# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401

Phone (805) 549-3147 O Fax (805) 543-0397

<u>Central Coast Regional Water Quality Control Board</u>
(http://www.waterboards.ca.gov/centralcoast)

# PROPOSED ORDER R3-2024-0001 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NUMBER CA0049224

# WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF SAN LUIS OBISPO WATER RESOURCE RECOVERY FACILITY

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

Discharger City of San Luis Obispo

Name of Facility Water Resource Recovery Facility

Facility Address 35 Prado Road

San Luis Obispo, CA 93401 San Luis Obispo County

# **Table 1. Discharge Location**

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated domestic wastewater	35.244307°	120.680618°	San Luis Obispo Creek
002	Disinfected Tertiary Recycled Municipal Wastewater	-	-	Reclamation Use

This Order was adopted on:

This Order shall become effective on:

This Order shall expire on:

June 20, 2024 September 1, 2024 August 31, 2029

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

# CITY OF SAN LUIS OBISPO WATER RESOURCE RECOVERY FACILITY

PROPOSED ORDER R3-2024-0001 NPDES CA0049244

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 discharge**.

I, Ryan E. Lodge, 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.

Ryan E. Lodge, Executive Officer

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#### 1. FACILITY INFORMATION

Information describing the City of San Luis Obispo (Discharger) Water Resource Recovery Facility (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 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 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 2017-0012, this Order supports the 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, which serves to diversify the State's water supply portfolio to prepare for uncertainties in water resources due to the changing climate through ongoing implementation, monitoring, and updating of the Discharger's climate action planning efforts using the best available data and technology for wastewater treatment and operation.
  - In 2019, the City participated in the development of the Multi-Jurisdictional San Luis Obispo Hazard Mitigation, a planning effort that identifies and prioritizes the City's vulnerability to hazards and outlines mitigation goals and objectives. In August 2020, the City adopted its Climate Action Plan with goals for community-wide carbon neutrality by 2035. Most recently, on January 17, 2023, The City adopted the Climate Adaptation and Safety Element as part of its general plan. According to Disaster Mitigation Act (DMA) requirement §201.6(d)(3), the City must review and revise this plan within five years for continued mitigation project grant funding. Additionally, the City is currently undergoing construction of the SLO Water Plus project, which includes Facility upgrades to improve the Facility's energy efficiency, provide flood protection improvements, increase treatment capacity, and improve resource recovery. To incorporate proactive planning for the future, this Order requires the Discharger to report on implementation progress, monitoring, and planning updates at this Facility as it relates to flooding, wildfire, renewable energy generation and energy efficiency, temperature, water recycling, biosolids reuse, 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 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 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 that are more stringent than previous objectives to more adequately protect beneficial uses related to water and fish consumption.
- 2.7. Disadvantaged Community Status. Environmental Justice principles call for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies that affect every community's natural resources and the places people live, work, play, and learn. The Central Coast Water Board implements regulatory activities and water quality projects in a manner that ensures the fair treatment of all people, including Underrepresented Communities. Underrepresented Communities include but are not limited to Disadvantaged Communities (DACs), Severely Disadvantaged Communities (SDACs), Economically Distressed Areas (EDAs), Tribes, Environmentally Disadvantaged Communities (EnvDACs), and members of Fringe Communities.1 Furthermore, the Central Coast Water Board is committed to providing all stakeholders the opportunity to participate in the public process and provide meaningful input to decisions that affect communities. To meet environmental justice principles, staff has evaluated the disadvantaged community status for the Discharger. Using 2020 census data, the California Department of Water Resources Disadvantaged Community (DAC) Mapping Tool<sup>1</sup> identifies 16 block groups in the City of San Luis Obispo, representing approximately 54 percent of the population, as disadvantaged communities. The tool defines a DAC as a census block with a median household income between \$50,458 and \$67,278 and a severely disadvantaged community (SDAC) as a census block with a median household income below \$50.458. The SDAC census blocks in the City of San Luis Obispo have median household incomes of \$8,075, \$9,596, \$11,935, \$28,173, \$28,284, \$35,774, \$39,526, and \$44,167. The DAC census blocks in the City of San Luis Obispo have median household income of \$51,074, \$52,961, \$55,769, \$56,866, \$57,175, \$57,803, \$58,083, and \$60,417.
- 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, Attachment F.
- 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, Attachment F.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order R3-2014-0033, except for enforcement purposes, that Waste Discharge/Master Reclamation

<sup>&</sup>lt;sup>1</sup> 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: <a href="https://gis.water.ca.gov/app/dacs/">https://gis.water.ca.gov/app/dacs/</a>.

Requirements Order R3-2003-081 is terminated upon Discharger's enrollment in State Water Board Order WQ-2016-0068-DDW, 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 orders.

#### 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, with compliance measured at EFF-001 and EFF-002 respectively as described in the Monitoring and Reporting Program (MRP) Attachment E, is prohibited.
- 3.2. The discharge of any waste not specifically regulated by this Order, excluding stormwater regulated by General Permit CAS000001 (Waste Discharge Requirements for Discharges of Stormwater Associated with Industrial Activities), is prohibited.
- 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 average dry weather daily discharge flow shall not exceed 5.4 million gallons per day (MGD).

#### 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-001A or EFF-001B 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	Monthly Median	Annual Average
Biochemical Oxygen Demand (BOD) 5-day at 20 degrees Celsius (°C)	Milligram per liter (mg/L)	10	30	50	-	-	-	-
BOD 5-day at 20°C	Pounds per day (lbs/day)[1]	425	1,351	2,252	-	-	-	-
Total Suspended Solids (TSS)	mg/L	10	30	75	-	•	-	1
TSS	lbs/day <sup>[1]</sup>	425	1,351	3,378	-	-	-	-
pH <sup>[2],[3]</sup>	standard units	-	-	-	7.0	8.3	-	-
Oil and Grease	mg/L	5	-	10	-	-	-	-
Settleable Solids	milliliter per liter (mL/L)	0.1	-	-	-	-	-	-
Dissolved Oxygen	mg/L	-	-	-	4.0	-	-	-
Chlorine Residual	mg/L			[4][5]				
Mercury, Total Recoverable	μg/L	0.01	-	0.024	-	-	-	-
Chlorodibromom ethane (Dibromochlorom ethane)	μg/L	0.40	-	0.81	-	-	-	-
Chloroform	μg/L	60	-	120.6	-	-	-	-

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median	Annual Average
Dichlorobromom ethane	μg/L	0.56	-	0.96	-	-	-	-
Methylene Chloride	μg/L	4.7	1	9.45	1	-	-	-
Pentachlorophen ol	μg/L	0.28	1	0.56	1	-	-	-
Nitrate, Total (as Nitrogen (N))	mg/L	10	1	-	1	-	-	-
Nitrite, Total	mg/L	1	-	-	-	-	-	-
Un-ionized Ammonia	mg/L	0.02 5	-	-	-	-	-	-
Methylene Blue Active Substances (MBAS)	mg/L	0.2	-	-	-	-	-	-
Molybdenum	mg/L	0.01	-	-	-	-	-	-
Total Dissolved Solids	mg/L		-	-	-	-	-	650 <sup>[10]</sup>
Chloride	mg/L		-	-	-	-	-	100 <sup>[10]</sup>
Sodium	mg/L		-	-	-	-	_	50 <sup>[10]</sup>
Sulfate	mg/L			-	-	-	-	100 <sup>[10]</sup>
Total Coliform	MPN/100 mL			[6]				
Chronic Toxicity <sup>[7]</sup>	"Pass/Fail " and Percent Effect	-	-	"Pass" and Percent Effect <50 <sup>[8]</sup>	-	-	[9]	-

- The average monthly percent removal for BOD and TSS shall not be less than 85 percent.
- [2] Applied as an instantaneous effluent limitation.
- 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 7.0-8.3 shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from the range of 7.0-8.3 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 7.0-8.3 at all times, measured daily).
- [4] Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:
  - The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance quidelines shall be followed.
- Total chlorine residual monitoring is only required when chlorine is used for disinfection and or cleaning/maintenance purposes. The Discharger shall specify with the monthly, quarterly, and annual SMRs if chlorination occurred during the monitoring period.
- [6] Total Coliform:
  - The median number of total coliform organisms in the effluent shall not exceed
     2.2 MPN/100 mL as determined by results of bacteriological analyses for the last
     7 days on which samples were taken;
  - No more than one sample shall exceed 23 MPN/100 mL total coliform in any 30day period;
  - The maximum number of total coliform organisms in any sample shall not exceed 240 MPN/100 mL.
- As specified in section 7.2 of this Order and section 5 of the Monitoring and Reporting Program (MRP) (Attachment E).
- [8] The Maximum Daily Effluent Limitation (MDEL) is exceeded if a chronic toxicity test using the most sensitive species results in a "Fail" at the in-stream waste concentration (IWC) for the sub-lethal endpoint measured in the test and a "Percent Effect" greater than or equal to 50 percent for the survival endpoint.
- The Median Monthly Effluent Limitation (MMEL) is exceeded when two or more chronic toxicity tests using the most sensitive species initiated in a calendar month result in a "Fail" at the IWC for any endpoint (see section 5 of the MRP-Attachment E).
- [10] Based on a 12-month running mean.

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

## 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 Discharger filed a California Code of Regulations title 22 engineering report on August 14, 2020, that described recycled water quality produced at the Facility as "disinfected tertiary" (as defined in title 22, section 60301.230) and submitted a Notice of Intent (NOI) on August 14, 2020, to enroll under the State Water Board General Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW). The distribution and offsite reuse of recycled water produced by the Facility are subject to State Water Board Order WQ 2016-0068-DDW, or other applicable permit, dependent on final use. Order WQ 2016-0068-DDW supersedes Waste Discharge/Master Reclamation Requirements Order R3-2003-081.

- 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 DDW that demonstrates or defines compliance with the Uniform Statewide Recycling Criteria.
- 4.3.3. Recycled water shall be disinfected tertiary recycled water, as defined by California Code of Regulations title 22, section 60301.230.
- 4.3.4. Recycled water shall be adequately filtered, and disinfected, as defined in title 22.
- 4.3.5. Turbidity in tertiary recycled water shall not exceed any of the following limits:
- 4.3.5.1. An average of 0.2 NTU within a 24-hour period; and
- 4.3.5.2. 0.5 NTU at any time.
- 4.3.6. Total coliform bacteria measured in the disinfected recycled water shall not exceed the following limits:

- 4.3.6.1. An MPN of 2.2 per 100 mL calculated as a median concentration utilizing the bacteriological results of the last seven days for which analyses have been completed,
- 4.3.6.2. An MPN of 23 per 100 mL in more than one sample in any 30-day period, and
- 4.3.6.3. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.
- 4.3.7. 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.
- 4.3.8. 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.
- 4.3.9. 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 peak dry weather design flow.
- 4.3.10 If a disinfection method other than chlorine is used, the disinfection process shall be a process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- 4.3.11. The Discharger shall adhere to the manufacturer's recommended operating conditions for the ultraviolet (UV) system.
- 4.3.12. 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.
- 4.3.13. All areas where recycled water is in use and 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.
- 4.3.14. 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 Luis Obispo Creek. 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 affect 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 Concentrations of toxic metals and inorganic chemicals in waters shall not be increased in such a manner that may adversely affect beneficial uses.
- 5.1.10. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits.
- 5.1.10.1. Where natural turbidity is between 0 and 50 NTUs, increases shall not exceed 20 percent.
- 5.1.10.2. Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTU.
- 5.1.10.3. Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.
- 5.1.11. The pH value shall not be depressed below 7.0 nor raised above 8.3. The change in normal ambient pH levels shall not exceed 0.5 units.
- 5.1.12. Dissolved oxygen concentrations in receiving waters shall not be reduced below 7.0 mg/L at any time.
- 5.1.13. Discharged effluent shall not cause the receiving water temperature to increase more than 5° Fahrenheit (F) above the receiving water temperature. If, due to

the Creek's low temperature as determined by early-morning monitoring, the discharge causes the Creek's temperature to exceed the limit, the Discharger must ensure the discharge shall not cause the receiving water to exceed 72.5° F (22.5° C). The discharger shall monitor the Creek again four hours after discovering the exceedance and shall report both results to the Executive Officer in the monthly self-monitoring report.

- 5.1.14. 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 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.
- 5.1.15. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH<sub>3</sub>) to exceed 0.025 mg/L (as N) in the receiving water.
- 5.1.16. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect the beneficial uses of the receiving water. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. For waters where existing concentrations are presently nondetectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods as prescribed in *Standard Methods for the Examination of Water and Wastewater*, latest edition, or other equivalent methods approved by the Executive Officer.
- 5.1.17. Waters shall not contain organic substances in concentrations greater than those listed in the table below:

Parameter	Units	Water Quality Objective
Methylene Blue Activated Substances	mg/L	0.2
Phenols	ug/L	1.0
Polychlorinated Biphenyls (PCBs)[1]	μg/L	0.3
Phthalate Esters	μg/L	0.002

**Table 3. Organic Substances Water Quality Criteria** 

- 5.1.18. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. 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.
- 5.1.19. Receiving waters shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for

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

- Organic Chemicals) of title 22 California Code of Regulations, division 4, chapter 15.
- 5.1.20. Receiving waters shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural beneficial use. Interpretation of adverse effects shall be derived from the University of California Agricultural Extension Service guidelines presented in section 3, Table 3-1 of the 2019 Basin Plan.
- 5.1.21. Receiving waters shall not contain concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in section 3, Table 3-2 of the Basin Plan. Salt concentrations for irrigations waters shall be controlled through implementation of the anti-degradation policy to the effect that mineral constituents of currently or potentially usable waters shall not be increased.
- 5.1.22. Receiving waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the levels presented in section 3, Table 3-3 of the 2019 Basin Plan. The concentrations of metals listed in the table below shall not be exceeded for the protection of aquatic life.

Parameter	Units	Receiving Water Hardness >100 mg/L calcium carbonate (CaCO <sub>3</sub> )	Receiving Water Hardness <100 mg/L CaCO₃
Cadmium	mg/L	0.003	0.0004
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

**Table 4. Hardness Dependent Metals Criteria** 

- 5.1.23. *E. coli* concentrations 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.
- 5.1.24. Discharges shall not cause receiving water to exceed the water quality objectives for the Estero Bay Hydrologic Unit (San Luis Obispo Creek Sub-Area) specifically identified by Table 3-5 of the 2019 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 5. Annual Mean Surface Water Quality Objectives** 

Parameter	Units	Annual Mean
Total Dissolved Solids	mg/L	650
Chloride	mg/L	100
Sulfate	mg/L	100
Boron	mg/L	0.2
Sodium	mg/L	50

#### 5.2. Groundwater Limitations

Activities at the Facility shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the 2019 Basin Plan. The Central Coast Water Board may require the Discharger to investigate the cause of exceedances in the groundwater before determining whether the Discharger caused any water condition that exceeds the following groundwater limitations.

- 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 that presents a hazard to human, plant, animal, or aquatic life. In no circumstances shall groundwater contain concentrations of radionuclides in excess of the MCLs for radioactivity presented in 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 downgradient of the waters affected by the discharge.
- 5.2.4. The median concentration of coliform organisms in groundwater, over any sevenday 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 derived in University of California Agricultural Extension Service guidelines provided in Table 3-1 of the 2019 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 2019 Basin Plan.
- 5.2.8. Groundwater shall not contain constituents greater than the following concentrations established in Table 3-6 of the 2019 Basin Plan for groundwaters within the San Luis Obispo Creek sub-area (Estero Bay sub-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.

**Parameter** Units **Annual Median TDS** mg/L 900 Chloride mg/L 200 100 Sulfate mg/L Boron 0.2 mg/L Sodium mg/L 50 Nitrogen mg/L 5

Table 6. Groundwater Objectives

#### 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), monitoring for surrogate parameters, and other new information. 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.
- 6.3.1.4. This Order may be reopened and modified to revise the most sensitive species to be used for acute and/or chronic aquatic toxicity testing once the required species sensitivity is completed in accordance with section 5 of the MRP (Attachment E). Reopening and modification is not required if the species sensitivity screening indicates that *Pimephales promelas* is the most sensitive species.
- 6.3.1.5 This Order may be reopened and modified to reevaluate reasonable potential for acute toxicity, and establish acute toxicity effluent limitations, if warranted, after the evaluation of new data and information.

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

# 6.3.2.1. Toxicity Reduction Requirements

For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct acute and chronic whole effluent toxicity (WET) testing, as specified in section 5 of the MRP. Furthermore, this Provision requires the Discharger to investigate the causes of and identify corrective actions to reduce or eliminate effluent toxicity. If the discharge exceeds the numeric toxicity monitoring trigger or effluent limitation during accelerated monitoring established in this Provision, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) in accordance with an approved TRE Work Plan and take actions to mitigate the impact of the discharge and prevent recurrence of toxicity. A TRE is a site-specific study conducted in a stepwise process to identify the source(s) of toxicity and the effective control measures for effluent toxicity. TREs are designed to identify the causative agents and sources of whole effluent toxicity, evaluate the effectiveness of the toxicity control options, and confirm the reduction in effluent toxicity. This Provision includes requirements for the Discharger to update and submit their TRE Work Plan and includes procedures for accelerated toxicity monitoring and TRE initiation:

- 6.3.2.1.1. TRE Work Plan. Within 90 days of the effective date of this Order, the Discharger shall submit to the Central Coast Water Board an updated TRE Work Plan for approval by the Executive Officer. The TRE Work Plan shall outline the procedures for identifying the source(s) of and reducing or eliminating effluent toxicity. The TRE Work Plan must be developed in accordance with U.S. EPA guidance and be of adequate detail to allow the Discharger to immediately initiate a TRE as required in this Provision.
- 6.3.2.1.2. Accelerated Monitoring and TRE Initiation. When the numeric toxicity monitoring trigger or effluent limitation is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria (TAC), the Discharger shall initiate accelerated monitoring as required in the Accelerated Monitoring Specifications in section 5 of the MRP. The Discharger shall initiate a TRE to address effluent toxicity if any WET testing results exceed

the numeric toxicity monitoring trigger or effluent limitation during accelerated monitoring.

# 6.3.3. Best Management Practices and Pollution Prevention

## 6.3.3.1. Salt and Nutrient Management Program

- 6.3.3.1.1 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 San Luis Obispo Creek Sub-Basin Area of the Estero Bay 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.
- 6.3.3.1.2 Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial, and residential dischargers.
- 6.3.3.1.3 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.
- 6.3.3.1.4 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).
- 6.3.3.1.5 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).

# 6.3.3.2. Pollutant Minimization Program

- 6.3.3.2.1. 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:
- 6.3.3.2.1.1. A sample result is reported as DNQ and the effluent limitation is less than the reporting limit (RL); or
- 6.3.3.2.1.2. 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.

- 6.3.3.2.2. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Central Coast Water Board Executive Officer:
- 6.3.3.2.2.1. 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;
- 6.3.3.2.2.2. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
- 6.3.3.2.2.3. 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;
- 6.3.3.2.2.4. 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).
- 6.3.5.5. 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, passthrough, 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 Management. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial, and residential dischargers. The Discharger shall assess additional pretreatment measures that may be taken to reduce influent salt concentrations and include a discussion of proposed and implemented measures in the annual report described below. The Discharger must also implement outreach to residential, commercial, and industrial salt contributors with the goal of reducing salts discharged to the collection system.
- 6.3.6.2. **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.
- 6.3.6.3. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2022-0103-DWQ)

The Discharger is subject to the requirements of and must separately comply with State Water Board Order 2022-0103-DWQ, Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems, including monitoring and reporting requirements, and any subsequent revision to that order. This General Permit, adopted on December 6, 2022, is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger is enrolled under the General Permit.

