2015	1,081.50	219.5	235.75	0.56
RSW-002 year 2016	1,062	206.3	234.7	0.75
Basin Plan Table 3-5 WQO[1]	1,000	100	100	0.4

[1] 12-month running mean.

The data in Table F-8 shows the background concentrations for TDS, chloride, and sodium. In effect, the data indicate that there is no definitive evidence to suggest the discharge is causing or contributing to increases in salinity parameters or excursions of the Basin Plan Table 3-5 WQOs in downstream portions of San Miguelito Creek and the Santa Ynez River.

4.3.6.9.3. **Sources and Control of Salt Loading.** Salts originate from both natural and unnatural sources. In 2011, the Discharger conducted a Salinity Management Study and Plan (Study). The Study examined the relative contributions of several primary sources of Facility influent salt loadings, which included analyzing data from municipal supply water sites as seen in Table F-9. The 2016 Study confirmed that sources of salt loadings are relatively unchanged from the 2011 Study.

Table F-9. Municipal Supply Water Sites

Site	Site Description
VVCSD Well	VVCSD source water obtained from three groundwater wells; samples are taken directly from wells, prior to water treatment processes.
VAFB State Water	VAFB source water consists of a combination of State Water Project water and groundwater. State water makes up approximately 75 percent of water supply.
VAFB Well	Groundwater makes up 25 percent of VAFB's water supply.

City of Lompoc Water Treatment Plant Effluent	Effluent from the Water Treatment Plant; water supply is obtained from groundwater wells.

Analyzing the water supply data from the facilities listed in Table F-9 showed that water supply was a major contributor of TDS, sodium, and chloride loadings in Facility influent, as seen in Table F-10.

Table F-10. Municipal Supply Water Loadings

Site	TDS (% of Facility Influent)	Chloride (% of Facility Influent)	Sodium (% of Facility Influent)
Supply Water from VVCSD Well	13	16	11
Supply water from VAFB Well	3	3	2
Supply water from VAFB State Water	4	7	5
City of Lompoc Residential Water Treatment Plant Effluent	68	43	57
Total Loadings from Municipal Water Supply	**88**	**69**	**75**

Additionally, self-regenerating water softeners are said to make up two percent of TDS loading, five percent of chloride loading, and seven percent of sodium loading in Facility influent from VVCSD residential water softeners and City of Lompoc residential water softeners.

The Discharger has limited control over the sources of salt loading to its treatment plant. Historically, since plant upgrades in 2009, the Facility has been able to meet effluent limitations for chloride and sodium. However, in order to meet existing effluent limitations for TDS, the Discharger needs an estimated seven percent reduction of TDS in Facility effluent. In order to meet existing surface WQOs in the Basin Plan, the Discharger would need a 15 percent reduction in TDS, 61 percent reduction in chloride, and 54 percent reduction in sodium. To address the salt loading issue, the Discharger evaluated several options to reduce water source salt loadings in Facility influent. Some of the options included were water treatment plant modifications, source water alternatives, microfiltration/reverse osmosis wastewater treatment, groundwater discharge, and ocean outfall discharge. These options mostly proved to have major economic impacts and/or be difficult to implement. However, the Discharger did find that reducing water softener usage will help to decrease the salt loading and is economically

feasible. The Facility will continue its public education and outreach initiative to promote awareness regarding the water quality impacts of salinity and promote voluntary removal of water softeners.

4.3.6.9.4. **Proposed Salt Limits.** Consistent with the previous Order, this Order retains limitations that are characteristic of the natural receiving water. Effluent limitations for the Facility should be related to water quality naturally present in the vicinity of the discharge while also protecting beneficial uses within the immediate influence of the discharge. Effluent limitations for TDS, chloride, and sodium from the previous Order were more closely related to the background water quality and were protective of beneficial uses.

4.3.6.9.5. **Conclusions.** Consistent with the Basin Plan, the proposed effluent limitations for salinity are based on a regional assessment of water quality conditions, are within reasonable control of the Discharger to meet, and are protective of downstream beneficial uses.

