

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
879 Aerovista Place, Ste 101, San Luis Obispo, California 93401**

**ORDER NO. R3-2021-0010  
NPDES NO. CA0050628**

**WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT  
FOR THE SENTINEL PEAK RESOURCES ARROYO GRANDE PRODUCED WATER  
RECLAMATION FACILITY**

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

Discharger	Sentinel Peak Resources California LLC
Name of Facility	Arroyo Grande Produced Water Reclamation Facility
Facility Address	1821 Price Canyon Road San Luis Obispo, CA 93401 San Luis Obispo County

**Table 1. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude (North-South)</b>	<b>Discharge Point Longitude (East-West)</b>	<b>Receiving Water</b>
001	Tertiary-treated produced water	35° 10' 56.928" N	-120° 37' 05.0448" W	Pismo Creek

This Order was adopted on **April 16, 2021**.  
This Order shall become effective on **July 1, 2021**.  
This Order shall expire on **June 30, 2026**.

The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations (CCR), and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than **January 1, 2026**. The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Central Coast Region have classified this discharge as follows: **Minor discharge**.

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

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Matthew T. Keeling, Executive Officer

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## 1. FACILITY INFORMATION

Information describing the Arroyo Grande Produced Water Reclamation Facility (Facility) owned and operated by Sentinel Peak Resources California LLC (Discharger) 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. The Facility was previously known as the Plains Exploration and Recovery Facility and previously owned by Freeport-McMoRan Oil and Gas. The Facility's discharge has been permitted by Order No. R3-2013-0029, which has been administratively extended pending preparation and consideration of this Order.

## 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 WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (Water Code) (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 as 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, 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.** The provisions/requirements in subsections 4.3 and 5.2 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. **Notification of Interested Parties.** The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided them with an opportunity to submit their written comments and recommendations. Details of the notifications are provided in the Fact Sheet.
- 2.5. **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.

- 2.6. **Long-Term Planning and Implementation.** Federal regulations require NPDES permits to expire five years after their effective dates, after which the permit may be administratively extended prior to renewal. Planning and instituting measures to support long-term beneficial reuse of the Facility's effluent may span multiple permit terms. As a result, this Order include requirements the Central Coast Water Board plans to carry over into future permit terms.
- 2.7. **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 Resource Control Board's (State Water Board) Resolution No. 2017-0012, "Comprehensive Response to Climate Change," requires a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities. Aligning with Resolution No. 2017-0012, this Order supports beneficial reuse of the Facility's treated effluent to offset potable water supplies for irrigation and dedication of in-stream flows to creek habitat. This Order increases water supply reliability as a climate adaptation strategy, in addition to maintaining instream discharges to provide water quality benefits and enhanced critical steelhead trout habitat.
- 2.8. **Human Right to Water.** 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 Environmental Justice and the Human Right to Water Resolution No. R3-2017-0004, which adopts the human right to water as a core value and affirms the realization of the human right to water and protecting human health as the Central Coast Water Board's top priorities. Consistent with the Water Code and Resolution No. R3-2017-0004, this Order promotes actions that advance the human right to water and discourages actions that delay or impede opportunities for communities to secure safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order implements recently updated mercury water quality objectives which are more stringent than previous objectives, in order to more adequately protect beneficial uses related to water and fish consumption.
- 2.9. **Disadvantaged Community Status.** In meeting the objectives of Resolution No. R3-2017-0004, staff has evaluated the disadvantaged community status for the Discharger and areas at and downstream of the discharge location. The Discharger is a limited liability company, and the Facility is located within the oil field from which the produced water is generated. The Discharger is not considered a disadvantaged community. The discharge location (an unincorporated area of San Luis Obispo County) and downstream receiving water areas (San Luis Obispo County and City of Pismo Beach) are also not disadvantaged communities.