6.3.6.4. Climate Change Adaptation Implementation Progress Report. On May 1, 2029, the Discharger shall submit a Climate Change Adaptation Implementation Progress Report<sup>2</sup> to the Central Coast Water Board Executive Officer describing the Discharger's progress in implementing, monitoring, and updating its 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).

<sup>&</sup>lt;sup>2</sup> 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.

The Climate Change Adaptation Implementation Report shall, at a minimum, include the following components:

- 6.3.6.4.1. Climate Change Adaptation Implementation Status Provide a status update on any city or county-wide reports that address Facility and or collection system climate change adaptation planning and or implantation. Submit copies of document(s) to CIWQS as attachments.
- 6.3.6.4.2. Resiliency Actions Report progress on actions that build facility and operational resilience to identified vulnerabilities, accounting for options that minimize resource impacts. For the anticipated life of the facility, include an analysis of:
  - Precipitation pattern changes
    - Drought Decreased influent quantity and quality
    - o Peak Events Flooding and increased influent quantity
  - Temperature fluctuations and extremes
  - Increased wildfires
  - Energy resilience
    - Energy efficiency
    - o Renewable energy generation
    - Increased power outages
  - Biosolid reuse
  - Water recycling
- 6.3.6.4.3. Adaptation Strategy Report progress and adjustments made to strategy to complete Resiliency Actions, encompassing the following:
- 6.3.6.4.3.1. Prioritization How resiliency actions were prioritized based on risks to water quality, but also accounting for costs and benefits.
- 6.3.6.4.3.2. Schedule and Milestones Ongoing and changing 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.
- 6.3.6.4.3.3. Financial Planning Costs of reported implementation and monitoring measures, projected costs necessary to continue implementation and monitoring of resiliency actions, and 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).

# 7.2. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.

The null hypothesis (H<sub>o</sub>) for the TST statistical approach is:

Mean discharge "in-stream" waste concentration (IWC) response ≤0.75 × Mean control response.

A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail".

The MDEL for chronic toxicity is exceeded when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" for the sub-lethal endpoint and the "Percent Effect" is ≥0.50 for the survival endpoint or the sub-lethal endpoint if there is no survival endpoint.

The MMEL for chronic toxicity is exceeded and a violation will be flagged when two or more toxicity tests initiated in a calendar month result in a "Fail" in accordance with the TST approach for any endpoint.

The MDEL and MMEL for chronic toxicity are set at the IWC for the discharge (100 percent effluent) and expressed in units of the TST statistical approach ("Pass" or "Fail"; "Percent Effect"). All NPDES effluent monitoring for the chronic toxicity effluent limitations shall be reported using the 100 percent effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (H<sub>o</sub>) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using a multi-concentration test design when required by Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002).

#### 7.3. 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:

- 7.3.1. 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.
- 7.3.2. 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.

# 7.4. 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.

# 7.5. 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.

### 7.6. 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:

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

where:  $\Sigma x$  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.

# **Bioassay**

A test used to evaluate the relative potency of a chemical or a mixture of chemicals by comparing its effect on a living organism with the effect of a standard preparation on the same type of organism.

#### Calendar Month(s)

A period of time from a day of one month to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, or from January 31 to February 28).

#### **Calendar Quarter**

A period of time defined as three consecutive calendar months.

#### Calendar Year

A period of time defined as twelve consecutive calendar months.

### Carcinogenic

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

## **Chronic Aquatic Toxicity Test**

A test to determine an adverse effect (sublethal or lethal) on a group of aquatic test organisms during an exposure of duration long enough to assess sub-lethal effects. Compliance with the effluent limitation for chronic toxicity in this Order is demonstrated by conducting chronic toxicity tests for the effluent as described in section 7.15 of this Order and section 5 of the Monitoring and Reporting Program (MRP) (Attachment E), and in accordance with the TST statistical approach.

#### **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.

# **Continuous Dischargers**

Facilities that discharge without interruption throughout its operating hours, except for infrequent shutdowns for maintenance, process changes, or other similar activities, and that discharge throughout the calendar year.

# **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.

#### **Dilution Ratio**

The critical low flow of the upstream receiving water divided by the flow of the effluent discharged.

# **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 and Coastal Lagoons**

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.

#### Flow-Through Acute Toxicity Testing Systems

A toxicity testing system where an effluent sample is either pumped continuously from the sampling point directly to a dilutor system, or collected and placed in a tank adjacent to the test laboratory and pumped continuously from the tank to a dilutor system.

#### **Inland Surface Waters**

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

# **Insignificant Dischargers**

National Pollutant Discharge Elimination System (NPDES) discharges that are determined to be a very low threat to water quality by the permitting authority.

#### **Instantaneous Maximum Effluent Limitation**

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

#### Instantaneous Minimum Effluent Limitation

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

## **In-stream Waste Concentration (IWC)**

The concentration of effluent in the receiving water after mixing as determined by the permitting authority. For purposes of aquatic toxicity testing for non-stormwater NPDES dischargers, the IWC shall be as described in section III.C.1 of the Toxicity Provisions. For assessing whether receiving waters meet the numeric water quality objectives (WQOs), the undiluted ambient water shall be used as the IWC in the TST as indicated in section III.B.3 of the Toxicity Provisions.

# **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. For the purposes of chronic and acute aquatic toxicity, an MDEL is an effluent limitation based on the outcome of the TST approach and the resulting percent effect at the IWC, as described in sections III.C.5 and III.C.6 of the Toxicity Provisions.

#### **Maximum Daily Effluent Target (MDET)**

For the purposes of chronic and acute aquatic toxicity, an MDET is a target used to determine whether a Toxicity Reduction Evaluation (TRE) should be conducted. Not meeting the MDET is not a violation of an effluent limitation.

#### 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:

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

#### 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))).

# **Median Monthly Effluent Limitation (MMEL)**

For the purposes of chronic and acute aquatic toxicity, an MMEL is an effluent limitation based on a maximum of three independent toxicity tests, analyzed using the TST, as described in sections III.C.5 and III.C.6 of the Toxicity Provisions.

### **Median Monthly Effluent Target (MMET)**

For the purposes of chronic and acute aquatic toxicity, an MMET is a target based on a maximum of three independent toxicity tests used to determine whether a TRE should be conducted. Not meeting the MMET is not a violation of an effluent limitation.

# **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.

#### **MMEL Compliance Tests**

For the purposes of chronic and acute aquatic toxicity, MMEL compliance tests are a maximum of two tests that are used in addition to the routine monitoring test to determine compliance with the chronic and acute aquatic toxicity MMEL and MDEL.

#### **MMET Tests**

For the purposes of chronic and acute aquatic toxicity, for dischargers not required to comply with numeric chronic toxicity effluent limitations, MMET tests are a maximum of two tests that are used in addition to the routine monitoring test to determine whether a TRE should be conducted.

### **Most Sensitive Species**

The single species selected from an array of test species to be used in a single species laboratory test series to determine toxic effects of effluent or ambient water.

# **Non-Continuous Dischargers**

Dischargers that do not discharge in a continuous manner or do not discharge throughout the calendar year (e.g., intermittent and seasonal dischargers).

# **Non-NPDES Dischargers**

Dischargers of waste that could affect the quality of waters of the State that are not regulated by the NPDES program.

# **Non-Stormwater NPDES Dischargers**

Dischargers that are regulated pursuant to one or more NPDES permit(s), but excluding any discharges subject to the United States Code title 33 section 1342(p). This includes dischargers that discharge a combination of treated municipal or industrial wastewater and stormwater.

#### **Nonpoint Source**

A source that does not meet the definition of a point source, as defined below.

# Not Detected (ND)

Sample results which are less than the laboratory's MDL.

### **Null Hypothesis**

A statement used in statistical testing that has been put forward either because it is believed to be true or because it is to be used as a basis for argument, but has not been proved.

#### **Ocean Waters**

The territorial marine waters of the State, as defined by California law, to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

#### **Percent Effect**

The value that denotes the difference in response between the test concentration and the control, divided by the mean control response, and multiplied by 100.

#### **Permitting Authority**

The State Water Board or a regional water board that issues a permit, waste discharge requirements, water quality certification, or other authorization for the discharge or proposed discharge of waste. To the extent that the action is delegable, the term "Permitting Authority" can include the Executive Officer or Executive Director.

#### **Persistent Pollutants**

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

#### **Point Source**

Any discernible, confined and discrete conveyance including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

#### **Pollutant**

Defined in section 502(6) of the CWA as "dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water."

#### **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).

#### **Publicly Owned Treatment Works (POTW)**

Facilities owned by a state or municipality that store, treat, recycle, and reclaim municipal sewage or industrial wastes of a liquid nature. Similar facilities that are privately, instead of publicly owned, are included in this definition for purposes of section III of the Toxicity Provisions.

#### **Reasonable Potential**

A designation used for a waste discharge that is projected or calculated to cause or contribute to an instream excursion above a water quality standard.

# **Regulatory Management Decision (RMD)**

The decision that represents the maximum allowable error rates and thresholds for toxicity and non-toxicity that would result in an acceptable risk to aquatic life.

# Replicates

Two or more independent organism exposures of the same treatment (i.e., effluent concentration) within a toxicity test. Replicates are typically conducted with separate test chambers and test organisms, each having the same effluent concentration.

# 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.

#### Response

A measured biological effect (e.g., survival, reproduction, growth) as a result of exposure to a stimulus.

#### **Routine Monitoring**

Required monitoring that occurs during a permit term.

#### **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).

# **Species Sensitivity Screening**

An analysis to determine the single most sensitive species from an array of test species to be used in a single species laboratory test series.

#### Standard Deviation (σ)

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

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

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

#### Stormwater

As defined at 40 C.F.R. section 122.26(b)(13) (Nov. 16, 1990) which states, 'Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage."

# **Test of Significant Toxicity (TST)**

A statistical approach used to analyze aquatic toxicity test data, as described in section IV.B.1.c of the Toxicity Provisions.

# **Toxicity Identification Evaluation (TIE)**

Techniques used to identity the unexplained cause(s) of toxic event. A TIE involves selectively removing classes of chemicals through a series of sample manipulations, effectively reducing complex mixtures of chemicals in natural waters to simple components for analysis. Following each manipulation, the toxicity sample is assessed to see whether the toxicant class removed was responsible for the toxicity.

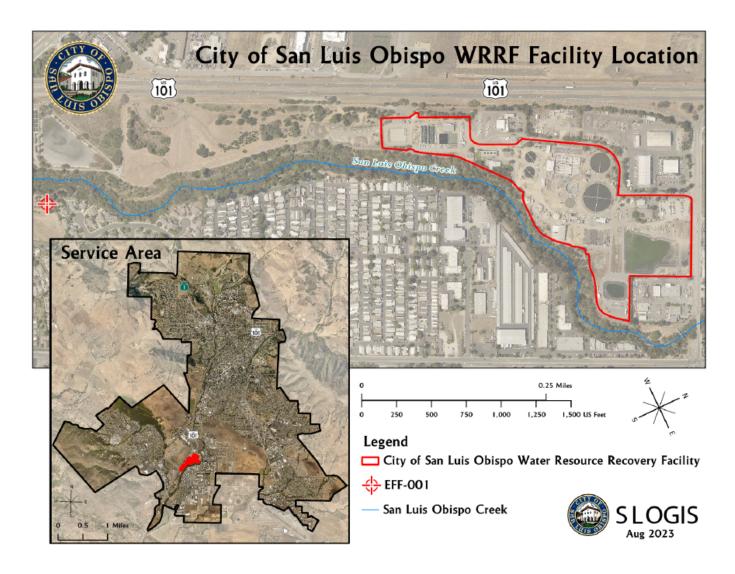
#### **Toxicity Reduction Evaluation (TRE)**

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.)

# **Toxicity Provisions**

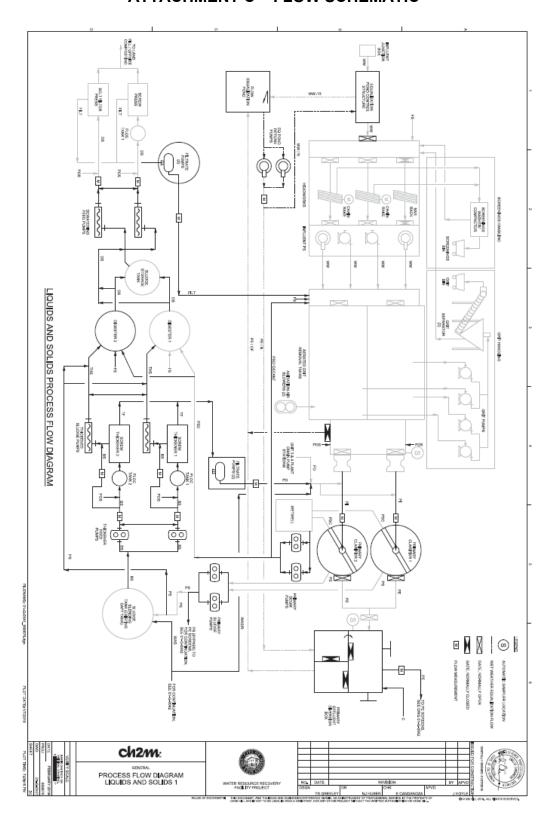
Refers to State Policy for Water Quality Control: Toxicity Provisions (adopted in 2020 and revised in 2021) of the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California.* 

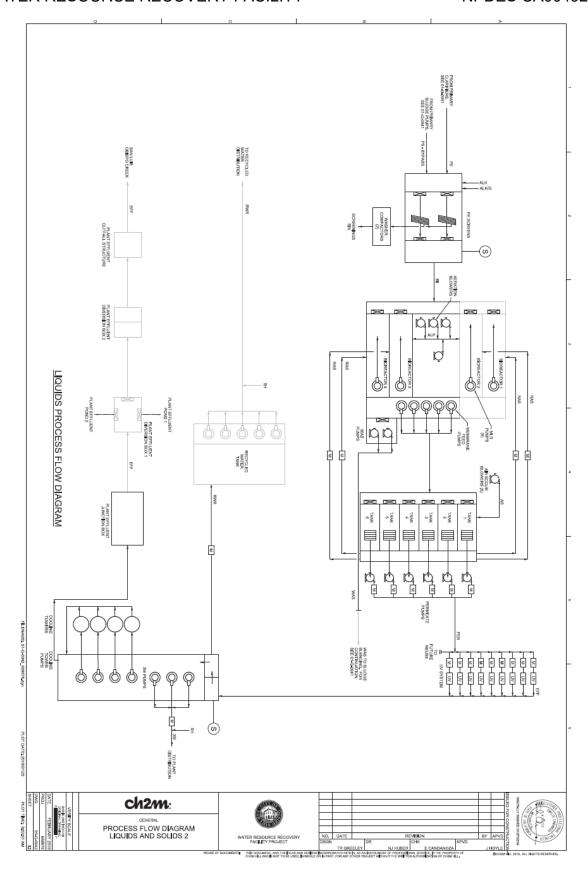
# **ATTACHMENT B - MAP**



ATTACHMENT B-MAP B-1

# 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 5.5 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(I)(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 decisionmaking 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(I)(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(I)(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(I)(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(I)(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(I)(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(I)(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(I)(6)(ii)(A).)
- 5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. 122.41(I)(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(I)(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(I)(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(I)(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(I)(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(I)(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(I)(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(I)(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(I)(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 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

## CITY OF SAN LUIS OBISPO WATER RESOURCE RECOVERY FACILITY

PROPOSED ORDER R3-2024-0001 NPDES CA0049244

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 February 1<sup>st</sup> 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 subcategories (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:
  - $Log Mean = (C1 \times C2 \times ... \times Cn)1/n,$

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

- 8.7.10. "Mass emission rate" is a daily rate defined by the following equations:
  - mass emission rate (lbs/day) =  $8.34 \times Q \times C$ ; and,
  - mass emission rate  $(kg/day) = 3.79 \times Q \times C$ ,
  - 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):

Ceffluent Removal Efficiency (%) = 100 x (1 - Ceffluent / Cinfluent)

- 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.

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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. <a href="http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication421.pdf">http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication421.pdf</a>
- 1.3.2. Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. <a href="https://www.usbr.gov/tsc/techreferences/mands/wmm/index.htm">https://www.usbr.gov/tsc/techreferences/mands/wmm/index.htm</a>1.3.3. 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. <a href="https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication484v2.pdf">https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication484v2.pdf</a>

- 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. <a href="https://www.epa.gov/compliance/compliance-inspection-manual-national-pollutant-discharge-elimination-system">https://www.epa.gov/compliance/compliance-inspection-manual-national-pollutant-discharge-elimination-system</a>
- 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:

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, where representative samples of	

**Table E-1. Monitoring Station Locations** 

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		wastewater influent can be obtained prior to any plant return flows or treatment processes
EFF-001	EFF-001A	At a point where representative samples of tertiary treated wastewater effluent can be collected after all treatment processes and prior to entering the discharge pipeline to San Luis Obispo Creek: 35.251533°N, 120.676817°W
	EFF-001B	At a point at the end of the discharge pipeline where representative samples of tertiary treated wastewater effluent can be collected after all treatment processes and prior to commingling with other waste streams or being discharged into San Luis Obispo Creek:  35.244307°N, 120.680618°W
EFF-002	EFF-002	Location where a representative sample of title 22 recycled water can be collected prior to discharge to the recycled water storage tank.
Receiving Water	RSW-001	At Fox Canyon Road
Receiving Water	RSW-002	At Mission
Receiving Water	RSW-003	At Marsh Street Bridge
Receiving Water	RSW-004	50 feet upstream of effluent structure discharge point on San Luis Obispo Creek
Receiving Water	RSW-005	A location in San Luis Obispo Creek immediately upstream of the confluence with Prefumo Canyon Creek

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	
Receiving Water	RSW-006	A location in Prefumo Canyon Creek 50 feet upstream of the confluence with San Luis Obispo Creek	
Receiving Water	RSW-007	Approximately 0.5 miles downstream from effluent structure discharge point on San Luis Obispo Creek	
Receiving Water	RSW-008	At Higuera Street Bridge, near US 101	
Biosolids	BIO-001	Biosolids at the last point in the biosolids handling process where representative samples of residual solids from the treatment process can be obtained	

#### 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 <sub>5</sub> ) <sup>[2]</sup>	Milligram per liter (mg/L)	24-hour Composite	1/Month <sup>[1]</sup>
Total Suspended Solids (TSS) <sup>[2]</sup>	mg/L	24-hour Composite	1/Month <sup>[1]</sup>

<sup>[1]</sup> The Discharger shall report the average and maximum daily flows.

## 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. Except where specified, all monitoring will be performed at EFF-001A. If more than one analytical test method is listed for a given

Collection of BOD<sub>5</sub> 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.