Because of elevated levels of salinity in the source water and naturally present in the receiving water, this Order requires the Discharger to continue to implement and update the Salt Management Study and Plan as described in section 6.2.3.2. of this Fact Sheet. This Special Provision is retained from the previous Order.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. Effluent limitations for bis(2-ethylhexyl) phthalate and aluminum have not been retained from the previous Order. The elimination of these WQBELs is consistent with the exception to the CWA's anti-backsliding requirements expressed at §402 (0)(2)(B)(i) of the Act, which allows a reissued permit to include less stringent limitations when information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods), and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. In these circumstances, less stringent limitations (here, the removal of limitations) are based on new data, which was generated during the term of previous Order and which demonstrates no reasonable potential for discharges from the Facility to cause or contribute to exceedances of applicable WQOs for these pollutants. Therefore, effluent limitations for these pollutants from the previous Order are not retained in this Order.

4.4.2. Antidegradation Policies

Provisions of the Order are consistent with applicable antidegradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. This Order does not authorize increases in discharge rates

or pollutant loadings, and its limitations and conditions otherwise ensure maintenance of the existing quality of receiving waters.

4.4.3. **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, TSS, and pH. 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. For pH, both technology-based effluent limitations and water quality-based effluent limitations are applicable. The more stringent of these effluent limitations are implemented by this Order. 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. 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.

4.4.4. **Summary of Final Effluent Limitations**

4.4.4.1. **Effluent Limitations.** The following effluent limitations are applicable to the discharge of disinfected tertiary treated wastewater from the Facility at Discharge Point No. 001.

Table F-11. Final Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD_5[1]	mg/L	10	15	20
	lbs/day	420	630	830
TSS[1]	mg/L	10	15	20
	lbs/day	420	630	830
Oil and Grease	mg/L	5.0	--	10
Settleable Solids	mL/L	0.1	--	0.3

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Turbidity	NTU	10	--	20
pH	standard units	6.5 – 8.3 at all times[2]		
Un-ionized Ammonia	mg/L	--	0.025	--
Nitrate, Total (as N)	mg/L	--	--	10
Nitrate + Nitrite (as N)	mg/L	10	---	20
Molybdenum[3]	µg/L	25	--	35
Chromium (VI), Total Recoverable	µg/L	8.1	--	16
Acute Toxicity	% Survival	[4]		
Chronic Toxicity	TUc	1.0		

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

[2] Applied as an instantaneous effluent limitation.

[3] Central Coast Water Board Resolution R3-2008-0025 recognized the high natural background levels of molybdenum and modified the effluent limits as reflected in this Order.

[4] Survival of test organisms exposed to 100 percent effluent shall not be significantly reduced when compared, using a t-test (or another test consistent with the procedures described by Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, U.S. EPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition) to the survival of control organisms, as defined in section 5 of Attachment E to this Order.

4.4.4.2. **Dry Weather Flow:** Effluent daily dry weather flow shall not exceed a monthly average of 5.0 MGD.

4.4.4.3. **Floating Material.** Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum in concentrations that cause nuisance or adversely affect beneficial uses.

4.4.4.4. ***E. Coli*.**

4.4.4.4.1. *E. coli* concentrations in the effluent shall not exceed 100 MPN/100 mL, as a 6-week rolling geometric mean; and

4.4.4.4.2. *E. coli* concentrations in the effluent shall not exceed 320 MPN/100 mL in more than 10 percent of samples collected in a calendar month, calculated in a static manner.

4.4.4.5. **Salinity.** The discharge of tertiary treated wastewater shall comply with the following effluent limitations:

Table F-12. Salinity Effluent Limitations

Parameter	Units	Annual Mean[1]

TDS	mg/L	1,100
Chloride	mg/L	250
Sodium	mg/L	270
Sulfate	mg/L	350
Boron	mg/L	0.4

[1] Compliance with the effluent limitations are based on a 12-month running mean.

4.5. Interim Effluent Limitations – Not Applicable

4.6. Land Discharge Specifications – Not Applicable

4.7. Recycling Specifications

This Order allows the production, onsite use, and limited offsite use of disinfected secondary and tertiary recycled wastewater in compliance with applicable state and local requirements regarding the production and use of reclaimed wastewater, including those requirements established by the California Department of Public Health at title 22, sections 60301 - 60357 of the California Code of Regulations, Water Recycling Criteria. This Order includes water reclamation requirements for the Facility pursuant to the State Water Board's Division of Drinking Water recommendations submitted to the Central Coast Water Board. This Order requires the Discharger to adhere to the requirements outlined in section 4.3 and any additional conditions pursuant to specifications in updated title 22 engineering reports approved by the State Water Board's Division of Drinking Water.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. 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 water quality objectives established by the Basin Plan to meet this goal for all inland surface waters are included as receiving water limitations in section 5.1. of this Order.