2.10. **California Environmental Quality Act.** Under California Water Code section 13389, this action to adopt an NPDES permit for the discharge of waste to surface waters is exempt from the California Environmental Quality Act (CEQA) provisions in Public Resources Code, Division 13, Chapter 3.

THEREFORE, IT IS HEREBY ORDERED that Order No. R3-2013-0029 is rescinded upon the effective date of this Order except for enforcement purposes and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Coast Water Board from taking enforcement action for violations of the previous Order.

**3. DISCHARGE PROHIBITIONS**

- 3.1. The discharge of any waste not specifically regulated by this Order, excluding stormwater regulated by Water Quality Order 2014-0057-DWQ, *NPDES General Permit No. CAS0000001, NPDES General Permit for Storm Water Discharges Associated with Industrial Activities*, is prohibited.
- 3.2. Discharge of treated wastewater at a location other than Discharge Point No. 001, as described by this Order, is prohibited, unless the discharge is regulated by General Permit No. CAS000001 or another discharge permit.
- 3.3 The overflow or bypass of wastewater from the Discharger’s collection, treatment, or disposal facilities and the subsequent discharge of untreated 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 Water Code, is prohibited.
- 3.5 Effluent flow shall not exceed the 0.84 million gallons per day (MGD) design flow capacity of the treatment facility.

**4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS**

**4.1. Effluent Limitations – Discharge Point No. 001**

**4.1.1. Final Effluent Limitations – Discharge Point No. 001**

**Table 2. Effluent Limitations**

Parameter	Units	Average Monthly	Maximum Daily
Total Dissolved Solids (TDS)	milligram per liter (mg/L)	--	450
TDS	pounds per day (lbs/day)	--	3100
Oil and Grease	mg/L	--	35

- 4.1.1.1. The Discharger shall maintain compliance with the above effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E.
- 4.1.1.2. Effluent pH shall be between 7.0 and 8.3 at all times.
- 4.1.1.3. The flow of effluent shall not exceed a daily average of 0.84 MGD.
- 4.1.1.4. Acute toxicity shall be assessed by the survival of aquatic organisms in 96-hour bioassays of undiluted waste and survival shall be no less than:
  - 70 percent, minimum for any one bioassay; and
  - 90 percent, median for any three consecutive bioassays.
- 4.1.1.5. There shall be no chronic toxicity in the effluent discharge.

**4.2. Land Discharge Specifications – Not Applicable**

**4.3. Recycling Specifications – Onsite use only**

**Table 3. Recycled Water Discharge Specifications**

<b>Parameter</b>	<b>Units</b>	<b>Average Monthly</b>	<b>Maximum Daily</b>
TDS	mg/L	--	450
Oil and Grease	lbs/day	--	35

- 4.3.1. The Discharger shall maintain compliance with the above specifications at all reclamation use areas, with compliance measured at Monitoring Location REC-001 as described in the attached MRP.
- 4.3.2. Recycled water pH shall be between 6.5 and 8.4 at all times.
- 4.3.3. Recycled water shall not exceed water quality objectives for agricultural use, irrigation supply specified in the Water Quality Control Plan for the Central Coastal Basin (Basin Plan) Table 3-2.
- 4.3.4. Recycled water shall not be allowed to run off to Pismo Creek or tributary streams.
- 4.3.5. Recycled water shall only be used onsite and for non-potable uses.

**5. RECEIVING WATER LIMITATIONS**

**5.1. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause a violation of the following receiving water limitations in Pismo Creek. The Central Coast Water Board may require the Discharger to investigate to determine if it is a cause of the exceedances in the receiving water.