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

Table E-3. Effluent Monitoring at EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Metered	1/Day
Instantaneous Maximum Flow	MGD	Metered	1/Day
Maximum Daily Flow		Calculated	1/Month
Mean Daily Flow	MGD	Calculated	1/Month
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	mg/L	24-hour Composite	1/Month
BOD Mass Emissions Rate	pounds per day (lbs/day)	Calculated	1/Month
BOD <sub>5</sub>	Percent removal	Calculated	1/Month
pH <sup>[1]</sup>	standard units	Continuous or Grab	1/Day
Chlorine, Total Residual <sup>[2]</sup>	mg/L	Continuous or Grab	Grab samples shall be taken a minimum of twice per day, and within 30 minutes of any excursion above 0.1 mg/L
Chlorine Used <sup>[2]</sup>	lbs/day	Calculated	1/Day
Temperature <sup>[1]</sup>	°C	Continuous or Grab	5/Week
Total Coliform	MPN/100 mL	Grab	5/Week
Settleable Solids	milliliter per liter (ml/L)	Grab	1/Week
Ammonia (as N) [3]	mg/L	Grab	1/Week
Un-ionized Ammonia (as N) [1]	mg/L	Calculated	1/Week
Total Suspended Solids (TSS)	mg/L	24-hr. composite	1/Week
TSS	Percent removal	Calculated	1/Week
Turbidity	Nephelo- metric Turbidity	24-hr. composite	1/10 days

Parameter	Units	Sample Type	Minimum Sampling Frequency
	Units (NTU)		
Dissolved Oxygen	mg/L	Grab	1/Month
Color	Color units	Grab	1/Month
Oil and Grease	mg/L	Grab	1/Month
Total Kjeldahl Nitrogen (TKN) (as N)	mg/L	Grab	1/Month
Chlorodibromomethane (aka Dibromochloromethane)	μg/L	24-hr. composite	1/Month <sup>[4]</sup>
Chloroform	μg/L	24-hr. composite	1/Month <sup>[4]</sup>
Dichlorobromomethane	μg/L	24-hr. composite	1/Month <sup>[4]</sup>
Methylene Chloride	μg/L	24-hr. composite	1/Month <sup>[4]</sup>
Pentachlorophenol	μg/L	24-hr. composite	1/Month <sup>[4]</sup>
Nitrate (as N)	mg/L	Grab	1/Month
Nitrite (as N)	mg/L	Grab	1/Month
Methylene Blue Active Substances (MBAS)	mg/L	24-hr. composite	1/Month <sup>[4]</sup>
Molybdenum	mg/L	Grab	1/Month
Dissolved Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Total Dissolved Solids (TDS)	mg/L	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Chloride	mg/L	Grab	1/Month
Sulfate	mg/L	Grab	1/Month
Hardness (CaCO <sub>3</sub> ) <sup>[5]</sup>	mg/L	24-hr. composite	1/Quarter
Boron	mg/L	Grab	1/Year (in October)
Cobalt	mg/L	Grab	1/Year (in October)
Iron	mg/L	Grab	1/Year (in October)
Lithium	mg/L	Grab	1/Year (in October)
Manganese	mg/L	Grab	1/Year (in October)
Vanadium	mg/L	Grab	1/Year (in October)

Parameter	Units	Sample Type	Minimum Sampling Frequency
Acute Toxicity <sup>[6]</sup>	"Pass/Fail" and % Effect	Grab	1/Year
Chronic Toxicity <sup>[6]</sup>	"Pass/Fail and % Effect"	Grab	1/Month <sup>[7]</sup>
California Toxics Rule (CTR) Pollutants <sup>[8], [9]</sup>	μg/L	24-Hour composite	1/Year (in October)
Title 22 Pollutants <sup>[10], [11]</sup>	μg/L	24-Hour composite	1/Year (in October)

- [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.
- Total chlorine residual monitoring is only required when chlorine is used for disinfection and or cleaning/maintenance purposes. The Discharger shall specify with the monthly, quarterly, and annual SMRs if chlorination occurred during the monitoring period.
- [3] Sampling shall be concurrent with sampling of receiving water for ammonia.
- If no exceedances of the effluent limitation occur for a minimum of 12 consecutive months of monitoring then the frequency of monitoring shall be reduced to quarterly. Subsequently, if an exceedance of the effluent limitation occurs during quarterly monitoring, the monitoring frequency shall return to monthly. The Discharger must notify the Central Coast Water Board of the change in monitoring frequency.
- [5] Hardness monitoring will occur on the same day and time as the California Toxics Rule (CTR) pollutants to allow for conversion from total recoverable to dissolved for hardness dependent metals.
- 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.
- Once per year, in October, chronic toxicity monitoring must be performed at EFF-001B instead of at EFF-001A.
- 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.

- [9] Monitoring for the CTR pollutants in effluent shall occur simultaneously with monitoring required for the CTR pollutants in receiving water.
- [10] 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.
- [11] 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. **Routine Acute Toxicity Monitoring Frequency.** The Discharger shall conduct at least one acute aquatic toxicity test using the most sensitive species every calendar year during which there is expected to be at least 15 days of discharge in at least one calendar quarter.

For the purposes of acute toxicity, the calendar year starts from the initiation of routine monitoring. If the Discharger is unable to sample within the calendar year due to the availability of test organisms, contract laboratory scheduling issues, or some other reason outside of the Discharger's control, the Discharger shall immediately notify the Central Coast Water Board in writing. If the Central Coast Water Board agrees that the failure to sample within the calendar year was unavoidable, the Central Coast Water Board will specify an alternative sampling window for the monitoring period.

- 5.1.2. **Discharge In-stream Waste Concentration (IWC) for Acute Toxicity.** The IWC for this discharge is 100 percent effluent.
- 5.1.3. Most Sensitive Species. The test species used for acute toxicity testing shall be the most sensitive species. To be consistent with previous Order R3-2014-0033, the Discharger shall use the fathead minnow (*Pimephales promelas*) to conduct acute toxicity testing from the effective date of this permit until the completion of the required acute species sensitivity screening detailed in section 5.1.6 below. If the species sensitivity screening indicates that *Pimephales promelas* is not the most sensitive species, this permit may be reopened and modified to revise the most sensitive species. Reopening and modification is not required if the species sensitivity screening indicates that *Pimephales promelas* is the most sensitive species.

The Central Coast Water Board may allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation, and the Central Coast Water Board determines that the

Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The "next appropriate species" is the species exhibiting the highest percent effect at the IWC tested in the last species sensitivity screening other than the most sensitive species.

- 5.1.4. Sample Volume and Holding Time. The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume of the effluent shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.
- 5.1.5. Acute Freshwater Species and Test Methods. The Discharger shall conduct acute toxicity tests on effluent samples at the discharge IWC for the discharge in accordance with species and test methods in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012, 2002; Table IA, 40 C.F.R. part 136). Approved tests methods for acute toxicity are listed in Table E-4 below. In no case shall these species be substituted with another test species unless written authorization from the Central Coast Water Board is received.

Species	Effect	Test Duration (hours)	Test Method
Fathead Minnow (Pimephales promelas)	Survival	96	Survival Test Method 2000.0
Water Flea (Ceriodaphnia dubia)	Survival	48	Survival Test Method 2002.0

Table E-4. Approved Test for Acute Toxicity – Fresh Water

5.1.6. **Acute Species Sensitivity Screening.** The Discharger shall conduct one species sensitivity screening test during the Order's first required sample collection for acute toxicity. The Discharger shall collect a single effluent sample to initiate and concurrently conduct two toxicity tests using the fish and invertebrate species referenced in Table E-4 above. This sample shall also be analyzed for the parameter(s) required on a monthly and quarterly frequency in Table E-3, during that given month. Samples for the species sensitivity screening shall be analyzed using the TST approach.

The species that exhibits the highest "Percent Effect" at the discharge IWC shall be used for routine monitoring during the permit term. If the percent effect is less than or equal to zero percent effect for each species, or all percent effect values are the same during the species sensitivity screening test, the Discharger shall either use the species that was most sensitive during the previous permit term for routine monitoring or repeat the species sensitivity screening for all species to confirm the results of the first screening before selecting the most sensitive species to use for routine monitoring. If two consecutive species sensitivity screening tests demonstrate that the percent effect for all species exhibit less

- than or equal to zero percent, the Discharger may select the species to be used for routine monitoring during the permit term.
- 5.1.7. **Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual referenced above. Additional requirements are specified below.
- 5.1.7.1. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" for acute toxicity tests using the TST approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1 and Appendix B, Table B-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response ≤ 0.80 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". This is a t-test (formally Student's t-test), a statistical analysis comparing two sets of replicate observations in the case of WET, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail"). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances. The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) + Mean control response) × 100.
- 5.1.7.2. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012, 2002; Table IA, 40 C.F.R. part 136) then the Discharger must resample and re-test within 7 days.
- 5.1.7.3. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- 5.1.7.4. The Discharger shall perform toxicity tests on final effluent samples. Chlorine in the final effluent sample may be removed prior to conducting toxicity tests in order to simulate the dechlorination process at the Facility. Ammonia, however, shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of this MRP and the rationale is explained in the Fact Sheet (Attachment F).
- 5.1.8. **Notification.** The Discharger shall notify the Central Coast Water Board of an exceedance of the acute toxicity trigger of 90 percent survival as soon as the Discharger learns of the violation, but no later than 24 hours of the Discharger receiving the monitoring results. The notification shall describe actions the

Discharger has taken or will take to investigate and correct the cause(s) of toxicity.

- 5.1.9. Accelerated Monitoring Requirements. If the result of any acute toxicity test fails to meet the single test minimum trigger (70 percent survival), and the testing meets all TAC, the Discharger shall take two more samples, one within 14 days and one within 21 days following receipt of the initial sample result. If any one of the additional samples do not comply with the three-sample median minimum limitation (90 percent survival), the Discharger shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with section 5.4 of the MRP. If the two additional samples are in compliance with the acute toxicity requirement and testing meets all TAC, then a TRE will not be required.
- 5.1.10. **Reporting.** The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test (WET report). The WET report shall be prepared using the format and content of section 12 (Report Preparation) of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821-R-02-012, 5th edition or subsequent editions), including:
- 5.1.10.1. The toxicity test results in percent (%) survival for the 100 percent effluent sample.
- 5.1.10.2. The toxicity test results for the TST approach, reported as "Pass" or "Fail" and "Percent Effect" at the acute toxicity IWC for the discharge.
- 5.1.10.3. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- 5.1.10.4. TRE/Toxicity Identification Evaluation (TIE) results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.
- 5.1.10.5. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.
- 5.2. Chronic Toxicity Monitoring Requirements Monitoring Location EFF-001
- 5.2.1. Routine Chronic Toxicity Monitoring Frequency. The Discharger shall conduct at least one chronic aquatic toxicity test every calendar month during which there is expected to be at least 15 days of discharge. Initiation of the routine monitoring test shall be at a time that would allow any required Median Monthly Effluent Limitation (MMEL) compliance tests to be initiated within the same calendar month as the routine monitoring test.

For routine chronic toxicity monitoring, the Discharger shall conduct at least one chronic toxicity test using the most sensitive species each calendar month during which there is expected to be at least 15 days of discharge. For the purposes of chronic toxicity, the calendar month starts from the initiation of routine monitoring. The Discharger shall ensure there is sufficient time to perform the MMEL compliance testing within the defined calendar month, should the initial toxicity test result in a "Fail". If the Discharger is unable to sample within the calendar

month due to the availability of test organisms, contract laboratory scheduling issues, or some other reason outside of the Discharger's control, the Discharger shall immediately notify the Central Coast Water Board in writing. If the Central Coast Water Board agrees that the failure to sample within the calendar month was unavoidable, the Central Coast Water Board will specify an alternative sampling window for the monitoring period.

The Discharger may request to reduce the monitoring frequency from once per calendar month to once per calendar quarter if all of the following conditions are met: 1) the toxicity requirements in this permit have been followed; and 2) there were no violations of the MMEL or Maximum Daily Effluent Limitation (MDEL) for chronic toxicity within the last five years. If a chronic toxicity test results in a "Fail" at the IWC during reduced monitoring, the frequency is automatically increased back to once per month for a period of five years.

- 5.2.2. **Discharge In-stream Waste Concentration (IWC).** The IWC for this discharge is 100 percent effluent.
- 5.2.3. Most Sensitive Species. The test species used for chronic toxicity testing shall be the most sensitive species. To be consistent with Order No. R3-2014-003, the Discharger shall use the fathead minnow (*Pimephales promelas*) to conduct chronic toxicity testing from the effective date of this permit until the completion of the required chronic species sensitivity screening described in section 5.2.7 below. If the species sensitivity screening indicates that *Pimephales promelas* is not the most sensitive species, this permit may be reopened and modified to revise the most sensitive species. Reopening and modification is not required if the species sensitivity screening indicates that *Pimephales promelas* is the most sensitive species.

The Central Coast Water Board may allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Central Coast Water Board determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The "next appropriate species" is the species exhibiting the highest percent effect at the IWC tested in the last species sensitivity screening other than the most sensitive species.

- 5.2.4. **Sample Volume and Holding Time.** The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume of the effluent shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.
- 5.2.5. Chronic Freshwater Species and Test Methods. The Discharger shall conduct chronic toxicity tests on effluent samples at the discharge IWC for the discharge in accordance with species and test methods in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002; Table IA, 40 C.F.R. part 136). Approved

tests methods for chronic toxicity are listed in Table E-5 below. In no case shall these species be substituted with another test species unless written authorization from the Central Coast Water Board is received.

Species	Effect	Test Duration (days)	Test Method
Fathead Minnow (Pimephales promelas)	Larval Survival and Growth	7	Larval Survival and Growth Test Method 1000.0
Water Flea (Ceriodaphnia dubia)	Survival and Reproduction	6 to 8 days	Survival and Reproduction Test Method 1002.0
Green Alga (Selenastrum capricornutum)	Growth	4 days	Growth Test Method 1003.0

Table E-5. Approved Tests for Chronic Toxicity – Freshwater

- 5.2.6. Median Monthly Effluent Limitation (MMEL) Compliance Monitoring. If a chronic toxicity test conducted during routine monitoring results in a "Fail" at the IWC, the Discharger shall conduct a maximum of two chronic toxicity MMEL compliance tests. The MMEL compliance tests shall be initiated within the same calendar month that the first routine chronic toxicity test was initiated that resulted in a "Fail" at the IWC. If the first chronic toxicity MMEL compliance test results in a "Fail" at the IWC, then the second chronic toxicity MMEL compliance test is not required.
- 5.2.7. Chronic Species Sensitivity Screening. The Discharger shall conduct four species sensitivity screening tests within 18 months of the effective date of this permit and four species sensitivity screening tests within one year of submitting the ROWD for the Facility, with one set of screenings conducted in each quarter for four consecutive quarters. For each set of species sensitivity screenings, the Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, invertebrate, and alga species referenced in Table E-5 above. This sample shall also be analyzed for the parameter(s) required on a monthly and quarterly frequency in Table E-3, during that given month. As allowed under the test method for the Ceriodaphnia dubia and the Pimephales promelas, a second and third sample shall be collected for use as test solution renewal water as the seven-day toxicity test progresses. Samples for the species sensitivity screening shall be analyzed using the TST approach.

After the fourth set of species sensitivity screening, the species that exhibits the highest "Percent Effect" at the discharge IWC shall be used for routine monitoring during the permit term. If the percent effect is less than or equal to zero percent effect for each species, or all percent effect values are the same during the species sensitivity screening test, the Discharger shall either use the species that was most sensitive during the previous permit term for routine monitoring or

repeat the species sensitivity screening for all species to confirm the results of the first screening before selecting the most sensitive species to use for routine monitoring. If two consecutive species sensitivity screening tests demonstrate that the percent effect for all species exhibit less than or equal to zero percent, the Discharger may select the species to be used for routine monitoring during the permit term.

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the MDEL and MMEL for chronic toxicity.

- 5.2.8. **Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual referenced above. Additional requirements are specified below.
- 5.2.8.1. The discharge is subject to determination of "Pass" or "Fail" and "Percent (%) Effect" for chronic toxicity tests using the TST approach described in *National* Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1 and Appendix B, Table B-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response ≤ 0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". This is a t-test (formally Student's t-test), a statistical analysis comparing two sets of replicate observations in the case of WET, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail"). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances. The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response) × 100.
- 5.2.8.2. The MDEL for chronic toxicity is exceeded and a violation will be flagged when a toxicity test during routine monitoring results in "Fail" for the sub-lethal endpoint in accordance with the TST approach and the "Percent Effect" is greater than or equal to 50 percent for the survival endpoint or the sub-lethal endpoint if there is no survival endpoint.
- 5.2.8.3. The MMEL for chronic toxicity is exceeded and a violation will be flagged when two or more toxicity tests in a calendar month result in a "Fail" in accordance with the TST approach for any endpoint.
- 5.2.8.4. If the effluent toxicity test does not meet all TAC specified in the referenced test method, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002) then the Discharger must resample and re-test within 14 days.

- 5.2.8.5. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- 5.2.8.6. Monthly reference toxicant testing is sufficient if in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002). All reference toxicant test results should be reviewed and reported using the effects concentration at 25 percent (EC25).
- 5.2.8.7. The Discharger shall perform toxicity tests on final effluent samples. Chlorine in the final effluent sample may be removed prior to conducting toxicity tests in order to simulate the dechlorination process at the Facility. Ammonia, however, shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of this MRP and the rationale is explained in the Fact Sheet (Attachment F).
- 5.2.9. **Notification.** The Discharger shall notify the Central Coast Water Board of a violation of a toxicity MDEL or MMEL as soon as the Discharger learns of the violation, but no later than 24 hours of the Discharger receiving the monitoring results. The notification shall describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity.
- 5.2.10. **Routine Reporting.** The SMR shall include a full laboratory report for each chronic toxicity test. This report shall be prepared using the format and content of the test methods manual in section 10 of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, 2002), Report Preparation, and shall include:
- 5.2.10.1. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-10.
- 5.2.10.2. Summary water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- 5.2.10.3. The statistical analysis used in *National Pollutant Discharge Elimination*System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.
- 5.2.10.4. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.
- 5.2.10.5. Tabular data and graphical plots clearly showing the laboratory's performance for the reference toxicant for the previous 20 tests and the laboratory's performance for the control mean, control standard deviation, and control coefficient of variation for the previous 12-month period.

5.2.10.6. Any additional quality assurance/quality control (QA/QC) documentation or any additional chronic toxicity-related information, upon written request from the Central Coast Water Board.

## 5.3. Accelerated Monitoring Requirements

- 5.3.1. When acute toxicity is detected in the effluent, or when the chronic toxicity effluent limitation is exceeded during regular toxicity monitoring, and the testing meets all TAC, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
- 5.3.2. 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.
- 5.3.3. 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.
- 5.3.4. If none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal testing frequency.

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

- 5.4.1. A TIE shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
- 5.4.1.1. Two or more MDEL or MMEL violations within a single calendar month or within two successive calendar months.
- 5.4.1.2. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
- 5.4.1.3. 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.
- 5.4.2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the U.S. EPA, which include the following:
- 5.4.2.1. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (U.S. EPA, 1992a);
- 5.4.2.2. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (U.S. EPA, 1991a);
- 5.4.2.3. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (U.S. EPA, 1993a); and

- 5.4.2.4. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (U.S. EPA, 1993b).
- 5.4.3. As part of the TIE investigation, the Discharger shall be required to implement its TRE Work Plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result appropriate enforcement action. Recommended guidance in conducting a TRE includes the following:
- 5.4.3.1. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99/002; and
- 5.4.3.2. 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.
- 5.4.4. The Central Coast Water Board may also require the Discharger conduct a TRE if other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, intermittent recurring toxicity), or if there is no effluent available to complete routine monitoring, a MMET test or a MMEL Compliance Test.