5.2. Groundwater

Groundwater limitations included in section 5.2 of the Order include general objectives as established in Section 3.3.4 of the Basin Plan and specific numeric WQOs for groundwater within the Lompoc Plain Sub Area of the Santa Ynez River Valley Groundwater Basin as established in Table 3-6 of the Basin Plan. All groundwater limitations in this Order are retained from Order No. R3-2011-0211.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories

of permits in accordance with 40 C.F.R. section 122.42, are provided in 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. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. section 122.41(j)(5) and (k)(2) because the enforcement authority under the California Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference California Water Code section 13387(e).

6.2. Special Provisions

6.2.1. **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 U.S. EPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

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

6.2.2. **Special Studies and Additional Monitoring Requirements**

The Order requires the Discharger to conduct accelerated whole effluent toxicity monitoring upon the detection of toxicity in the effluent and requires the Discharger to perform a TRE upon the determination of continued toxicity within the effluent. This requirement is retained from previous order.

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.

6.2.3. **Best Management Practices and Pollution Prevention**

6.2.3.1. **Pollutant Minimization Program.** The Discharger is required to minimize the discharge of pollutants consistent with the requirements of section 2.4.5.1 of the SIP. The goal of the Pollutant Minimization Program is to reduce all

potential sources of a priority pollutant through pollutant minimization strategies to maintain the effluent concentration at or below water quality-based effluent limitations.

6.2.3.2. **Salt and Nutrient Management Program.** Section VI.C.6 of the previous Order 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 Lompoc Plain Sub Area of the Santa Ynez River Valley Groundwater Basin.

The Discharger conducted a Salt Management Study and Plan in 2016. The purpose of the study was to summarize effluent and receiving water data, characterize source water supply and wastewater quality, and evaluate and identify feasible source control strategies. The study confirmed that receiving water quality upstream and downstream of the Facility discharge point exceeds surface WQOs, indicating the background levels for salts are elevated prior to contributions from the Facility. According to the study, sources of salt are substantially unchanged from the Salinity Management Study and Plan provided to the Central Coast Water Board in January 2011. For TDS, sodium, chloride, and sulfate, the principal source is the water supply. While water supply also contributes some boron, more likely the contribution comes from use of boron-based laundry products, such as borax water conditioning products and sodium perborate bleaching products (also known as "oxygen" bleach or "nonchlorine" bleach).

Data from the term of the previous Order indicated the Facility has reasonable potential to cause or contribute to downstream impairment for salts loading. Therefore, in addition to effluent limitations for TDS, sodium, and chloride, this Order requires the Discharger to continue to update and implement the Salt Management Program. Additionally, the Discharger shall develop and implement a Nutrient Management Program as part of the Salt and Nutrient Management Program, as discussed in section 6.2.3.1. of this Order, based on the Recycled Water Policy discussed in section 3.5.3. of this Fact Sheet.

6.2.4. **Construction, Operation, and Maintenance Specifications – Not Applicable**

6.2.5. **Special Provisions for Publicly Owned Treatment Works (POTWs)**

6.2.5.1. **Pretreatment.** Section 307(b) of the CWA and 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.

6.2.5.2. **Collection System.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program (MRP) for the General Order through Order

WQ 2013-0058-EXEC on August 6, 2013. The General Order requires public agencies that own or operate sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions.

The General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive, and therefore, more stringent than the requirements under federal standard provisions. The Discharger and public agencies that are discharging wastewater into the Facility's collection system were required to obtain enrollment for regulation under the General Order by December 1, 2006.

6.2.5.3. **Resource Recovery from Anaerobically Digestible Material.** Some POTWs choose to accept organic material such as food waste, fats, oils, and grease into their anaerobic digesters for co-digestion to increase production of methane and other biogases for energy production and to prevent such materials from being discharged into the collection system, which could cause sanitary sewer overflows. The California Department of Resources Recycling and Recovery has proposed an exemption from requiring Process Facility/Transfer Station permits where this activity is regulated under waste discharge requirements or NPDES permits. The proposed exemption is restricted to anaerobically digestible material that has been prescreened, slurried, and processed/conveyed in a closed system to be co-digested with regular POTW sludge. The proposed exemption requires that a POTW develop Standard Operating Procedures for the proper handling, processing, tracking, and management of the anaerobically digestible material before it is received by the POTW.