- 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. This may require effluent oil and grease to be less than 35 mg/L.
- 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. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits (where NTU is normal turbidity units):
  - 5 NTU, where natural turbidity is less than 25 NTU.
  - 20 percent, where natural turbidity is at least 25-50 NTU.
  - 10 NTU, where natural turbidity is at least 50-100 NTU.
  - 10 percent, where natural turbidity is greater than 100 NTU.
- 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. Natural temperature of receiving waters shall not be altered unless it can be demonstrated to the satisfaction of the Central Coast Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature be increased by more than 5 degrees Fahrenheit above natural receiving water temperature.
- 5.1.14. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions shall not be less than that for the same water body 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 the following (where ug/L is the concentration units of micrograms per liter):
- |                                                                         |            |
|-------------------------------------------------------------------------|------------|
| Methylene Blue Activated Substances:                                    | 0.2 mg/L   |
| Phenols:                                                                | 1.0 ug/L   |
| Polychlorinated biphenyls (PCBs):                                       | 0.3 ug/L   |
| (PCBs as sum of PCB 1016,<br>1221, 1232, 1242, 1248, 1254,<br>and 1260) |            |
| Phthalate Esters:                                                       | 0.002 ug/L |
- 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, which presents a hazard to human, plant, animal, or aquatic life. In no circumstance shall receiving waters contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) for radioactivity presented in Table 4 of title 22 CCR division 4, chapter 15, article 5.

- 5.1.19. Waters shall not contain concentrations of chemical constituents in excess of the primary MCLs specified for drinking water in Table 64431-A (Primary MCLs for Inorganic Chemicals) and Table 64444-A (Primary MCLs for Organic Chemicals) of title 22 CCR division 4, chapter 15.
- 5.1.20. Waters shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural beneficial use. Interpretation of adverse effects shall be derived from guidelines of the University of California Agricultural Extension Service guidelines presented in chapter 3, Table 3-1 of the Basin Plan.
- 5.1.21. Waters shall not contain concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in chapter 3, Table 3-2 of the Basin Plan. Salt concentrations for irrigation waters shall be controlled through implementation of the anti-degradation policy to the effect that mineral constituents of currently or potentially usable waters shall not be increased.
- 5.1.22. Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the levels presented in chapter 3, Table 3-3 of the Basin Plan.
- 5.1.23. Cadmium shall not exceed 0.003 mg/L, when hardness in receiving waters is greater than 100 mg/L as calcium carbonate ( $\text{CaCO}_3$ ), nor shall cadmium exceed 0.0004 mg/L when hardness in receiving waters is equal to or less than 100 mg/L as  $\text{CaCO}_3$ .
- 5.1.24. Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 organisms per 100 milliliter (organisms/100 mL), nor shall more than 10 percent of samples collected during any 30-day period exceed 400 organisms/100 mL.

## 5.2. Groundwater Limitations

Activities at the Facility shall not cause exceedance or deviation from the following water quality objectives for groundwater established in the Basin Plan. The Central Coast Water Board may require the Discharger to investigate to determine if it is a cause of exceedances in the groundwater.

- 5.2.1. Groundwater shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses.
- 5.2.2. The Discharger shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwaters as determined by comparison of samples collected from wells located up-gradient and down-gradient of the waters affected by the discharge.
- 5.2.3. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life. In no circumstances shall groundwater contain concentrations of radionuclides in excess of the MCLs for radioactivity presented in Table 64442 of title 22 CCR division 4, chapter 15, article 5.

- 5.2.4. The median concentration of coliform organisms in groundwater, over any seven-day period, shall be less than 2.2 organisms/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 CCR division 4, chapter 15.
- 5.2.6. Groundwater shall not contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-1 of the Basin Plan.
- 5.2.7. Groundwater used for irrigation and livestock watering shall not exceed concentrations of chemical constituents in excess of those levels specified for irrigation and livestock watering in chapter 3, Table 3-2 of the Basin Plan.

## **6. PROVISIONS**

### **6.1. Standard Provisions**

- 6.1.1. The Discharger shall comply with all Standard Provisions included in Attachment D.
- 6.1.2. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply.
- 6.1.3. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

### **6.2. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E. All monitoring shall be conducted according to title 40 of the Code of Federal Regulations (CFR) part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants* or other approved alternate test methods.