## 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 described below:

Table E-6.	Recycled Water	Monitoring Re	equirements at	<b>EFF-002</b>

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[3]</sup>
Daily Flow	MGD	Metered	Continuous
Total Coliform	MPN/100 mL	Grab	1/Day
Turbidity <sup>[1]</sup>	NTU	Metered	Continuous
рН	standard units	Grab	1/Day
Total Chlorine Residual <sup>[2]</sup>	mg/L	Metered	Continuous

<sup>[1]</sup> Turbidity to be sampled immediately downstream of the membrane bioreactors.

<sup>[2]</sup> Total chlorine residual monitoring is only required when chlorine is used for disinfection and or cleaning/maintenance purposes. The Discharger shall specify with

- the monthly, quarterly, and annual SMRs if chlorination occurred during the monitoring period.
- [3] 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, RSW-002, RSW-003, RSW-004, RSW-005, RSW-006, RSW-007, and RSW-008
- 8.1.1. The Discharger shall monitor the receiving water at Monitoring Locations RSW-001, RSW-002, RSW-003, RSW-004, RSW-005, RSW-006, RSW-007, and RSW-008 as follows:

Table F-7 Receiving Water Monitoring Requirements

Table	L 7. Receiving	Water Monitorni	ig itequilement	IJ
			Sampling	
Parameter	Unite	Sample Type	Station	9

Parameter	Units	Sample Type	Sampling Station [1]	Minimum Sampling Frequency
Flow <sup>[2]</sup>	CFS	Instantaneous	4, 5, 7, 8	1/Month
Flow	MGD	Estimated	4, 5, 7, 8	1/Month
Turbidity <sup>[2]</sup>	NTU	Grab	4, 5,	1/Month
Color <sup>[2]</sup>	Color units	Grab	4, 5	1/Month

Parameter	Units	Sample Type	Sampling Station [1]	Minimum Sampling Frequency
pH <sup>[2][4]</sup>	standard units (s.u.)	Grab	4, 5, 7, 8	1/Month
Dissolved Oxygen	mg/L	Grab	4, 5, 7, 8	1/Month
Temperature <sup>[4]</sup>	°C	Grab	4, 5	1/Month
Un-ionized Ammonia (as N) <sup>[4]</sup>	mg/L	Calculated	4, 5	1/Month
Nitrate (as N)	mg/L	Grab	4, 5, 7, 8	1/Month
Dissolved Oxygen	mg/L	Grab	4, 5, 7, 8	1/Month
Total Phosphate (as P)	mg/L	Grab	5, 7, 8	1/Month
Ammonia, Total (as N)	mg/L	Grab	5, 7, 8	1/Month
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	5, 7, 8	1/Month
Total Dissolved Solids (TDS)	mg/L	Grab	4, 5, 7, 8	1/Month
Chloride	mg/L	Grab	4, 5, 7, 8	1/Month
Sulfate	mg/L	Grab	4, 5, 7, 8	1/Month
Sodium	mg/L	Grab	4, 5, 7, 8	1/Quarter
Boron	mg/L	Grab	4, 5, 7, 8	1/Quarter
Hardness, as CaCO₃	mg/L	Grab	4, 5, 7, 8	1/Quarter
Molybdenum	mg/L	Grab	4, 5, 7, 8	1/Year
Methylene Blue Activated Substances	mg/L	Grab	4, 5, 7, 8	1/Year
E. coli	MPN/100 mL	Grab	4, 5, 7, 8	1/Quarter
CTR Pollutants <sup>[5], [6]</sup>	μg/L	Grab	4, 5	1/Year
Title 22 Pollutants[7], [8]	μg/L	Grab	4, 5	1/Year

<sup>[1]</sup> Samples shall be obtained only when safe to do so.

The San Luis Obispo Creek flow rate shall be used to determine the upstream and downstream stations where these constituents shall be monitored as follows: If the creek flows underground between Monitoring Location RSW-002 and the discharge point, samples shall be obtained from Monitoring Locations RSW-002. If the creek flows aboveground from Monitoring Location RSW-002 to the discharge point, samples shall be obtained from Monitoring Location RSW-004. In either case, Monitoring Location RSW-005 shall be the downstream location.

<sup>[3]</sup> Sampling shall be concurrent with sampling of effluent for ammonia.

- [4] Temperature and pH are to be measured at the same time that the total ammonia sample is collected. Results shall be used to calculate and report un-ionized ammonia concentrations.
- 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.
- 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.

#### 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-8. Amount of Biosolids and Frequency of Analysis

Amount <sup>[1]</sup> (dry metric tons/365-day period)	Minimum Sampling Frequency <sup>[2]</sup>
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)

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

<sup>[1]</sup> 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).

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-9. Biosolids Monitoring Requirements** 

Parameter	Units	Sample Type	Minimum Sampling Frequency
Quantity Removed	Tons or yd <sup>3</sup>	Measured	During Removal
Location of Reuse/Disposal	General Public or Specific Site		
Moisture Content	Percent	Grab	Per Table E-8 (above)
pН	standard units	Grab	Per Table E-8 (above)
Total Kjeldahl Nitrogen	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Ammonia (as N)	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Nitrite (as N)	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Total Phosphorus	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Oil and Grease	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Arsenic	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Boron	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Cadmium	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Copper	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Chromium (Total)	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Lead	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Mercury	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Molybdenum	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Nickel	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)
Selenium	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)

Parameter	Units	Sample Type	Minimum Sampling Frequency
Zinc	mg/kg <sup>[1]</sup>	Grab	Per Table E-8 (above)

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. 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 in electronically using EPA's Central Data Exchange website at <a href="CDX Home">CDX Home</a> | Central Data Exchange | US EPA (cdx.epa.gov).

A PDF copy can be printed and sent to: 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

The previous Order required the Discharger to develop and implement an ongoing salts management plan dedicated to minimize the discharge of salts to and attainment of applicable water quality objectives (WQOs) for salts in San Luis Obispo Creek subbasin of the Estero Bay Drainage Basin. Additionally, the previous order required the Discharger to develop and implement a Nutrient Management Program, with the intent of reducing mass loading of nutrients in treated effluent and attainment of applicable WQOs for nutrients in the same basin. Based on the annual reports supplied by the Discharger, over the previous period of the Order, the Discharger has demonstrated that the effluent has contributed to exceedances of 2019 Basin Plan WQOs for salts. By February 1 of each year, the Discharger shall submit an annual report (separate from the NPDES 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.

## 9.5 Discharge to Evaporation Ponds

9.5.1. The Discharger shall provide written notification to the Central Coast Water Board when there is any discharge to or from the Facility's evaporation ponds, which are described in section 2.1 of the Fact Sheet. If the discharge is anticipated, the Discharger shall provide notice within 10 days prior to the anticipated discharge. If the discharge is unanticipated, the Discharger shall provide notice within 24 hours of the time the discharge occurs. Discharge from the evaporation ponds is not permitted in this Order, so standard provision 5.5 applies. The notification must include discharge dates, times, volumes, and reasons for discharge. The notification must be submitted electronically, consistent with standard provision 5.10.

#### 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 <a href="California Integrated Water Quality System">California Integrated Water Quality System</a> (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 through 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-10. 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, Weekly, Monthly	MRP Sections 3 (Influent), 4 (Effluent) and 5 (Whole Effluent Toxicity), 9.5	Monthly	First day of second calendar month following period of sampling
Updated Toxicity Reduction Evaluation Work Plan	Permit Section 6.3.2.1.1	Once	90 days following permit
NPDES Monitoring Report - Quarterly	MRP Sections 4 (Effluent) and 8.1 (Receiving Water)	Quarterly	May 1 <sup>st</sup> August 1 <sup>st</sup> November 1 <sup>st</sup> February 1 <sup>st</sup>
NPDES Monitoring Report – Annually	MRP Sections 4 (Effluent) and 8.1 (Receiving Water), 9.5	Annually	February 15 <sup>th</sup>
Recycled Water Monitoring Report	MRP Section 7.1 (Recycled Water Monitoring)	Annually	April 1 <sup>st</sup> , the year following
Recycled Water Volumetric Monitoring	MRP Section 9.4 (Volumetric Reporting of Wastewater and Recycled Water)	Annually	April 30 <sup>th</sup> , the year following sampling  Note: This report is submitted using

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequency	SMR Due Date
			the GeoTracker system, not CIWQS
Biosolids Monitoring Report	MRP Section 9.1 (Biosolids Monitoring)	Annually	February 19 <sup>th</sup> , the year following sampling
Pretreatment Report	MRP Section 9.2 (Pretreatment Monitoring)	Quarterly	May 1 <sup>st</sup> August 1 <sup>st</sup> November 1 <sup>st</sup> February 1 <sup>st</sup>
Pretreatment Report	MRP Section 9.2 (Pretreatment Monitoring)	Annually	February 15 <sup>th</sup> , the year following sampling
Summary Report	Attachment D, Standard Provision, 8.4.8 (page D-16)	Annually	February 15 <sup>th</sup> , the year following
Salt and Nutrient Management Plan Annual Report	MRP Section 9.3 (Salt and Nutrient Management Plan Reporting)	Annually	February 15 <sup>th</sup> , the following year
Pollutant Minimization Program Annual Report	Permit Section 6.3.3.2 (Pollutant Minimization Program)	Annually	February 15 <sup>th</sup> , the following year
Climate Change Implementation Progress Report	Permit Section 6.3.6.2 (Climate Change Adaptation Implementation Progress Report)	Every five years	May 1 <sup>st</sup> , every five years following permit effective 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 <a href="DMR website">DMR website</a> 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 <a href="http://geotracker.waterboards.ca.gov/">http://geotracker.waterboards.ca.gov/</a>. 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 <a href="http://www.waterboards.ca.gov/recycledwaterpolicy">http://www.waterboards.ca.gov/recycledwaterpolicy</a>.
- 10.4.3. Every five years, the Discharger shall submit a Climate Change Implementation Progress Report as specified in section 6.3.6.2 of this Order.

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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 400107001
Discharger	City of San Luis Obispo
Name of Facility	City of San Luis Obispo Water Resource Recovery Facility
Facility Address	35 Prado Road San Luis Obispo, CA 93401 San Luis Obispo County
Facility Contact, Title and Phone	Patrick McGrath, WRRF Supervisor 805-781-7240
Authorized Person to Sign and Submit Reports	Patrick McGrath, WRRF Supervisor 805-781-7240
Mailing Address	35 Prado Road, San Luis Obispo, CA 93401
Billing Address	35 Prado Road, San Luis Obispo, CA 93401
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	Production: NPDES R3-2024-0001 Distribution and Use: WQ 2016-0068, DDW Water Reclamation Requirements for Recycled Water
Facility Permitted Flow	5.4 million gallons per day (MGD)
Facility Design Flow	5.4 MGD
Watershed	Estero Bay Hydrologic Unit
Receiving Water	San Luis Obispo Creek
Receiving Water Type	Inland surface water

- 1.1. The City of San Luis Obispo (hereinafter Discharger or the City) is the owner and operator of the City of San Luis Obispo Water Resource Recovery Facility (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 Luis Obispo Creek, 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 R3-2014-0033 and National Pollutant Discharge Elimination System (NPDES) Permit CA0049224 adopted on September 25, 2014, and effective on December 1, 2014. The Discharger was also regulated by Time Schedule Order R3-2014-0036 and Time Schedule Order R3-2019-0124. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on May 28, 2019.
- 1.5. The Discharger was previously regulated by Waste Discharge Requirements and Master Reclamation Requirements Order R3-2003-081, which authorized the production, distribution, and use of recycled water.
- 1.6. Federal 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. R3-2014-0033, NPDES Permit No. CA0049224

was administratively continued after the original expiration date of November 30, 2019.

#### 2. FACILITY DESCRIPTION

## 2.1. Description of Wastewater and Biosolids Treatment and Controls

The City of San Luis Obispo Resource Recovery Facility is a municipal wastewater collection, treatment, and disposal facility that discharges tertiary treated wastewater to San Luis Obispo Creek. First constructed in 1920 and located at the southwest corner of the City of San Luis Obispo and adjacent to San Luis Obispo Creek, the Facility provides sewerage service to approximately 47,328 municipal and industrial users from the City of San Luis Obispo, California Polytechnic State University, San Luis Obispo, and the San Luis Obispo County Regional Airport. The City also administers an approved pretreatment program that includes seven significant industrial users, as defined in federal regulations. The Discharger currently operates a collection system that is composed of over 148 miles of main line and 9 lift stations. The design flow capacity of the Facility is 5.4 MGD. During storm events, the estimated wet weather influent flow to the facility is 11.1 MGD due to inflow and infiltration into the collection system from aging or broken/cracked pipes. Ongoing capital improvement projects for sewer line replacement, flow metering, and main line repairs will continue to address areas of concern that result in inflow and infiltration into the Facility.

The Discharger has been implementing a significant upgrade of the Facility's biological, disinfection, and biosolids units since 2019. A focus of the facility upgrade was to improve removal of chorine disinfection byproducts (trihalomethanes, or THMs) and nitrate to meet effluent limits of the previous permit. Another focus of the upgrade was to increase the facility's ability to treat high inflows from wet-weather events. Prior to the most recent upgrades, the facility's treatment process consisted of an equalization basin, mechanical screening, grit removal, primary settling, biofiltration, secondary settling, nitrification with two activated sludge aeration basins, final settling, cooling using evaporative cooling towers, dual media filtration, and chlorination/dechlorination.

During the upgrade, the discharger removed or abandoned the following components of the facility: bio filter and secondary clarifier, final clarifiers, tertiary dual media filtration, and chlorine disinfection and dechlorination. The two activated sludge basins were converted to Modified Ludzack-Ettinger (MLE) bioreactors for nutrient removal, the dissolved air floatation thickener (DAFT) was modified into a sludge blend tank, and a digester was modified into an odor control unit. The final upgraded treatment system currently consists of mechanical screening with washer compactor, aerated grit removal, primary settling, four MLE bioreactors, hollowfiber membranes, and UV disinfection. Although chlorination and dechlorination of the effluent and recycled water has been terminated due to the use of UV disinfection, the recycled water sent to the storage tank will be dosed with chlorine to maintain a chlorine residual in the recycled water distribution line per best practices of the distribution system. The Discharger may use sodium hypochlorite (chlorine) for

maintenance purposes such as membrane cleaning in the MLE unit when hydrogen peroxide and/or citric acid is insufficient. If chlorine is used for membrane cleaning, dechlorination of the effluent with sodium bisulfite may be necessary remove the chlorine residual to protect beneficial uses of San Luis Obispo Creek.

Biosolids were previously handled with a dissolved air floatation thickener (DAFT), three anaerobic digesters, a screw press, a belt filter press, and drying beds, with the final product shipped out for composting. The upgraded biosolids handling train now consists of a sludge blend tank, two rotary screw thickeners, two anaerobic digesters, a digested sludge storage tank, an odor control unit, a screw press, and a belt filter press, with the final product hauled for composting.

There are two lined evaporation ponds located at southwest corner of the Facility property. The Discharger has occasionally diverted wastewater to these ponds when it did not meet effluent limitations, rather than discharging the wastewater to the creek. This Order requires the Discharger to submit a written notification to the Central Coast Water Board when wastewater is sent to these ponds. This Order does not provide regulatory coverage for the discharge of wastewater from these ponds to land or surface water.

In recent years with large, prolonged storm events, these ponds have filled with stormwater from overland flow (not from the facility). This Order does not provide coverage of stormwater discharge from these ponds. As discussed further in section 3.5.1 of this Fact Sheet, the Discharger is enrolled in the Industrial General Permit (State Water Board Order 2014-0057-DWQ, NPDES General Permit CAS000001). The Discharger may incorporate these ponds into their Industrial General Permit enrollment to allow for the discharge of stormwater from the ponds, in compliance with all the requirements of the Industrial General Permit.

#### 2.2. Discharge Points and Receiving Waters

Tertiary treated wastewater is discharged from Discharge Point EFF-001 to San Luis Obispo Creek, a water of the United States, at latitude 35.244307° N and longitude 120.680618° W. Sampling location EFF-001A is located prior to discharge into the effluent pipeline that discharges to San Luis Obispo Creek. Sampling location EFF-001B is located at the most downstream end of the effluent pipeline that discharges to San Luis Obispo creek. The flowrate in San Luis Obispo Creek varies greatly between the wet and dry seasons. No dilution credit has been granted for this discharge.

Tertiary treated wastewater is discharged from Discharge Point EFF-002 to the Discharger's reclaimed water storage tank that is located just south of the UV disinfection system. The reclaimed water storage tank feeds the Discharger's reclaimed water distribution lines located throughout the city.

#### 2.3. Summary of Existing Requirements and Self Monitoring Report Data

Effluent limitations contained in Order R3-2014-0033 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from December 1, 2014, to December 1, 2022, are shown in Table F-2:

**Table F-2. Historic Effluent Limitations and Monitoring Data** 

Table F-2. Historic Effluent Limitations and Monitoring Data								
Parameter	Units	Averag e Monthl y Effluen t Limit	Averag e Weekly Effluen t Limit	Maximum Daily Effluent Limit	Highest Average Monthly Discharge Reported	Highest Average Weekly Discharge Reported	Highest Daily Discharge Reported	
Flow (dry weather)	MGD	5.1		8.0			12.9 <sup>[1]</sup>	
Biochemical Oxygen Demand 5- day @ 20°C (BOD <sub>5</sub> )	milligra ms per liter (mg/L)	10	30	50	8.84	14.3	12.6	
Biochemical Oxygen Demand 5- day @ 20°C (BOD <sub>5</sub> )	pounds per day (lbs/day )	425	1275	2125	382	382	382	
Biochemical Oxygen Demand 5- day @ 20°C (BOD <sub>5</sub> )	percent removal	≥85			91.6 – 100 <sup>[2]</sup>			
Total Suspended Solids (TSS)	mg/L	10	30	75	7.9	11	23.3	
Total Suspended Solids (TSS)	lbs/day	425	1275	3190	572	842	1556	
Total Suspended Solids (TSS)	percent removal	≥85			97.3-99.7 <sup>[2]</sup>			
Oil and Grease	mg/L	5		10	8		8	
Settleable Solids	milliliter per liter per hour (mL/L/h r)	0.1			<0.1			
рН	standar d units	6.5– 8.3 <sup>[3]</sup>			$6.5 - 7.88^{[4]}$			
Nitrate, Total (as N)	mg/L	10			51.7			
Chlorodibro momethane	μg/L	0.4		1.0	5		5	
Dichlorobro momethane	μg/L	0.56		1.0	22		22	
N- Nitrosodimet hylamine	μg/L	0.0006 9		0.0014	ND		ND	
Dissolved Oxygen	mg/L		4.0 <sup>[5]</sup>		4.8			

Chlorine Residual	mg/L			ND <sup>[6]</sup>			0.76
Chronic Toxicity	Toxic Units Chronic (TUc)			1.0			4.0
Fecal or Total Coliform Bacteria	Most probabl e number (MPN)/ 100 mL	[7]	[8]	[9]	79, 94 <sup>[10]</sup>	1.8	350

- [1] Reported as maximum daily. Flow occurred in February 2017 during a wet weather event.
- [2] The numbers represent the range of lowest to highest reported values.
- [3] Applied as an instantaneous minimum and maximum effluent limitation.
- [4] Representative values contain the lowest instantaneous minimum to the highest instantaneous maximum.
- [5] Applied as an instantaneous minimum effluent limitation.
- ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:
  - The total time during which to the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed.
- No more than one sample shall exceed 23 MPN/100 mL total coliform in any 30-day period.
- [8] The median number of fecal coliform organisms in the effluent shall not exceed 2.2 MPN/100 mL as determined by results of bacteriological analyses for the last 7 days for which analyses have been completed.
- [9] The maximum number of total coliform organisms in any sample shall not exceed 240 MPN/100 mL.
- [10] Values occurred within a 30-day time period.