Standard Operating Procedures are required for POTWs that accept hauled food waste, fats, oil, and grease for injection into anaerobic digesters. The development and implementation of Standard Operating Procedures for management of these materials is intended to allow the California Department of Resources Recycling and Recovery to exempt this activity from separate and redundant permitting programs. If the POTW does not accept food waste, fats, oil, or grease for resource recovery purposes, it is not required to develop and implement Standard Operating Procedures.

6.2.5.4. **Biosolids.** Provisions regarding sludge handling and disposal ensure that such activities will comply with all applicable regulations.

40 C.F.R. part 503 sets forth U.S. EPA's final rule for the use and disposal of biosolids, or sewage sludge, and governs the final use or disposal of biosolids. The intent of this federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.

U.S. EPA's regulations require that producers of sewage sludge meet certain reporting, handling, and disposal requirements. As the U.S. EPA has not delegated the authority to implement the sludge program to the State of

California, the enforcement of sludge requirements that apply to the Discharger remains under U.S. EPA's jurisdiction at this time. U.S. EPA, not the Central Coast Water Board, will oversee compliance with 40 C.F.R. part 503.

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

6.2.6. **Other Special Provisions**

6.2.6.1. **Recycled Water Policy Salt/Nutrient Management Plan.** This Order requires the Discharger to develop and implement a Salt/Nutrient Management Plan. This requirement is based on the Recycled Water Policy.

6.2.6.2. **Climate Change Adaptation Program.** This Order requires the Discharger to implement and submit a Climate Change Adaptation Program. The Central Coast Water Board is addressing the threats of climate change and flooding by including provisions in new orders that ensure climate change mitigation and adaptation strategies are implemented. There is widespread scientific consensus that climate change is occurring and will continue at an accelerating rate into the future. Extreme weather events, including drought, high-intensity precipitation, flooding, and extreme heat have occurred through much of California in the recent years and are projected to increase in frequency, extent, or intensity due to climate change.

Climate change has the potential to impact discharging facilities through inundation, storm impacts, an erosion, increasing the risk of accidental discharge that results in discharge permit violations. These events have significant implications for wastewater treatment and operations, such as increased corrosion, deposition of solids, infiltration, overflows, inundation of facilities, impairment of treatment processes, and disruption of power or electrical components. Due to the long-term nature of these risks, there is a need to avoid piecemeal or reactionary adaptation and instead undertake proactive, long-term planning with consideration of various adaptation strategies that both keep facilities safe, maintain safe discharging practices, and avoid impacts to resources.

6.2.7. **Compliance Schedules – Not Applicable**

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. California Water Code section 13383 authorizes the Central Coast Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements related to discharges to navigable waters or publicly owned treatment works. California Water Code section 13267 further authorizes the Central Coast Water Board to establish such requirements related to discharges of waste to any waters

of the state within its region. The MRP, Attachment E of this Order, establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the inclusion of the monitoring and reporting requirements contained in the MRP for this facility to ensure compliance with Order requirements to ensure protection of water quality and beneficial uses. The burden, including costs, of these requirements bears a reasonable relationship to the need for and benefits to be obtained through the provision of these reports.

7.1. Influent Monitoring

In addition to influent flow monitoring, monitoring for BOD_5 and TSS is required to determine compliance with the Order's percent removal requirement for these pollutants. Influent monitoring requirements have been retained from Order No. R3-2011-0211, including the addition of total nitrogen to help determine the level of nitrogen loading to the Facility and removal within the treatment system, and the addition of TDS, sodium, chloride, sulfate, and boron to evaluate domestic contributions of these parameters and aid in the development and implementation of a salt and nutrient management plan. Annual influent monitoring for major cations and anions has been added consistent with other Central Coast Water Board monitoring programs, such as Central Coast Ambient Monitoring Program and Irrigated Lands Program. The additional parameters will help efforts to discern sources of water quality impacts in the watershed through cation and anion mapping of various water sources.