### **6.3. Special Provisions**

#### **6.3.1. Reopener Provisions**

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

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

### 6.3.2.1. Toxicity Reduction Requirements

If the discharge causes or contributes to chronic toxicity in the receiving water, a Toxicity Reduction Evaluation (TRE) shall be required. The Central Coast Water Board will require the Discharger to conduct a TRE if repeated tests reveal toxicity as a result of waste discharge under this Order. The Discharger shall take all reasonable steps to control toxicity once the source of toxicity is identified. Failure to conduct the required toxicity tests and TRE actions shall result in the establishment of effluent limitations for chronic toxicity under this Order and/or appropriate enforcement action.

**Chronic Whole Effluent Toxicity.** For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct chronic whole effluent toxicity (WET) testing, as specified in MRP section 5. Furthermore, this provision requires the Discharger to investigate the causes of effluent toxicity and identify corrective actions to reduce or eliminate effluent toxicity. If the discharge exceeds the numeric toxicity monitoring trigger during accelerated monitoring established in this provision, the Discharger is required to initiate a 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 develop and submit a TRE Work Plan and includes procedures for accelerated chronic 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 a TRE Workplan. The workplan shall outline the procedures for identifying the source(s) of effluent toxicity and reducing or eliminating effluent toxicity. The workplan must be developed in accordance with USEPA guidance including EPA/600/2-88/062 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 is exceeded during regular chronic toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring as required in the Accelerated Monitoring Specifications. The Discharger shall initiate a TRE to address effluent toxicity if any WET testing results exceed the numeric toxicity monitoring trigger during accelerated monitoring.
- 6.3.2.1.3. **Numeric Toxicity Monitoring Trigger.** When acute toxicity is detected in the effluent greater than the applicable effluent limitation established in section 4.1.1.4 or chronic toxicity is detected greater than a chronic toxicity trigger of 1 chronic toxicity unit (TU<sub>c</sub>), and the discharge is continuing, the Discharger

shall resample immediately, retest, and report the results to the Executive Officer, who will determine whether to initiate an enforcement action, require a TRE in accordance with the Discharger's TRE Workplan, or implement other measures. The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to begin accelerated monitoring and initiate a TRE.

6.3.2.1.4. **Accelerated Monitoring Specifications.** If the numeric toxicity monitoring trigger is exceeded during regular chronic toxicity testing, the Discharger shall initiate accelerated monitoring within 14 days of notification by the laboratory of the exceedance. Accelerated monitoring shall consist of four chronic toxicity tests conducted once every two weeks using the species that exhibited toxicity. The following protocol shall be used for accelerated monitoring and TRE initiation:

- If the results of four consecutive accelerated monitoring tests do not exceed the monitoring trigger, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. However, notwithstanding the accelerated monitoring results, if there is adequate evidence of a pattern of effluent toxicity, the Executive Officer may require that the Discharger initiate a TRE.
- If the source(s) of the toxicity is easily identified (e.g., temporary plant upset), the Discharger shall make necessary corrections to the facility and shall continue accelerated monitoring until four consecutive accelerated tests do not exceed the monitoring trigger. Upon confirmation that the effluent toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.
- If the result of any accelerated toxicity test exceeds the monitoring trigger, the Discharger shall cease accelerated monitoring and begin a TRE to investigate the cause(s) of effluent toxicity and identify corrective actions to reduce or eliminate effluent toxicity. Within thirty (30) days of notification by the laboratory of any test result exceeding the monitoring trigger during accelerated monitoring, the Discharger shall submit a TRE Action Plan to the Central Coast Water Board including, at minimum:
  1. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
  2. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
  3. A schedule for these actions.

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

The Discharger shall develop and implement a Best Management Practices (BMP) plan to ensure that no contaminated stormwater leaves the treatment and disposal facilities and flows to surface waters. A BMP plan is designed to prevent or minimize the potential for release of toxic substances from ancillary activities

to the water of the State through plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. BMP plans may either be source controls, which prevents a discharge, or treatment controls, which remove pollutants from a discharge before reaching surface or ground waters. BMPs should be certified by the State Water Board to be considered “best”. Further information regarding BMP plans is found in Chapter 4 of the Basin Plan, and the appropriate Best Management Practices Handbook.