## 2.4. Summary of Interim Effluent Limits and Time Schedule Orders

During the permit term for Order R3-2014-0036, the discharger could not immediately achieve compliance with the chlorodibromomethane, dichlorobromomethane, and nitrate effluent limitations. The Central Coast Water Board issued two time schedule orders (TSOs) to set interim effluent limits and compliance timelines: TSO R3-2014-0036 and TSO R3-2019-0124. TSO R3-2014-0036 set interim limits for the three aforementioned effluent limits with full compliance with effluent limits by November 30, 2019. With the planned upgrades to the Facility's biological and disinfection units, TSO R3-2019-0124 extended the deadlines to meet the interim effluent limits with a compliance deadline of March 31, 2020, for chlorodibromomethane and

dichlorobromomethane and a compliance deadline of July 31, 2023 for nitrate. Table F-3 summarizes the interim effluent limits that were established. The interim effluent limitations were established based on the Facility's performance. When operating under a TSO, if effluent concentrations exceed the final effluent limitation but do not exceed the interim effluent limitation, an effluent violation has not occurred, and mandatory minimum penalties do not apply. If effluent concentrations exceed both the final and interim effluent limitation values, then an effluent violation has occurred, and mandatory minimum penalties do apply.

ConstituentUnitsAverage MonthlyMaximum DailyChlorodibromomethane $\mu g/L$ -42Dichlorobromomethane $\mu g/L$ -36Nitrate (as Nitrogen)mg/L42.6-

Table F-3. TSO R3-2014-0036 Interim Effluent Limits

## 2.5. Compliance Summary

## 2.5.1 Effluent Compliance Summary

The following discussion is a summary of the violations that occurred during the term and administrative extension of Order No. R3-2014-0033. During the time period from December 1, 2014, to May 31, 2023, the Discharger incurred effluent violations related to nitrate, oil and grease, total coliform, chlorine residual, dichlorobromomethane, and chlorodibromomethane. The number of violations, violation type, and reported value range are provided in Table F-4.

Table F-4. Compliance Summary from December 1, 2014 through May 31, 2023

Constituent	Monitoring Period	Violation Type	Number of Violations	Reported Value Range	Permit Limitation	Units
Nitrate (Total as N)	December 2016- November 2022	Monthly Average (Mean) Limit	9	43.2-51.7	10	mg/L
Oil and Grease	March 2017	Monthly Average Limit	1	6	5	mg/L

Constituent	Monitoring Period	Violation Type	Number of Violations	Reported Value Range	Permit Limitation	Units
Total Coliform	July 2018- October 2020	30-Day Specific Limit	3	33-1600	23	MPN/ 100m L
Total Coliform	December 2019- October 2020	Daily Maximum	3	540-1600	240	MPN/ 100m L
Residual Chlorine	February 2020- December 2022	Daily Maximum	2	0.35-0.75	ND	mg/L
Dichlorobro momethane	April 2020- October 2022	Monthly Average Limit	4	2.5-17.8	0.56	μg/L
Dichlorobro momethane	April 2020- October 2022	Daily Maximum	4	2.5-17.8	1	μg/L
Chlorodibro momethane (Dibromochl oromethane)	April 2020- October 2022	Monthly Average Limit	3	1.2-5	0.40	μg/L
Chlorodibro momethane (Dibromochl oromethane)	April 2020- October 2022	Daily Maximum	3	1.2-5	1	μg/L

## 2.6. Planned Changes

The Discharger will continue to implement planned upgrades through 2024. The Discharger has not indicated it plans any significant changes to the Facility beyond those 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 an existing facility is exempt from the California Environmental Quality Act (CEQA) provisions in Public Resources Code, division 13, chapter 3 (commencing with section 21100). 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 the *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 2019 Basin Plan for San Luis Obispo Creek (below W. Marsh Street) are presented below:

San Luis Obispo Creek

(below W. Marsh Street)

001

Cold Freshwater Habitat (COLD):

Development (SPWN);

Intermittent: None. Potential: None.

Warm Freshwater Habitat (WARM);

Fresh Water Replenishment (FRSH) Commercial and Sport Fishing (COMM).

Migration of Aquatic Organisms (MIGR) Spawning, Reproduction, and/or Early

 Discharge Point
 Receiving Water Name
 Beneficial Use(s)

 Existing: 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);

Table F-5. Basin Plan Beneficial Uses

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 apply 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 *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.
- 3.3.6 Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan). The ISWEBE Plan includes several parts and sections that have been adopted by the State Water Board over time. The applicable parts and sections are discussed below.

On May 2, 2017, the State Water Board adopted and ISWEBE Plan Part 2: *Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*. With ISWEBE Plan 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 ISWEBE Plan Part 2 are to be implemented through NPDES permits and WDRs, among other actions the Regional Water Boards may take.

On August 7, 2018, the State Water Board adopted ISWEBE Plan Part 3: Bacteria Provisions and a Water Quality Standards Variance Policy, which establishes 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). The provisions of ISWEBE Plan Part 2 are to be implemented through NPDES permits and WDRs, among other actions the Regional Water Boards may take.

On December 1, 2020, the State Water Board adopted the Aquatic Toxicity Provisions, which are incorporated into the ISWEBE Plan. On October 5, 2021, the State Water Board adopted a resolution to confirm that the Aquatic Toxicity Provisions were adopted as state policy for water quality control for all inland surface waters, enclosed bays, estuaries, and coastal lagoons of the state. The provisions were approved by the California Office of Administrative Law on April 25, 2022 and were approved by the U.S. EPA on May 1, 2023. The provisions include statewide numeric water quality objectives for both acute and chronic toxicity and a program of implementation to control toxicity. The provisions provide consistent protection of aquatic life beneficial uses in inland surface waters, enclosed bays, estuaries, and coastal lagoons throughout the state from the effects of known and unknown toxicants.

- This Order is consistent with the ISWEBE Plan and includes effluent limitations for mercury, bacteria, and chronic toxicity.
- 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 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 by 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 acts.
- 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 specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources.

The U.S. EPA approved the State's 2020-2022 303(d) list of impaired water bodies on May 11, 2022. The 2020-2022 303(d) list identifies San Luis Obispo Creek, below Osos Street, as impaired for chloride, sodium, benthic community effects, *Escherichia coli* (*E. coli*), dissolved oxygen, nitrate, and toxicity. A TMDL for nitrate was adopted for San Luis Obispo Creek below West Marsh Street. Effluent limitations for nitrate in this Permit are based on Central Coast Water Board Resolution R3-2005-0106 (TMDL for nitrate). A TMDL for pathogens was adopted for San Luis Obispo Creek (R3-2004-0142) but the Facility was not identified as a source and was not assigned a wasteload allocation. However, the Discharger is implementing a Wasteload Allocation Attainment Plan (WAAP) to address pathogens from the sources identified in the TMDL.

## 3.5. Other Plans, Polices and Regulations

- 3.5.1. State Water Board Order 2014-0057-DWQ, NPDES General Permit CAS000001, Waste Discharge Requirements for Stormwater Associated with Industrial Activities Excluding Construction Activities (Industrial General Permit). The Industrial General Permit, 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 the Industrial General Order is to regulate stormwater discharges associated with industrial activities. For the control of stormwater discharged from the Facility, the Discharger has enrolled in and is regulated by the Industrial General Permit.
- 3.5.2. State Water Board Order. 2022-0103-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. State Water Board Order No. 2022-0103-DWQ, adopted on December 6, 2022, 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 Water Quality Order 2022-0103-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 is enrolled in Water Quality Order 2022-0103-DWQ and must comply with its requirements and any requirements in reissuances to Water Quality Order 2022-0103-DWQ.

- 3.5.3. **State Water Board Recycled Water Policy.** The State Water Board adopted the *Quality Control Policy for Recycled Water* (Recycled Water Policy) on December 11, 2018, and it 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 WQ 2016-0068-DDW, or other applicable permit, dependent on final use.
- 3.5.5 Environmental Justice and Advancing Racial Equity. When issuing or reissuing individual waste discharge requirements or waivers of waste discharge requirements that regulate an activity or a facility that may impact a disadvantaged or tribal community, and that includes a time schedule in accordance with subdivision (c) of Section 13263 for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance, the Central Coast Water Board shall make a finding on potential environmental justice, tribal impact, and racial equity considerations. (Water Code § 13149.2, effective Jan. 1, 2023). Water Code section 189.7 requires the Central Coast Water Board to conduct outreach in disadvantaged and/or tribal communities when adopting individual waste discharge requirements. In accordance with the Water Boards' efforts to advance racial equity, the Central Coast Water Board is also committed to developing and implementing policies and programs to advance racial equity and environmental justice so that race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

Upon review of readily available information, the Central Coast Water Board finds that this Order regulates a discharge that does not disproportionately impact the water quality of an economically disadvantaged community or a tribal community. Similarly, this Order does not include a time schedule, alternative compliance path, or variance. Therefore, Water Code section 13149.2 does not apply to this permit reissuance. Nevertheless, the Central Coast Water Board has conducted outreach consistent with Water Code section 189.7 by reaching out to surrounding communities and tribal communities about this Order. Additionally, the Board has considered any environmental justice concerns within the Board's authority, in accordance with the Water Boards' efforts to advance racial equity. The Order

requires the Permittee to meet water quality standards to protect public health and the environment, thereby benefiting all persons and communities within the Region.

## 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 receiving waters. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to exceedances of water quality standards described at 40 C.F.R. section 122.44 (d), then 1) water quality based effluent limitations (WQBELS) may be established using a calculated water quality criterion derived from a proposed state criterion or an explicit State policy or regulation interpreting its narrative criterion, 2) WQBELs may be established on a case-by-case basis using U.S. EPA criteria guidance published under CWA Section 304 (a), or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

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

#### 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. (Discharge of any waste not specifically regulated by this Order is prohibited). Because limitations and conditions of the Order are 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.
- 4.1.3. Discharge Prohibition 3.3. (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 that poses a threat to human health and/or aquatic life, and, therefore, is explicitly prohibited by this 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 to waterbodies be accomplished in a manner that safeguards public health and prevents nuisance conditions.
- 4.1.5. Discharge Prohibition 3.5. (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 consistent with the requirements of the Basin Plan.
- 4.1.6. **Discharge Prohibition 3.6.** (**Discharge of radioactive substances is prohibited**). This prohibition is consistent with the requirements of the Basin Plan.
- 4.1.7. Discharge Prohibition 3.7. (Monthly average dry weather effluent flow shall not exceed 5.4 million gallons per day (MGD), aggregated at Discharge Point 001). 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.

## 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. § 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Where the USEPA has not yet developed technology-based standards for a particular industry or a particular pollutant, CWA Section 402 (a) (1) and USEPA regulations at 40 C.F.R. § 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 C.F.R. § 125.3. Regulations promulgated in 40 C.F.R. § 125.3(a)(1) require technology-based effluent limitations for municipal dischargers to be placed in NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards. The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in section 304(d)(1)]. Section 301(b)(1)(B) of that act requires

that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the U.S. EPA Administrator. Based on this statutory requirement, U.S. EPA developed secondary treatment regulations, which are specified in 40 C.F.R. part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD5), total suspended solids (TSS), and pH. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 C.F.R. part 133, summarized below:

	<del>-</del>	_	
Parameter	Units	30-Day Average	7-Day Average
BOD <sub>5</sub> [1]	mg/L	30	45
TSS <sup>[1]</sup>	mg/L	30	45
nH	standard units	6 O <sup>[2]</sup>	9 O[3]

**Table F-6. Secondary Treatment Requirements** 

## 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-7. Technology-Based Effluent Limitations – Discharge Point 001

Parameter	Units	30-Day Average	7-Day Average	Maximum Daily
BOD <sub>5</sub> [1]	mg/L	10	30	50
BOD <sub>5</sub>	lbs/day <sup>[2]</sup>	450	1,351	2,252
Total Suspended Solids (TSS) <sup>[1]</sup>	mg/L	10	30	75
TSS	lbs/day <sup>[2]</sup>	450	1,351	3,378

The average monthly percent removal of BOD<sub>5</sub> and TSS, as measured at Monitoring Location EFF-001, shall not be less than 85 percent.

The 30-day average percent removal shall not be less than 85 percent.

<sup>[2]</sup> Instantaneous minimum value.

<sup>[3]</sup> Instantaneous maximum value.

- Mass loading limits were calculated using the following formulas: lbs/day = pollutant concentration (mg/L) \* permitted flow (5.4 MGD) \* conversion factor (8.34)
- [3] Instantaneous minimum value.
- [4] Instantaneous maximum value.

4.2.2.1.1. **BOD**<sup>5</sup> and **TSS.** BOD and TSS. Federal regulations, 40 C.F.R. part 133, establish the minimum weekly and monthly average level of effluent quality attainable by secondary treatment for BOD5 and TSS. The Central Coast Water Board has determined that tertiary treatment is necessary to protect the beneficial uses of the receiving stream, thus the final effluent limitations for BOD5 and TSS are based on the technical capability of the tertiary process. The secondary and tertiary treatment standards for BOD5 and TSS are indicators of the effectiveness of the treatment processes. The principal design parameter for wastewater treatment plants is the daily BOD5 and TSS loading rates and the corresponding removal rate of the system. In applying 40 C.F.R. part 133 for weekly and monthly average BOD5 and TSS limitations, the application of tertiary treatment processes results in the ability to achieve lower levels for BOD5 and TSS than the secondary standards currently prescribed; the 30-day average BOD5 and TSS limitations are 10 mg/L, the 7-day average BOD5 and TSS limitations are 30 mg/L. These effluent limitations are based on the capability of a tertiary system. In addition to the average weekly and average monthly effluent limitations, daily maximum effluent limitation of 50 mg/L and 75 mg/L for BOD5 and TSS, respectively, are included in the Order to ensure that the treatment works are not organically overloaded and operate in accordance with design capabilities. In addition, 40 C.F.R. § 133.102, in describing the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. If 85 percent removal of BOD5 and TSS must be achieved by a secondary treatment plant, it must also be achieved by a tertiary (i.e., treatment beyond secondary level) treatment plant. This Order contains a limitation requiring an average of 85 percent removal of BOD5 and TSS over each calendar month. These effluent limitations are carried over from Order R3-2014-0033.

## 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 to 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 2019 Basin Plan for San Luis Obispo Creek and they 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 2019 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, the statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above State water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants which show reasonable potential.

The SIP Section 1.3 requires the Central Coast Water Board to use all available valid, relevant, and representative receiving water and effluent data and information to conduct a reasonable potential analysis (RPA). The Central Coast Water Board analyzed the Discharger's data for priority pollutants and the nature of the discharge to determine if the discharge has reasonable potential to exceed water quality standards. The RPA is based on effluent data retrieved from CIWQS from the period of December 2014 to December 2022.

Some freshwater water quality criteria for metals are hardness dependent, i.e., as hardness decreases, the toxicity of certain metals increases, and the applicable water quality criteria become correspondingly more stringent. The Discharger has not specifically collected hardness data for the receiving water. However, the Central Coast Water Board's Central Coast Ambient Monitoring Program has nearby monitoring stations on San Luis Obispo Creek that has collected this information. The Water Board used 330 mg/L as CaCO<sub>3</sub> as a conservative estimate of the receiving water hardness to determine hardness-based criteria.

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 2019 Basin Plan. The Discharger did not collect background data (B) for receiving water. 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, pursuant to State Water Board Resolution 2017-0027, 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 (Mercury Provisions).

- 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 Luis Obispo Creek, the applicable water column concentration is 0.012 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 0.012 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 0.03 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. This Discharger did not sample for and does not have ambient background concentration data for mercury.

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 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 greater than C and there was no B data available. Therefore, according to Part 2 of the SIP, a 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, title 22, or Basin Plan pollutant for which data was available from December 2014 through December 2022 and sets forth the basis upon which WQBELs are included in this Order.