7.2. Effluent Monitoring

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements have been retained from Order No. R3-2011-0211 for Discharge Point 001, with some exceptions. Effluent limitations for aluminum has been removed since there was no reasonable potential to cause harm to the receiving water. However, effluent aluminum monitoring will be conducted once per year as part of title 22 pollutant monitoring. Effluent monitoring for bis(2-ethylhexyl) phthalate was reduced from quarterly to annually since there was no reasonable potential determined. Annual effluent monitoring for major cations and anions have been added consistent with other Central Coast Water Board monitoring programs, such as Central Coast Ambient Monitoring Program and Irrigated Lands Program. The additional parameters will help efforts to discern sources of water quality impacts in the watershed through cation and anion mapping of various water sources.

7.3. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and or growth. This Order retains limitations for acute and

chronic toxicity and monitoring requirements for acute and chronic toxicity for Discharge Point No. 001 from the previous permit.

7.4. Recycled Water Monitoring

Recycled water monitoring is necessary to evaluate compliance with recycling specifications detailed in section 4.3 of this Order.

7.5. Receiving Water Monitoring

7.5.1. Surface Water

Surface water receiving water requirements are necessary to evaluation compliance with water quality objectives and the protection of beneficial uses. Surface water monitoring requirements have been retained from Order No. R3-2011-0211 for Discharge Point 001.

7.5.2. Groundwater

Groundwater monitoring requirements are necessary to evaluate compliance with water quality objectives and the protection of beneficial uses. Groundwater monitoring requirements have been retained from the previous order.

7.6. Other Monitoring Requirements

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

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

7.6.2. Annual Volumetric Reporting of Wastewater and Recycled Water

To establish a realistic estimate of statewide recycled water use and potential for increased recycled water use statewide, the Recycled Water Policy requires Dischargers to report the volume of treated wastewater and recycled water. The

annual report will meet implementation needs of the Recycled Water Policy and fill data gaps for additional statewide water planning efforts. The burden and cost of preparing the report is reasonable and consistent with the interest of the state in maintaining water quality and developing alternative water supplies to increase water resiliency. The Discharger shall ensure that all volumetric reporting requirements from this Order are submitted in electronic format via the State Water Board's Internet GeoTracker system at http://geotracker.waterboards.ca.gov/. The State Water Board will evaluate progress towards the recycled water goals in the Recycled Water Policy and evaluate the need to update the recycled water goals in the future based on consistent statewide data.

7.6.3. Biosolids/Sludge Monitoring

Biosolids monitoring shall be reported in the annual report in accordance with 40 C.F.R. 503. Biosolids monitoring requirements have been retained from the previous Order.

7.6.4. Pretreatment Monitoring

Pretreatment monitoring shall be reported in the annual report in accordance with requirements in 40 C.F.R. 403.8. Pretreatment monitoring requirements have been retained from the previous Order.

7.6.5. Salt and Nutrient Management Plan Reporting

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

8. PUBLIC PARTICIPATION

The Central Coast Water Board considered the issuance of WDRs that serve as an NPDES permit for the City of Lompoc Wastewater Reclamation Plant. As a step in the WDR adoption process, Central Coast Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

8.1. Notification of Interested Persons

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 via the Central Coast Water Board's website and e-mail subscription service.

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/

8.2. Written Comments

Interested persons were invited to submit written comments on March 30, 2021 concerning the tentative WDRs originally identified as draft Order No. R3-2021-0005.

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments were due at the Central Coast Water Board office by 5:00 p.m. on **April 29, 2021**.

Comment letters and responses to comments were provided in Attachment 1 to the staff report for consideration of adoption of the WDRs. The Discharger requested, and Central Coast Water Board staff drafted, a time schedule order in order to provide the Discharger time to comply with new effluent limitations for boron, sulfate, and chromium VI. The Central Coast Water Board publicly noticed draft Time Schedule Order No. R3-2022-0005 from November 18, 2021, to December 20, 2021, and there were no public comments.

8.3. Public Hearing

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

Date:	**February 17, 2022**	**Time:**	**9:00 am-5:00 pm**
Location:	Link to video and teleconference were provided at https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2021/2021_agendas.html		

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

8.4. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see the State Water Board's website on instructions for filing water quality petitions at: https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml.

8.5. 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.

8.6. 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.

8.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Peter von Langen at (805) 549-3688 or peter.vonlangen@waterboards.ca.gov or Arwen Wyatt-Mair at (805) 542-4695 or arwen.wyattmair@waterboards.ca.gov.