Table F-8. Summary of RPA Results

	Table 1 -0. Dallillary of Rt A Results									
CTR#	Parameter	Units	N <sup>[1]</sup>	$MEC^{[2]}$	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>		
			Prior	ity Pollutan	ts					
1	Antimony, Total Recoverable	μg/L	9	2.5	6	-	No	Primary MCL		
2	Arsenic, Total Recoverable	μg/L	9	<2.0	10	-	No	Primary MCL		
3	Beryllium	μg/L	9	<0.2	4	-	No	Primary MCL		
4	Cadmium, Total Recoverable	μg/L	9	<0.2	3	-	No	CA Prim. MCL		
5a	Chromium (III)	μg/L	7	7.0	50	-	No	CA Prim. MCL for Chromium (Total)		
5b	Chromium (VI)	μg/L	8	1.1	11	-	No	CTR - Chronic		
6	Copper, Total Recoverable	μg/L	9	24	26	-	No	CTR - Chronic		
7	Lead, Total Recoverable	μg/L	8	6.3	15	-	No	CA Prim. MCL		
8	Mercury, Total Recoverable	μg/L	9	0.03	0.012	-	Yes	Mercury Provisions		
9	Nickel, Total Recoverable	μg/L	9	7.0	100	-	No	CA Prim. MCL		
10	Selenium, Total Recoverable	μg/L	9	1.0	5	-	No	CTR - Chronic		

CTR#	Parameter	Units	[1]N	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
11	Silver, Total Recoverable	μg/L	8	<0.25	31.6	-	No	CTR - Acute
12	Thallium, Total Recoverable	μg/L	9	<0.2	1.7	-	No	CTR
13	Zinc, Total Recoverable	μg/L	9	100	330	-	No	CTR
14	Cyanide, Total (as CN)	μg/L	9	<4.0	5.2	-	No	CTR
15	Asbestos	Million Fibers/L	9	<0.2	7	ı	No	CTR
16	2,3,7,8 TCDD	μg/L	9	<0.00000 0251	0.00000001 3	ı	Ud	CTR
17	Acrolein	μg/L	8	<5.0	320	1	No	CTR
18	Acrylonitrile	μg/L	8	<2.0	0.059	ı	Ud	CTR
19	Benzene	μg/L	9	<0.5	1	ı	No	CA Prim. MCL
20	Bromoform	μg/L	73	1.1	4.3	-	No	CTR
21	Carbon Tetrachloride	μg/L	9	<0.5	0.25	ı	Ud	CTR
22	Chlorobenzene	μg/L	9	<0.5	70	ı	No	CA Prim. MCL
23	Chlorodibromomethane (aka Dibromochloromethane)	μg/L	73	5.4	0.401	-	Yes	CTR
24	Chloroethane	μg/L	8	<0.5	No Criteria	-	Uc	No criteria
25	2-Chloroethylvinyl ether	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
26	Chloroform	μg/L	8	95.7	60	ı	Yes	NAWQC
27	Dichlorobromomethane	μg/L	73	24.8	0.56	ı	Yes	CTR
28	1,1-Dichloroethane	μg/L	9	<0.5	5	ı	No	Primary MCL
29	1,2-Dichloroethane	μg/L	9	<0.5	0.38	ı	Ud	CTR
30	1,1-Dichloroethylene	μg/L	9	<0.5	0.057	ı	No	CTR
31	1,2-Dichloropropane	μg/L	9	<0.5	0.52	-	No	CTR
32	1,3-Dichloropropylene	μg/L	1	<0.5	0.5	-	No	CA Prim. MCL
33	Ethylbenzene	μg/L	9	<0.5	300	-	No	CA Prim. MCL
34	Methyl Bromide (aka Bromomethane)	μg/L	8	<0.5	48	ı	No	CTR
35	Methyl Chloride (aka chloromethane)	μg/L	8	<0.5	No Criteria	-	Uc	No criteria
36	Methylene Chloride	μg/L	9	15	4.7	1	Yes	CTR

CTR#	Parameter	Units	[ <sup>1</sup> ]N	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
37	1,1,2,2-Tetrachloroethane	μg/L	9	<0.5	0.17	-	Ud	CTR
	Tetrachloroethylene (aka Tetrachloroethene)	μg/L	7	<0.5	0.8	-	No	CTR
39	Toluene	μg/L	9	<0.5	150	ı	No	CA Prim. MCL
40	1,2-Trans-Dichloroethylene	μg/L	7	<0.005	10	-	No	CA Prim. MCL
41	1,1,1-Trichloroethane	μg/L	9	<0.5	200	-	No	CA Prim. MCL
42	1,1,2-Trichloroethane	μg/L	9	<0.5	0.6	-	No	CTR
43	Trichloroethylene (aka Trichloroethene)	μg/L	7	<0.5	2.7	-	No	CTR
44	Vinyl Chloride	μg/L	9	<0.5	0.5	-	No	CA Prim. MCL
45	2-Chlorophenol	μg/L	8	<2.0	120	-	No	CTR
46	2,4-Dichlorophenol	μg/L	8	<2.0	93	-	No	CTR
47	2,4-Dimethylphenol	μg/L	8	<1.0	540	-	No	CTR
48	4,6-dinitro-o-resol (aka 2-methyl-4,6- Dinitrophenol aka 4,6-Dinitro-2- methylphenol)	μg/L	7	<1.0	13.4	-	No	CTR
49	2,4-Dinitrophenol	μg/L	8	<5.0	70	-	No	CTR
50	2-Nitrophenol	μg/L	8	<1.0	No Criteria	ı	Uc	No criteria
51	4-Nitrophenol	μg/L	8	<1.0	No Criteria	ı	Uc	No criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol aka 4-Chloro-3- methylphenol)	µg/L	8	<1.0	No Criteria	-	Uc	No criteria
53	Pentachlorophenol	μg/L	34	2	0.28	-	Yes	CTR
54	Phenol, Single Compound	μg/L	1	<1.0	1	-	No	BP
55	2,4,6-Trichlorophenol	μg/L	8	<1.0	2.1	ı	No	CTR
56	Acenaphthene	μg/L	8	<1.0	1200	ı	No	CTR
57	Acenaphthylene	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
58	Anthracene	μg/L	8	<1.0	9600	•	No	CTR

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CTR#	Parameter	Units	<b>N</b> [1]	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
59	Benzidine	μg/L	8	<1.0	0.00012	-	Ud	CTR
60	Benzo(a)Anthracene	μg/L	8	<1.0	0.0044	-	Ud	CTR
61	Benzo(a)Pyrene	μg/L	9	<0.1	0.0044	-	Ud	CTR
62	Benzo(b)Fluoranthene	μg/L	8	<1.0	0.0044	-	Ud	CTR
63	Benzo(ghi)Perylene	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
64	Benzo(k)Fluoranthene	μg/L	8	<1.0	0.0044	-	Ud	CTR
65	Bis(2- Chloroethoxy)Methane	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
66	Bis(2-Chloroethyl)Ether	μg/L	8	<1.0	0.031	-	Ud	CTR
67	Bis(2-Chloroisopropyl)Ether	μg/L	8	<1.0	1400	-	No	CTR
68	Bis(2-Ethylhexyl) Phthalate (aka Di(2-ethylhexyl) Phthalate)	μg/L	9	<2.0	1.8	-	Ud	CTR
69	4-Bromophenyl Phenyl Ether	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
70	Butylbenzyl Phthalate	μg/L	8	<1.0	3000	-	No	CTR
71	2-Chloronaphthalene	μg/L	8	<1.0	1700	-	No	CTR
72	4-Chlorophenyl Phenyl Ether	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
73	Chrysene	μg/L	8	<1.0	0.0044	-	Ud	CTR
74	Dibenzo(a,h)Anthracene	μg/L	8	<1.0	0.0044	-	Ud	CTR
75	1,2-Dichlorobenzene	μg/L	10	<0.5	600	-	No	CA Prim. MCL
76	1,3-Dichlorobenzene	μg/L	9	<0.5	400	-	No	CTR
77	1,4-Dichlorobenzene	μg/L	10	<0.5	5	-	No	CA Prim. MCL
78	3,3 Dichlorobenzidine	μg/L	8	<1.0	0.04	-	Ud	CTR
79	Diethyl Phthalate	μg/L	8	<1.0	23000	-	Ud	CTR
80	Dimethyl Phthalate	μg/L	8	<1.0	313000	-	No	CTR
81	Di-n-Butyl Phthalate	μg/L	8	<1.0	2700	-	No	CTR
82	2,4-Dinitrotoluene	μg/L	8	<1.0	0.11	-	Ud	CTR
83	2,6-Dinitrotoluene	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
84	Di-n-Octyl Phthalate	μg/L	8	<1.0	No Criteria	-	Uc	No criteria

CTR#	Parameter	Units	[t] <b>N</b>	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
85	1,2-Diphenylhydrazine	μg/L	8	<1.0	0.04	-	Ud	CTR
86	Fluoranthene	μg/L	8	<1.0	300	-	No	CTR
87	Fluorene	μg/L	8	<1.0	1300	-	No	CTR
88	Hexachlorobenzene	μg/L	8	<1.0	0.00075	-	Ud	CTR
89	Hexachlorobutadiene	μg/L	8	<1.0	0.44	-	Ud	CTR
90	Hexachlorocyclopentadiene	μg/L	8	<1.0	50	-	No	CA Prim. MCL
91	Hexachloroethane	μg/L	8	<1.0	1.9	-	No	CTR
92	Indeno(1,2,3-cd)Pyrene	μg/L	8	<1.0	0.0044	-	Ud	CTR
93	Isophorone	μg/L	8	<1.0	8.4	-	No	CTR
94	Naphthalene	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
95	Nitrobenzene	μg/L	8	<1.0	17	-	No	CTR
96	N-Nitrosodimethylamine	μg/L	35	<0.001	0.00069	-	No	CTR
97	N-Nitrosodi-n-Propylamine	μg/L	8	<1.0	0.005	-	Ud	CTR
98	N-Nitrosodiphenylamine	μg/L	8	<1.0	5	-	No	CTR
99	Phenanthrene	μg/L	8	<1.0	No Criteria	-	Uc	No criteria
100	Pyrene	μg/L	8	<1.0	960	-	No	CTR
101	1,2,4-Trichlorobenzene	μg/L	9	<0.5	5	-	No	CA Prim. MCL
102	Aldrin	μg/L	9	<0.005	0.00013	-	Ud	CTR
103	alpha-BHC	μg/L	8	<0.005	0.0039	-	Ud	CTR
104	beta-BHC	μg/L	8	<0.005	0.014	-	No	CTR
105	gamma-BHC	μg/L	10	<0.005	0.019	-	No	CTR
106	delta-BHC	μg/L	8	<0.005	No Criteria	-	Uc	No criteria
107	Chlordane	μg/L	9	<0.047	0.00057	-	Ud	CTR
108	4,4'-DDT	μg/L	8	<0.005	0.00059	-	Ud	CTR
109	4,4'-DDE	μg/L	8	<0.005	0.00059	-	Ud	CTR
110	4,4'-DDD	μg/L	8	<0.005	0.00083	-	Ud	CTR
111	Dieldrin	μg/L	9	<0.005	0.00014	-	Ud	CTR
112	alpha-Endosulfan	μg/L	8	<0.005	0.056	-	No	CTR
113	beta-Endolsulfan	μg/L	8	<0.005	0.056	-	No	CTR
114	Endosulfan Sulfate	μg/L	8	<0.005	110	-	No	CTR
115	Endrin	μg/L	10	<0.005	0.036	-	No	CTR

CTR#	Parameter	Units	N <sup>[1]</sup>	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
116	Endrin Aldehyde	μg/L	7	<0.005	0.76	-	No	CTR
117	Heptachlor	μg/L	10	<0.005	0.00021	-	Ud	CTR
118	Heptachlor Epoxide	μg/L	10	<0.005	0.00011	-	Ud	CTR
119- 125	PCBs sum	μg/L	2	<0.5	0.00017	-	Ud	CTR
126	Toxaphene	μg/L	9	<0.24	0.0002	-	Ud	CTR
		N	Ion-Pri	ority Pollut	ants			
	Drinking Water Quality Obje	ectives						
	Aluminum	μg/L	9	150	200	-	No	CA Sec. MCL
	Barium	μg/L	9	42.9	1000	-	No	CA Prim. MCL
	Fluoride	mg/L	9	0.7	1	-	No	BP
	Nitrate, Total (as N)	mg/L	151	51.7	10	8.1	Yes	EPA Prim. MCL
	Nitrate + Nitrite (as N)	mg/L	7	43.4	10	-	Yes	CA Prim. MCL
	Nitrite, Total (as N)	mg/L	106	5.1	1	<0.1	Yes	CA Prim. MCL
	Methyl-tert-butyl ether	μg/L	9	<1.0	5	-	No	CA Sec. MCL
	Styrene	μg/L	9	<0.5	100	-	No	CA Prim. MCL
	Alachlor	μg/L	9	<0.1	2	-	No	CA Prim. MCL
	Atrazine	μg/L	9	<0.1	1	-	No	CA Prim. MCL
	Bentazon	μg/L	9	<2.0	18	-	No	CA Prim. MCL
	Carbofuran	μg/L	9	<5.0	18	-	No	CA Prim. MCL
	2,4-D	μg/L	9	5	70	-	No	CA Prim. MCL
	Dalapon	μg/L	9	<10.0	200	-	No	CA Prim. MCL
	Dibromochloropropane (aka 1,2-Dibromo-3- Chloropropane)	μg/L	8	<0.01	0.2	-	No	CA Prim. MCL
	Di(2-ethylhexyl)adipate	μg/L	9	<5.0	400	-	No	CA Prim. MCL
	Dinoseb	μg/L	9	<1.0	7	-	No	CA Prim. MCL
	Diquat	μg/L	9	<2.0	20	-	No	CA Prim. MCL
	Endothall	μg/L	9	<40	100	-	No	CA Prim. MCL
	Ethylene Dibromide (aka 1,2-Dibromoethane)	μg/L	8	<0.02	0.05	-	No	CA Prim. MCL

CTR#	Parameter	Units	N <sup>[1]</sup>	MEC <sup>[2]</sup>	Most Stringent Criteria	Background	RPA Result <sup>[3]</sup>	Basis <sup>[4]</sup>
	Glyphosate	μg/L	9	<20.0	700	-	No	CA Prim. MCL
	Methoxychlor	μg/L	10	<0.1	30	-	No	CA Prim. MCL
	Molinate	μg/L	9	<0.1	20	-	No	CA Prim. MCL
	Oxamyl	μg/L	9	<5.0	50	-	No	CA Prim. MCL
	Picloram	μg/L	9	<1.0	500	-	No	CA Prim. MCL
	Simazine	μg/L	9	<0.1	4	-	No	CA Prim. MCL
	Thiobencarb	μg/L	9	<0.1	70	-	No	CA Prim. MCL
	2,4,5-TP (Silvex)	μg/L	9	<1.0	50	-	No	CA Prim. MCL
	Trichlorofluoromethane	μg/L	9	<0.5	150	-	No	CA Prim. MCL
	1,1,2-Trichloro-1,2,2- Trifluoroethane	μg/L	3	<0.5	1200	-	No	CA Prim. MCL
	Xylenes	μg/L	9	<0.5	1750	-	No	CA Prim. MCL
	Methylene blue activated substances (MBAS)	μg/L	8	800	200	-	Yes	BP
	Un-ionized Ammonia (as N)	mg/L	[5]	[5]	0.025	-	Yes <sup>[5]</sup>	BP
	Board 3 Basin Plan Water C	Quality Ob	jectiv	es for Agric	ultural Water I	Jse		
	Boron, Total	μg/L	7	260	750	-	No	BP
	Cobalt, Total	μg/L	7	4.0	50	-	No	BP
	Iron, Total	μg/L	8	520	5000	-	No	BP
	Lithium, Total	μg/L	7	14	2500 <sup>d</sup>	-	No	BP
	Manganese, Total	μg/L	8	42.8	200	-	No	BP
	Molybdenum, Total	μg/L	7	17	10	-	Yes	BP
	Vanadium, Total	μg/L	7	5	100	-	No	BP
	San Luis Obispo Creek Sub	-Area Sui	face V	Nater Quali	ty Objectives			
	Total Dissolved Solids	mg/L	38	990	650	470- 750 <sup>[6]</sup>	Yes	BP
	Chloride	mg/L	39	209	100	31- 92 <sup>[6]</sup>	Yes	BP
	Sulfate, Total, (as SO <sub>4</sub> )	mg/L	6	142	100	-	Yes	BP
	Sodium	mg/L	35	181	50	29- 72 <sup>[6]</sup>	Yes	ВР

<sup>[1]</sup> Number of data points available for the RPA.

<sup>[2]</sup> 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;
  - = (Uc) Undetermined, if no criteria have been promulgated;
  - = (Ud) Undetermined, for lack of data. As described in section 1.3 in the SIP, if monitoring results show non-detect for all samples of a pollutant and if all reported detection limits of the pollutant in the effluent are greater than or equal to the C value, the RWQCB shall require additional monitoring for the pollutant in place of a water quality-based effluent limitation. For pollutants with a result of Ud, additional monitoring is established through this permit.
- [4] Basis of Most Stringent Criteria

CTR - California Toxics Rule'

CA Prim. MCL - California Primary MCL

CA Sec. MCL - California Secondary MCL

EPA Prim. MCL - EPA Primary MCL

EPA Sec. MCL - EPA Secondary MCL

NAWQC - National Ambient Water Quality Criteria

BP - Central Coast Regional Board 2019 Basin Plan

SWRCB 2017-0027 - 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.

- The reasonable potential for the effluent to exceed the 2019 Basin Plan water quality objective for San Luis Obispo Creek for un-ionized ammonia is based on 93 concurrent upstream (RSW-004) and downstream (RSW-005) monitoring data results from December 2014 through April 2020.
- Range of measured values. The 2019 Basin Plan Water Quality Objective for this pollutant is an annual mean.

#### 4.3.4. WQBEL Calculations

As detailed in Table F-6, reasonable potential has been determined for mercury, chlorodibromomethane, chloroform, dichlorobromomethane, methylene chloride, pentachlorophenol, total nitrate (as N), nitrate + nitrite (as N), total nitrite (as N), unionized ammonia (as N), methylene blue activated substances (MBAS), total molybdenum, total dissolved solids (TDS), sulfate, sodium, and chloride. The following example demonstrates how WQBELs were established for this Order for chlorodibromomethane.

**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  $C \le B$ , 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 chlorodibromomethane, the applicable water quality criteria are:

ECA<sub>Human Health</sub> = 0.401 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.

LTAacute = ECAacute x Multiplieracute 99

LTAchronic = ECAchronic x Multiplierchronic 99

Typically, historic effluent data is 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). For chlorodibromomethane and the other constituents that had a reasonable potential, aquatic criterion had not been promulgated at the time of the development of this permit and LTA for acute and chronic were unnecessary to calculate.

**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 1 (n = 1). 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.

No. of Samples	No. of Samples Per Month (n)	CV
73	1	0.6

**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. AMELaquatic life = LTA x AMELmultiplier 95

MDELaquatic life = LTA x MDELmultiplier 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). Equations provided in Section 1.4, Step 5 of the SIP are used to develop the AMEL and MDEL for aquatic life using (Table 2 of the SIP also provides this data up to two decimals). For chlorodibromomethane and the other constituents that had a reasonable potential, aquatic criterion had not been promulgated at the time of the development of this permit and AMEL and MDEL for aquatic life were unnecessary to calculate.

Calculation of human health AMEL and MDEL:

**Step 5:** For the ECA based on human health, set the AMEL equal to the ECA<sub>human health</sub> AMEL<sub>human health</sub> = ECA<sub>human health</sub>

For chlorodibromomethane:

AMELhuman health =  $0.401 \mu g/L$ 

**Step 6:** Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier<sub>MDEL</sub> to the Multiplier<sub>AMEL</sub>. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

MDELhuman health = AMELhuman health x (MultiplierMDEL / MultiplierAMEL)

For chlorodibromomethane the following data were used to develop the MDELhuman health:

No. of Samples Per	CV	MultiplierMDEL 99	Multiplieramel 95	Ratio
Month			,	

		1	0.6	3.11	1.55	2.01
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MDELhuman health =  $0.401 \mu g/L \times 2.01 = 0.806 \mu g/L$ 

**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 chlorodibromomethane, the AMELhuman health and MDELhuman health were 0.401  $\mu$ g/L and 0.806  $\mu$ g/L respectively. Thus, the human health criteria-based effluent limitations were more stringent and were considered in the Order.

#### 4.3.4.1 Constituents with Reasonable Potential

- 4.3.4.1.1 **Mercury.** The RPA used effluent data from December 2014 through December 2022 and showed that there was a reasonable potential for the discharge to exceed the total recoverable mercury criteria, and therefore effluent limitations are established in this order. Using the effluent limitation calculations established in the SIP, an AMEL of 0.012  $\mu$ g/L and an MDEL of 0.024  $\mu$ g/L have been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for total recoverable mercury.
- 4.3.4.1.2 **Chlorodibromomethane**. The previous Order established an AMEL of 0.40  $\mu$ g/L and an MDEL of 1.0  $\mu$ g/L for chlorodibromomethane (dibromochloromethane). The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the chlorodibromomethane criteria, and therefore these effluent limitations are retained from the previous order. Using the effluent limitation calculations established in the SIP, an AMEL of 0.4  $\mu$ g/L and an MDEL of 0.81  $\mu$ g/L have been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for chlorodibromomethane.
- 4.3.4.1.3 **Chloroform**. The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the chloroform criteria, and therefore effluent limitations are established in this order. Using the effluent limitation calculations established in the SIP, an AMEL of 60  $\mu$ g/L and an MDEL of 120.6  $\mu$ g/L have been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for chloroform.
- 4.3.4.1.4 **Dichlorobromomethane**. The previous Order established an AMEL of 0.56  $\mu$ g/L and an MDEL of 1.0  $\mu$ g/L for dichlorobromomethane. The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the dichlorobromomethane criteria, and therefore these effluent limitations are retained from the previous order. Using the effluent limitation calculations established in the SIP, an AMEL of 0.56  $\mu$ g/L and an MDEL of 0.96  $\mu$ g/L have been established in this permit. Effluent and receiving water

monitoring and reporting requirements have also been established for dichlorobromomethane.

- 4.3.4.1.5. **Methylene Chloride.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the methylene chloride criteria; therefore, effluent limitations are established in this order. Using the effluent limitation calculations established in the SIP, an AMEL of 4.7  $\mu$ g/L and an MDEL of 9.45  $\mu$ g/L have been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for methylene chloride.
- 4.3.4.1.6. **Pentachlorophenol.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the pentachlorophenol criteria, and therefore effluent limitations are established in this order. Using the effluent limitation calculations established in the SIP, an AMEL of 60  $\mu$ g/L and an MDEL of 120.6  $\mu$ g/L have been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for pentachlorophenol.
- 4.3.4.1.8. **Nitrate and Nitrate + Nitrite.** As previously discussed, an effluent limitation for total nitrate (as N) was established through the TMDL for nitrate-nitrogen discharges to San Luis Obispo creek and was retained from the previous permit. Additionally, an effluent limitation for total nitrite (as nitrogen) is established in this order. A separate effluent limitation has not been established for nitrate+nitrite. Nitrate+nitrite is the sum of nitrate and nitrite, and therefore is duplicative of the two established effluent limitations.
- 4.3.4.1.9. **Nitrite**. The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to exceed the total nitrite (as N) criteria, and therefore an effluent limitation is established in this order. Using the effluent limitation calculations established in the SIP, an AMEL of 1.0 mg/L has been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for total nitrite (as N).
- 4.3.4.1.10. **Methylene blue activated substances (MBAS).** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the effluent to exceed the MBAS criteria of 0.2 mg/L from the 2019 Basin Plan. The 0.2 mg/L effluent limitation established in this order is equivalent to the most stringent water quality objective in the 2019 Basin Plan. Effluent and receiving water monitoring and reporting requirements have also been established for MBAS.
- 4.3.4.1.11 **Un-ionized Ammonia.** The 2019 Basin Plan includes a water quality objective for un-ionized ammonia (NH3) of 0.025 mg/L. The previous Order did not establish an effluent limitation for un-ionized ammonia. The previous Order incorporated the Basin Plan objective as a receiving water limitation. From December 2014 through April 2020, the Discharger collected 93 concurrent upstream (RSW-004) and

downstream (RSW-005) samples to determine un-ionized ammonia concentrations in the receiving water. The effluent caused the receiving water to exceed the Basin Plan objective on 29 occasions. Reasonable potential was found for un-ionized ammonia, and an effluent limitation and monitoring requirement were established for un-ionized ammonia. The effluent limitation of 0.025 mg/L is equivalent to the most stringent water quality objective in the Basin Plan and has been established in this permit.

- 4.3.4.1.12. **Molybdenum.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the effluent to exceed the molybdenum criteria of 10  $\mu$ g/L from the 2019 Basin Plan. An effluent limitation of 10  $\mu$ g/L is equivalent to the most stringent water quality objective in the Basin Plan and has been established in this permit. Effluent and receiving water monitoring and reporting requirements have also been established for molybdenum.
- 4.3.4.1.13. **Total Dissolved Solids.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to cause an exceedance of the total dissolved solids criteria of 650 mg/L in the Basin Plan for the mean surface water quality objective for San Luis Obispo Creek. Effluent and receiving water monitoring and reporting requirements have also been established for total dissolved solids.
- 4.3.4.1.14. **Chloride.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to cause an exceedance of the chloride criteria of 100 mg/L from the 2019 Basin Plan for the mean surface water quality objective for San Luis Obispo Creek. Effluent and receiving water monitoring and reporting requirements have also been established for chloride.
- 4.3.4.1.15. **Sulfate.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to cause an exceedance of the sulfate criteria of 100 mg/L in the 2019 Basin Plan for the mean surface water quality objective for San Luis Obispo Creek. Effluent and receiving water monitoring and reporting requirements have also been established for sulfate.
- 4.3.4.1.16. **Sodium.** The RPA based on analysis of effluent data from December 2014 through December 2022 showed that there was a reasonable potential for the discharge to cause an exceedance of the sodium criteria of 50 mg/L in the 2019 Basin Plan for the mean surface water quality objective for San Luis Obispo Creek. Effluent and receiving water monitoring and reporting requirements have also been established for sodium.

#### 4.3.4.2 Constituents with No Reasonable Potential

As detailed in Table F-8, constituents that were analyzed and received a "No" in the "RPA Result" column did not have a reasonable potential to cause or contribute to an excursion above the 126 U.S. EPA priority toxic pollutants, title 22 MCLs, or any

numeric water quality objectives included in any State Water Board plans or the 2019 Basin Plan. WQBEL's are not included in this Order for constituents that do not demonstrate reasonable potential to cause or contribute to an instream excursion of an applicable water quality objective; however monitoring for priority toxic and title 22 pollutants is established in this Order.

Most constituents with no reasonable potential are not discussed in this order. This section provides a discussion on the constituent with no reasonable potential for which an effluent limitation has not been retained from the previous order.

4.3.4.2.1 N-nitrosodimethylamine. The previous Order included an AMEL of 0.00069 μg/L and an MDEL of 0.0014 μg/L for n-nitrosodimethylamine. Several sample results analyzed during 2016 showed effluent limitation exceedances. However, in a letter dated February 9, 2017, the Discharger provided additional information to the Central Coast Water Board describing that the cause of the apparent exceedances was due to the test method used to analyze the samples. The Minimum Level (ML) established for n-nitrosodimethylamine in Appendix 4 of the SIP is 5 µg/L for samples analyzed by gas chromatography/ mass spectrometry. The Discharger was using EPA Method 1625M, an "ultra-low-level" method, which is not an approved method in 40 CFR part 136 and is not appropriate for compliance monitoring. The Discharger notified the Central Coast Water Board of its plan to return to using EPA Method 625 to measure nnitrosodimethylamine in the effluent instead of the "ultra-low-level" the Discharger used in 2016 (i.e., EPA Method 1625M). On May 15, 2017, the Central Coast Water Board provided a written response that concurred with the Discharger regarding the return to EPA Method 625 and that the n-nitrosodimethylamine effluent concentrations reported in 2016 should not have been reported as effluent limitation exceedances because results below the ML of 5 µg/L are not considered violations according to the SIP. The RPA used effluent data from December 2014 through December 2022 that was analyzed using the correct test method and found that there was not reasonable potential for an exceedance of a water quality objective. An effluent limitation of nnitrosodimethylamine has not been retained for this Order. Additional discussion is included in section 4.4.1 Ant-Backsliding Requirements and section 4.4.1 Antidegradation Policies of this fact sheet.

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

Aquatic toxicity is the adverse response of aquatic organisms from exposure to chemical or physical agents, or their synergistic effects in effluent or ambient water. Acute aquatic toxicity refers to adverse response (typically lethality) from a short-term exposure. Chronic aquatic toxicity generally refers to longer exposure duration and measures of both lethal and sub-lethal adverse response. WET testing protects receiving waters from the aggregate toxic effect of a mixture of pollutants that may be present in effluent.

The Basin Plan establishes a narrative WQO which states that all waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Survival of aquatic organisms in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same waterbody in areas unaffected by the waste discharge or for another control water. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity.

For compliance with the Basin Plan's narrative toxicity objective and the 2022 Toxicity Provisions, this Order requires the Discharger to conduct WET testing for acute and chronic toxicity in accordance with the Test of Significant Toxicity (TST) statistical approach, as specified in section 5 of the MRP (Attachment E).

## 4.3.5.1. Test of Significant Toxicity (TST)

In 2010, U.S. EPA endorsed the TST statistical hypothesis testing approach, described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1, as an improved hypothesis-testing tool to evaluate data from U.S EPA's toxicity test methods. The TST hypothesis testing approach more reliably identifies toxicity—in relation to the chronic (0.25 or more) and acute (0.20 or more) mean responses of regulatory management concern—than the No Observed Effect Concentration (NOEC) hypothesis-testing approach previously used.

On December 1, 2020, the State Water Board adopted Resolution No. 2020-0044, establishing the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries* (ISWEBE Plan), and adopting statewide numeric WQOs for both acute and chronic toxicity and a program of implementation to control toxicity, which are collectively known as the Toxicity Provisions. The Toxicity Provisions, which were revised on October 5, 2021, standardized the regulation of aquatic toxicity for all non-oceanic surface waters.<sup>3</sup> U.S. EPA's Test of Significant Toxicity Design, or TST, approach is an essential component of the Toxicity Provisions as it forms the basis for utilizing numeric WQOs and acts as the primary means of determining compliance with WET effluent limitations. This Order requires application of the TST approach for statistical analysis of WET data.

#### 4.3.5.1.1. Test of Significant Toxicity Design

The TST null hypothesis (Ho) for acute toxicity is: "mean discharge IWC response ≤0.80 × mean control response", where 0.80 is the regulatory management decision (RMD). The TST null hypothesis (Ho) for chronic toxicity is: "mean discharge IWC response ≤0.75 × mean control response", where 0.75 is the RMD. The null hypotheses for acute and chronic toxicity described in the TST are assigned as numeric WQOs for acute and chronic toxicity in sections II.C.1 and II.C.2 of the Toxicity Provisions. A test result that rejects the null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The TST approach is a t-test (formally Student's t-

<sup>&</sup>lt;sup>3</sup> The Toxicity Provisions were approved by the Office of Administrative Law on April 25, 2022, and by U.S. EPA on May 1, 2023.

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

The MDEL for chronic toxicity is exceeded when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" for the sub-lethal endpoint and the "Percent Effect" is ≥0.50 for the survival endpoint or the sub-lethal endpoint if there is no survival endpoint. The MMEL for chronic toxicity is exceeded and a violation will be flagged when two or more toxicity tests initiated in a calendar month, or in consecutive calendar months, result in a "Fail" in accordance with the TST approach for any endpoint.

The MDEL and MMEL for chronic toxicity are set at the IWC for the discharge and expressed in units of the TST statistical approach ("Pass" or "Fail"; "Percent Effect"). All NPDES effluent monitoring for the chronic toxicity effluent limitations shall be reported using the 100 percent effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using a multi-concentration test design when required by Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002).

Compliance with the toxicity limitation is demonstrated by rejecting the null hypothesis and reporting "Pass". When the toxicity test results in a "Fail" the Discharger must initiate accelerated monitoring as specified in section 5.3 of the MRP. After accelerated monitoring, if conditions of chronic toxicity are found to persist, the Discharger will be required to conduct a TRE, as described in section 5.4 of the MRP.

See section III.B.3 of the Toxicity Provisions for a detailed step-by-step description of the TST statistical method.

#### 4.3.5.2. WET Reasonable Potential Analysis

To determine the need for acute and/or chronic toxicity effluent limitations, the Central Coast Water Board conducted a RPA using the TST approach. In conducting the RPA, the Central Coast Water Board considered and evaluated all acute and chronic toxicity data generated during the previous permit term since the data is representative of the actual effluent quality from the Facility. Reasonable potential exists if any of the acute or chronic toxicity tests result in a "Fail" or if the percent effect at the IWC is greater than 10 percent. The IWC for Discharge Point 001 is 100 percent effluent.

The Discharger conducted eight acute and 26 chronic toxicity tests using the species *Pimephales promelas* between October 2015 and October 2022, as shown in Table F-10 below. Analysis using the TST approach concluded that the Discharger failed zero acute toxicity tests, and 14 chronic toxicity tests, representing a fail rate of 54 percent.

After extensive City staff and consultant review, summarized in the Toxicity Reduction Evaluation Workplan Conclusion report submitted to the Central Coast Regional Water Quality Control Board on May 22, 2019, all Effluent 001 sampling events from October 2016 to October 2018 exhibited at least one of the three qualifying data interpretations of sporadic mortality, suggesting biological interference was the cause of observed toxicity. The Central Coast Water Board reviewed the TRE Workplan and maintained that the failed chronic test results would remain on record.

These chronic toxicity test results were used to conclude that the discharge has reasonable potential to cause or contribute to an exceedance of chronic toxicity WQOs and that the discharge is subject to chronic toxicity effluent limitations. In addition, section III.C.5.c. of the Toxicity Provisions requires establishment of chronic toxicity effluent limitations if a POTW is authorized to discharge at a rate equal to or greater than 5.0 MGD and is required to have a pretreatment program by the terms of 40 CFR section 403.8(a). The permitted flow rate for the Facility is 5.4 MGD, and the Discharger is required to have a pretreatment program. Therefore, based on the determination of the RPA, and requirements contained in the Toxicity Provisions, the Order establishes MDEL and MMEL effluent limitations for chronic toxicity.

Table F-9. Summary of Acute and Chronic Toxicity Test Results

Test Initiation Date	iation Date Test Result		Test Endpoint	Test Type
10/6/2015	Pass	2.50	Survival	Acute
10/4/2016	Pass	0.00	Survival	Acute
10/3/2017	Pass	10.00	Survival	Acute
10/30/2018	Pass	0.00	Survival	Acute
10/15/2019	Pass	7.50	Survival	Acute
10/28/2020	Pass	0.00	Survival	Acute
10/5/2021	Pass	0.00	Survival	Acute
10/4/2022	Pass	0.00	Survival	Acute
10/6/2015	Pass	8.68	Growth	Chronic
10/6/2015	Pass	6.78	Survival	Chronic
10/4/2016	Pass	-13.56	Growth	Chronic
10/4/2016	Pass	13.33	Survival	Chronic
10/3/2017	Fail	31.69	Growth	Chronic
10/3/2017	Fail	40.68	Survival	Chronic
10/24/2017	Fail	49.63	Growth	Chronic
10/24/2017	Fail	68.33	Survival	Chronic
11/28/2017	Pass	17.20	Growth	Chronic
11/28/2017	Pass	10.91	Survival	Chronic
12/12/2017	Fail	43.78	Growth	Chronic
12/12/2017	Fail	58.33	Survival	Chronic
8/21/2018	Fail	19.95	Growth	Chronic
8/21/2018	Fail	31.67	Survival	Chronic
7/31/2018	Pass	14.48	Growth	Chronic

Test Initiation Date	iation Date Test Result		Test Endpoint	Test Type	
7/31/2018	Fail	34.48	Survival	Chronic	
10/30/2018	Pass	Pass 4.56		Chronic	
10/30/2018	Fail	18.33	Survival	Chronic	
10/15/2019	Pass	-12.63	Growth	Chronic	
10/15/2019	Pass	1.75	Survival	Chronic	
10/28/2020	Pass	-7.95	Growth	Chronic	
10/28/2020	Pass	0.00	Survival	Chronic	
10/5/2021	Pass	-2.02	Growth	Chronic	
10/5/2021	Pass	0.00	Survival	Chronic	
10/4/2022	Pass	3.00	Growth	Chronic	
10/4/2022	Pass	0.00	Survival	Chronic	

## 4.3.5.3. Acute Aquatic Toxicity

Although the Discharger reported no acute toxicity test failures from the eight acute toxicity tests conducted during the previous permit term, this permit retains annual effluent monitoring requirements for acute toxicity established in Order No. R3-2014-0033 due to persistent failure of chronic toxicity tests during the previous permit term, which resulted in a required TRE being conducted. The Order implements federal guidelines (*Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*) by requiring the Discharger to conduct acute species sensitivity testing as described in section 5 of the MRP (Attachment E). This Order requires the Discharger to conduct a screening test using a vertebrate and invertebrate species. After the screening test is completed, the Discharger is required to use the most sensitive species in future acute toxicity testing if the most sensitive species is found not to be *Pimephales promelas*.

#### 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 R3-2014-0033 established effluent limitations for coliform bacteria based on applicable water quality objectives in the Basin Plan for San Luis Obispo Creek. 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 water quality control plan prior to February 4, 2019. Because San Luis Obispo Creek 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. **Dissolved Oxygen.** In order to protect the beneficial uses of San Luis Obispo Creek, Order R3-2014-0033 retained an effluent limit for dissolved oxygen, prohibiting the discharge from containing a dissolved oxygen concentration of less than 4.0 mg/L or so low that it adversely affects beneficial uses.
- 4.3.6.3. **Nitrate.** San Luis Obispo Creek is included on the 303(d) List as impaired for nutrients. Central Coast Water Board Resolution R3-2005-0106 established TMDLs for nitrate for discharges to San Luis Obispo Creek. Due to federal and State antibacksliding regulations, nitrate remains a pollutant of concern for this discharge and the monthly average effluent limitation of 10 mg/L as N is retained from the previous Order.
- 4.3.6.4. **pH.** Federal regulations, 40 CFR 133, establish technology-based effluent limitations for pH. The secondary treatment standards require the pH of the effluent to be no lower than 6.0 and no greater than 9.0 standard units. However, the Basin Plan establishes a WQO for pH of between 6.5 to 8.3 standard units for the protection of receiving waters with the beneficial use of Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), and Water Recreation (REC1 and REC2). The Basin Plan establishes a WQO for pH between 7.0 to 8.5 standard units for the beneficial use of Freshwater Habitat (COLD and WARM) and Fish Spawning (SPWN). The previous Order established an effluent limitation of 6.5 to 8.3. However, since San Luis Obispo Creek has MUN, AGR, REC1, REC2, COLD, WARM, and SPWN beneficial uses, a pH effluent limitation of 7.0 to 8.3 is appropriate in order to protect all beneficial uses. This Order updates the previous 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.
- 4.3.6.5. **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 the previous Order.

- 4.3.6.6. **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.
- 4.3.6.7. **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) of 0.1 mL/L. 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.

#### 4.4. 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(I) 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. An effluent limitation for n-nitrosodimethylamine has not been retained from the previous Order because current data analysis shows no reasonable potential. The elimination of this WQBEL 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 that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods), and that would have justified the application of a less stringent effluent limitation at the time of permit issuance. The removal of the limitation of nnitrosodimethylamine is 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 this pollutant. Therefore, effluent limitations for these pollutants from the previous Order are not retained in this Order.

### 4.4.2. Antidegradation Policies

40 CFR section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. On October 28, 1968, the State Water Board established California's antidegradation policy when it adopted Resolution Number 68-16, Statement of Policy with Respect to Maintaining the Quality of the Waters of the State. Resolution Number 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The State Water Board has, in State Water Board Order Number 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution Number 68-16 to be fully consistent with the federal antidegradation policy contained in 40 CFR section 131.12. Similarly, CWA section 303(d)(4)(B) and 40 CFR section 131.12 require that all permitting actions be consistent with the federal antidegradation policy. Together, the state and federal antidegradation policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The Central Coast Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies.

The renewal of this NPDES permit is consistent with the anti-degradation policy because it is not expected to allow degradation of receiving water quality. No reduction in the existing level of wastewater treatment is anticipated. In addition, the renewal of the NPDES permit will not lower the surface water quality because the conditions in this Order are at least as stringent as the previous permit except for limits described in section 4.4.1 of the Fact Sheet. Specifically, the removal of the final effluent limitation for n-nitrosodimethylamine is consistent with the antidegradation policy because the discharge did not exhibit reasonable potential to exceed the water quality objective, and it is not expected to degrade the water quality of the receiving water. Effluent and receiving water monitoring for this pollutant continue to be required under this Order to ensure effluent and receiving water concentrations do not exceed the objective.

# 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 BOD and TSS. 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, BOD, and TSS 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-10. Final Effluent Limitations – Discharge Point EFF-001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median	Annual Average
Biochemical Oxygen Demand (BOD) 5-day at 20 degrees Celsius (°C)	Milligram per liter (mg/L)	10	30	50	-	-	-	-
BOD 5-day at 20°C	Pounds per day (lbs/day)[1]	425	1,351	2,252	-	-	-	-
Total Suspended Solids (TSS)	mg/L	10	30	75		1	-	1
TSS	lbs/day <sup>[1]</sup>	425	1,351	3,378	-	-	-	-
pH <sup>[2],[3]</sup>	standard units	-	-	-	7.0	8.3	-	-
Oil and Grease	mg/L	5	-	10	-	-	-	-

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median	Annual Average
Settleable Solids	milliliter per liter (mL/L)	0.1	-	-	-	1	-	-
Dissolved Oxygen	mg/L	ı	-	-	4.0	ı	-	-
Chlorine Residual	mg/L			[4][5]				
Mercury, Total Recoverable	μg/L	0.01 2	-	0.024	-	-	-	-
Chlorodibromom ethane (Dibromochlorom ethane)	μg/L	0.40	-	0.81	-	-	-	-
Chloroform	μg/L	60	-	120.6	-	-	-	-
Dichlorobromom ethane	μg/L	0.56	-	0.96	-	-	-	-
Methylene Chloride	μg/L	4.7	-	9.45	-	-	-	-
Pentachlorophen ol	μg/L	0.28	-	0.56	-	-	-	-
Nitrate, Total (as Nitrogen (N))	mg/L	10	-	-	-	1	-	-
Nitrite, Total	mg/L	1	-	-	-	-	-	-
Un-ionized Ammonia	mg/L	0.02 5	-	-	-	-	-	-
Methylene Blue Active Substances (MBAS)	mg/L	0.2	-	-	-	-	-	-
Molybdenum	mg/L	0.01	-	-	-	-	-	-
Total Dissolved Solids	mg/L		-	-	-	-	-	650 <sup>[10]</sup>

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median	Annual Average
Chloride	mg/L		ı	-	-	1	-	100 <sup>[10]</sup>
Sodium	mg/L		ı	-	-	1	-	50 <sup>[10]</sup>
Sulfate	mg/L		-	-	-	-	-	100 <sup>[10]</sup>
Total Coliform	MPN/100 mL			[6]				
Chronic Toxicity <sup>[7]</sup>	"Pass/Fail" and Percent Effect	-	-	"Pass" and Percent Effect <50 <sup>[8]</sup>	-	-	[9]	-

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

- [2] Applied as an instantaneous effluent limitation.
- 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] Compliance determination for total chlorine residual shall be based on 99 percent compliance. To determine 99 percent compliance, the following conditions shall be met:
  - The total time during which to the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
  - No single excursion from 0.1 mg/L shall exceed 30 minutes;
  - No single excursion shall exceed 2 mg/L.
  - When continuous monitoring is not being performed, standard compliance guidelines shall be followed.
- Total chlorine residual monitoring is only required when chlorine is used for disinfection and or cleaning/maintenance purposes. The Discharger shall specify

with the monthly, quarterly, and annual SMRs if chlorination occurred during the monitoring period.

#### [6] Total Coliform:

- The median number of total coliform organisms in the effluent shall not exceed 2.2 MPN/100 mL as determined by results of bacteriological analyses for the last 7 days on which samples were taken;
- No more than one sample shall exceed 23 MPN/100 mL total coliform in any 30day period;
- The maximum number of total coliform organisms in any sample shall not exceed 240 MPN/100 mL.
- As specified in section 7.2 of this Order and section 5 of the Monitoring and Reporting Program (MRP) (Attachment E).
- The Maximum Daily Effluent Limitation (MDEL) is exceeded if a chronic toxicity test using the most sensitive species results in a "Fail" at the in-stream waste concentration (IWC) for the sub-lethal endpoint measured in the test and a "Percent Effect" greater than or equal to 50 percent for the survival endpoint.
- The Median Monthly Effluent Limitation (MMEL) is exceeded when two or more chronic toxicity tests using the most sensitive species initiated in a calendar month result in a "Fail" at the IWC for any endpoint (see section 5 of the MRP-Attachment E).
- [10] 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 and onsite use of disinfected tertiary recycled wastewater in compliance with applicable state and local requirements regarding the production and use of reclaimed wastewater, including those requirements in the State Water Board's Recycled Water Policy, and those established by DDW 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.

#### 4.8. Point of Compliance for Effluent Limitations

4.8.1. The Discharger must comply with the effluent limitations established in this order at location EFF-001. The facility includes a long concrete pipe that sends treated effluent from the facility to San Luis Obispo Creek. In previous permits, the discharge was monitored at the end of the pipe, just before it mixes with San Luis Obispo Creek. Due to safety and cost concerns, the Discharger requested to

perform the majority of their compliance monitoring at the beginning of the pipe. The beginning of the pipe is referred to as EFF-001A and the end of the pipe is referred to as EFF-001B.

## 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.

#### 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

6.2.2.1. Whole Effluent Toxicity. The Basin Plan states, "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. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board." The Basin Plan further states, "Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality condition, shall not be less than that for the same waterbody in areas unaffected by the waste discharge..." and that effluent limitations based upon acute bioassays of effluent will be prescribed where appropriate. This permit establishes acute and chronic monitoring requirements, and chronic toxicity effluent limitations in accordance with the 2022 Toxicity Provisions, which incorporates the narrative objectives of the Basin Plan.

The Order and MRP require the Discharger to conduct accelerated toxicity testing for exceedances of the acute toxicity WQOs, as described in the Toxicity Provisions, and/or chronic toxicity effluent limitations. If the accelerated testing demonstrates toxicity, the Discharger is required to submit a TRE Work Plan in accordance with U.S. EPA guidance, which shall include further steps taken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharge will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. This provision also includes requirements to conduct the TIE process in accordance with the Work Plan if the results of toxicity testing exceed the effluent limitation or trigger for toxicity.

#### 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.3 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 San Luis Obispo Creek sub-basin of the Estero Bay Drainage Basin.

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 and receiving water monitoring for TDS, chloride, sulfate, boron and sodium, this Order requires the Discharger to continue to update and implement the Salt Management Program and provide

annual reports. Additionally, the Discharger shall develop and implement a Nutrient Management Program as part of the Salt and Nutrient Management Program, as discussed in section 6.3.3.1. 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
- 6.2.4.1 The Facility shall be operated as specified under Standard Provision 1.4 of Attachment D.
- 6.2.5. Special Provisions for Publicly Owned Treatment Works (POTWs)
- 6.2.5.1. **Pretreatment.** This Order contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to section 307 of the CWA; 40 CFR 35 and 403; and/or Title 23, CCR section 2233.
- 6.2.5.2. **Collection System.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2022-0103-DWQ (General Order) on December 6, 2022. 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 obtained enrollment for regulation under the General Order 2022-0103-DWQ.

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.

On March 7, 2017, the State Water Board adopted a resolution in recognition of the challenges posed by climate change that requires a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (Resolution 2017-0012). The resolution lays the foundation for a response to climate change that is integrated into all State Water Board actions, by giving direction to the State Water Board divisions and encouraging coordination with the regional water quality control boards. 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 and reissued 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 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, and 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. A description of the actions taken by the Discharger are described in section 2.5 – Response to Climate Change of this Order.

These requirements are consistent with 40 CFR section 122.41(e), requiring permittees to ensure compliance through proper operation and maintenance of facilities, including installation and operation of appropriate auxiliary and backup facilities, and they are authorized pursuant to Water Code section 13383. (*In re the City of Oceanside, Fallbrook Public Utilities Dist. And the Southern California Alliance of Publicly Owned Treatment Works*, State Water Board Order WQ 2021- 0005, February 12, 2021 at p. 26.) The Los Angeles Water Board understands that the cost of preparing such a plan could be significant (estimated cost range of \$25,000-\$60,000), but "the costs of ensuring resilient infrastructure to protect water quality against the effects of climate change is warranted." (Fallbrook, at p. 27.)

## 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. Sections 13267 and 13383 of the California Water Code also authorize 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, with section 13267 being the specific statute authorizing all such activities pertaining to the State Water Board's *Water Quality Control Policy for Recycled Water*. 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 Central Coast Water Board has considered the cost and need for monitoring and reporting generally in this NPDES permit. The discharger has provided the Central Coast Water Board with an estimation of its monitoring and reporting costs here, which are \$226,860 for five years. Although the costs are significant, the costs are reasonable considering the nature of the wastewater discharge and because they result in critical data required under the Clean Water Act and which are needed to evaluate water quality generally, the impacts of the discharges on human and aquatic and benthic health, and water quality specifically, and to ensure that beneficial uses are protected. The requirements are generally comparable to other inland dischargers in the region.

## 7.1. Influent Monitoring

In addition to influent flow monitoring, monitoring for BOD<sub>5</sub> and TSS is required to determine compliance with the Order's percent removal requirement for these pollutants and to assess plant performance. Influent monitoring requirements have been retained from the previous Order.

## 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 the previous Order for Discharge Point 001, with some exceptions. Effluent monitoring for fecal coliform has been removed and replaced with E. coli monitoring to be consistent with the updated Bacteria Provisions. Effluent monitoring frequency has been increased in this Order to monthly for those pollutants with a reasonable potential to cause or contribute to an exceedance of a water quality standards and for which effluent limitations were established: mercury, chlorodibromomethane, chloroform, dichlorobromomethane, methylene chloride, pentachlorophenol, nitrite (as N), unionized ammonia, MBAS, total dissolved solids, sulfate, chloride, and sodium. Chronic toxicity monitoring has increased to monthly to reflect the requirements of the updated Toxicity Provisions. A quarterly effluent monitoring requirement has been established for hardness to assist with the next permit's reasonable potential analysis. An annual effluent monitoring frequency has been established for results of the reasonable potential analysis and the 2019 Basin Plan objectives.

## 7.3. Whole Effluent Toxicity Testing Requirements

Acute and chronic toxicity monitoring requirements and chronic toxicity effluent limitations have been established in this Order in accordance with the 2020 Toxicity Provisions in the ISWEBE Plan. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. For this permit, chronic toxicity in the discharge was evaluated using U.S. EPA's 2010 TST hypothesis testing approach and is expressed as "Pass" or "Fail" for the median

monthly summary results and "Pass" or "Fail" and "Percent Effect" for each individual acute and chronic toxicity result. The chronic toxicity effluent limitations protect the narrative WQO in the Basin Plan and comply with the requirement in the Toxicity Provisions to establish chronic effluent limitations for Facilities with permitted discharges greater than 5.0 MGD and a pretreatment program.

This Order requires the Discharger to submit an updated TRE Work Plan submitted pursuant to Order No. R9-2014-0033 within 90 days of the effective date of the Order. The TRE Work Plan must describe steps the Discharger intends to follow if the effluent limitation for chronic toxicity is exceeded.

If a routine acute and/or chronic toxicity test results in a "Fail" at the IWC, this Order requires the Discharger to conduct accelerated monitoring to determine the cause of the toxicity. A TRE is required when the Discharger has any combination of two or more MDEL or MMEL violations within a single calendar month or within two successive calendar months. In addition, if other information indicates toxicity (e.g., results of additional monitoring, fish kills, intermittent recurring toxicity, etc.), then the Central Coast Water Board may require a TRE. If a TRE is required, the Discharger is required to submit a detailed TRE Work Plan in accordance with U.S. EPA guidance which shall include further steps taken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. This provision also includes requirements to conduct the TRE/TIE process in accordance with the submitted work plan if the results of toxicity testing exceed the effluent limitations for chronic toxicity.

This Order retains annual acute toxicity monitoring requirements and establishes monthly chronic toxicity monitoring requirements based on the RPA determination for toxicity using the TST approach and the Toxicity Provisions. Refer to section 5 of the MRP (Attachment E).

# 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 evaluate compliance with water quality objectives, WQBELs, and the protection of beneficial uses. Surface water monitoring requirements have been retained from Order R3-2014-0033 for Discharge Point 001, with some changes in sampling frequency and additional constituents to monitor. Annual monitoring for CTR and title 22 pollutants has been included in this Order because it had not been required historically and is necessary to obtain the background (B) concentration data that will be used for the next permit's reasonable potential analysis. Quarterly sampling of *E.coli* has been included in this Order to be consistent with

the statewide Bacteria Provisions. Sampling frequency for flow, turbidity, color, pH, dissolved oxygen, and temperature have been decreased from weekly to monthly due to personnel safety concerns at sampling locations in the creek. Monthly monitoring of these parameters will provide sufficient data of the receiving water. Quarterly monitoring of boron and monthly monitoring of TDS, chloride, sodium, and sulfate have been included in this Order to provide an understanding of salts concentrations in the receiving water. The addition of quarterly monitoring of hardness in this Order will assist with the next permit's reasonable potential analysis.

#### 7.5.2. Groundwater

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

## 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 <a href="http://geotracker.waterboards.ca.gov/">http://geotracker.waterboards.ca.gov/</a>. 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 retained in this Order to help identify and reduce salt and nutrient loading in effluent. This salt/nutrient management report shall be included as a separate report from the annual report.

## 7.6.6. Discharge to Evaporation Ponds

Reports of discharge to and from the Facility's evaporation ponds are required pursuant to California Water Code section 13383. Any costs incurred with this reporting are expected to be minimal. The reporting is necessary to ensure compliance with the provisions of this Order, inform follow-up actions in the event of noncompliance with the provisions of this Order, and to protect human health and water quality.

# 8. CONSIDERATION OF NEED TO PREVENT NUISANCE AND WATER CODE SECTION 13241 FACTORS

The requirements set forth in subsections 2.4 and 4.3 of this Order are included to implement state law only. These requirements are not required or authorized under the federal CWA; consequently, violations of these requirements are not subject to the enforcement remedies that are available for NPDES violations. As required by Water Code section 13263, the Central Coast Water Board has considered the need to prevent nuisance and the factors listed in Water Code section 13241 in establishing the state law provisions/requirements. The Central Coast Water Board finds, on balance, that the state law requirements in this Order are reasonably necessary to prevent nuisance and to protect beneficial uses identified in the Basin Plan, and the section 13241 factors are not sufficient to justify failing to protect those beneficial uses.

## 8.1. Need to prevent pollution or nuisance

In establishing effluent limitations in this Order, the Central Coast Water Board has considered state law requirements to prevent pollution or nuisance as defined in

section 13050, subdivisions (I) and (m), of the Water Code. The requirements in this Order, including those set forth in subsections 2.4 and 4.3, will prevent pollution and nuisance.

## 8.2. Past, present, and probable future beneficial uses of water

Chapter 2 of the Basin Plan identifies designated beneficial uses for water bodies in the Central Coast Region. Beneficial uses of water relevant to this Order are also identified above in sections 3.3.1 of this Fact Sheet. The Central Coast Water Board has taken this factor into account in establishing effluent limitations in the Order, including those set forth in sections 2.4 and 4.3 of this Order. Accordingly, the requirements herein protect and augment the past, present and probable future beneficial uses of the water.

# 8.3. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto

The environmental characteristics of this watershed are discussed in the Basin Plan, as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters. The environmental characteristics of the hydrographic unit, including the quality of available recycled water that may be produced as a result of this Order will be improved by compliance with the requirements of this Order.

# 8.4. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area

The water quality standards necessary to protect beneficial uses of San Luis Obispo Creek Sub-Basin of the Estero Bay Drainage Basin can reasonably be achieved through the coordinated control of all factors that affect water quality in the area, including the conservation of water and/or the production of recycled water authorized by this Order. For example, the water quality in the watershed and/or groundwater basin could be improved through the addition or use of recycled water authorized by this Order, which meets title 22 standards. The Central Coast Water Board has taken this factor into account in establishing effluent limitations in the Order

#### 8.5 Economic Considerations

The Permittee presented evidence regarding cost of monitoring but did not present additional evidence concerning other economic considerations related to this Order, such as the benefits of producing recycled water and benefits resulting from protection of beneficial uses of San Luis Obispo Creek. The Central Coast Water Board has considered the economic impact of requiring certain provisions pursuant to state law, including the costs of conducting feasibility studies for recycling, conservation, and climate change. Any additional costs associated with producing any study are reasonably necessary to prevent nuisance and protect beneficial uses identified in the Basin Plan and to improve the water supply resiliency. The failure to consider conservation or recycled water could result in the loss of, or impacts to, beneficial uses, which would have a detrimental economic impact, particularly given the effects on beneficial uses and supplies of water from the

drought and climate change. Economic considerations related to costs of compliance are therefore not sufficient, in the Central Coast Water Board's determination, to justify failing to prevent nuisance and protect beneficial uses.

## 8.6 The need for developing housing within the region

The Central Coast Water Board does not anticipate that these state law requirements will adversely impact the need for housing in the area. To the contrary, this Order helps address the need for housing by controlling pollutants in discharges and by allowing the reuse and exportation of recycled water for use in the area. Both of these things will improve the quality of local surface and groundwater, as well as water supply generally. This may in turn increase the region's capacity to support continued housing development. Therefore, the potential for developing housing in the area will be facilitated by the conservation of water, or reuse or the production of recycled water, under this permit.

## 8.7. Need to develop and use recycled water

The State Water Board's Recycled Water Policy requires the Central Coast Water Board to encourage the use of recycled water. In addition, as discussed immediately above, a need to develop and use recycled water exists within the region, especially during times of drought. To encourage recycling, the Permittee is required by this Order to continue to explore the feasibility of recycling to maximize the beneficial reuse of tertiary treated effluent and to report on its recycled water production and use. The Discharger shall submit an update to this feasibility investigation as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal.

#### 9. PUBLIC PARTICIPATION

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

#### 9.1. 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 can access the agenda and any changes in dates and locations through the Central Coast Water Board's website at http://www.waterboards.ca.gov/centralcoast/

#### 9.2. Written Comments

Interested persons were invited to submit written comments on December 14, 2023, concerning these tentative WDRs.

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 <u>January 16</u>, <u>2024</u>.

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

Date: June 20-21, 2024 Time: 9:00 am-5:00 pm

Location: Link to video and teleconference were provided at

https://www.waterboards.ca.gov/centralcoast/board\_info/age

ndas/2024/2024 agendas.html

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

## 9.4. 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: <a href="https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.shtml">https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.shtml</a>.

## 9.5. 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.

## 9.6. 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.

#### 9.7. Additional Information

Requests for additional information or questions regarding this order should be directed to **Sarah Crable at (805) 549-3706** or

**Sarah.Crable@waterboards.ca.gov** or Arwen Wyatt-Mair at (805) 542-4695 or Arwen.Wyattmair@waterboards.ca.gov.