If a stormwater pollution prevention plan (SWPPP) is developed for compliance with the CAS000001 *Water Quality Order 2014-0057-DWQ, NPDES General Permit No. CAS0000001, NPDES General Permit for Storm Water Discharges Associated with Industrial Activities*, the SWPPP will satisfy this BMP plan requirement.

#### 6.3.3.1. Pollutant Minimization Program

The goal of a Pollutant Minimization Program (PMP) shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies. The Discharger shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as detected but not quantified (DNQ) when the effluent limitation is less than the method detection limit (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:

- A sample result is reported as DNQ and the effluent limitation is less than the reporting limit (RL); or
- A sample result is reported as not detected (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.

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

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;
2. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
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;
4. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

5. An annual status report that shall be sent to the Central Coast Water Board including:
  - All PMP monitoring results for the previous year;
  - A list of potential sources of the reportable priority pollutant(s);
  - A summary of all actions undertaken pursuant to the control strategy; and
  - A description of actions to be taken in the following year.

The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

**6.3.5. Special Provisions for Publicly Owned Treatment Works (POTWs) – Not Applicable**

**6.3.6. Other Special Provisions**

For the control of stormwater discharged from the site of the produced water 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. CAS0000001, NPDES General Permit for Storm Water Discharges Associated with Industrial Activities* (and any subsequent amendments).

**6.3.7. Compliance Schedules – Not Applicable**

**7. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in this Order will be determined as specified below.

- 7.1. **General:** Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and definitions found in Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional 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 minimum level (ML).
- 7.2. **Multiple Sample Data:** When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of DNQ or ND, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
  1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

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

If a priority pollutant sample result, or the arithmetic mean or median of multiple sample results, is below the RL, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP, the Discharger shall not be deemed out of compliance.

- 7.3. **Chronic Whole Effluent Toxicity Effluent Limitation:** Compliance with the accelerated monitoring and TRE provisions shall constitute compliance with the chronic toxicity effluent limitation.



## ATTACHMENT A – DEFINITIONS

### **Arithmetic Mean**

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

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

where:  $\sum x$  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.

### **Carcinogenic**

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

### **Coefficient of Variation (CV)**

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

### **Daily Discharge**

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

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

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

**Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the reporting limit (RL), but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

**Dilution Credit**

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

**Effluent Concentration Allowance (ECA)**

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

**Enclosed Bays**

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

**Estimated Chemical Concentration**

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

**Estuaries**

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

Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

### **Inland Surface Waters**

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

### **Instantaneous Maximum Effluent Limitation**

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

### **Instantaneous Minimum Effluent Limitation**

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

### **Maximum Daily Effluent Limitation (MDEL)**

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

### **Median**

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order)

**If the number of measurements (n) is odd, then:**

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

**If n is even, then:**

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

(i.e., the midpoint between the (n/2 and ((n/2)+1))).

### **Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 CFR part 136.

### **Minimum Level (ML)**

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is

equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

### **Mixing Zone**

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

### **Not Detected (ND)**

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

### **Persistent Pollutants**

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

### **Pollutant Minimization Program (PMP)**

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

### **Pollution Prevention**

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

### **Reporting Level (RL)**

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Central Coast Water Board either from Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and*

*Estuaries of California* (State Implementation Policy or 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.

**Sanitary Sewer Overflow** is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sanitary sewer overflows include: (1) overflows or releases of untreated or partially treated wastewater that reach waters of the United States; (2) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (3) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly-owned portion of a sanitary sewer system.

### **Satellite Collection System**

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

### **Source of Drinking Water**

Any water designated as municipal or domestic supply in the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan).

### **Standard Deviation**

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

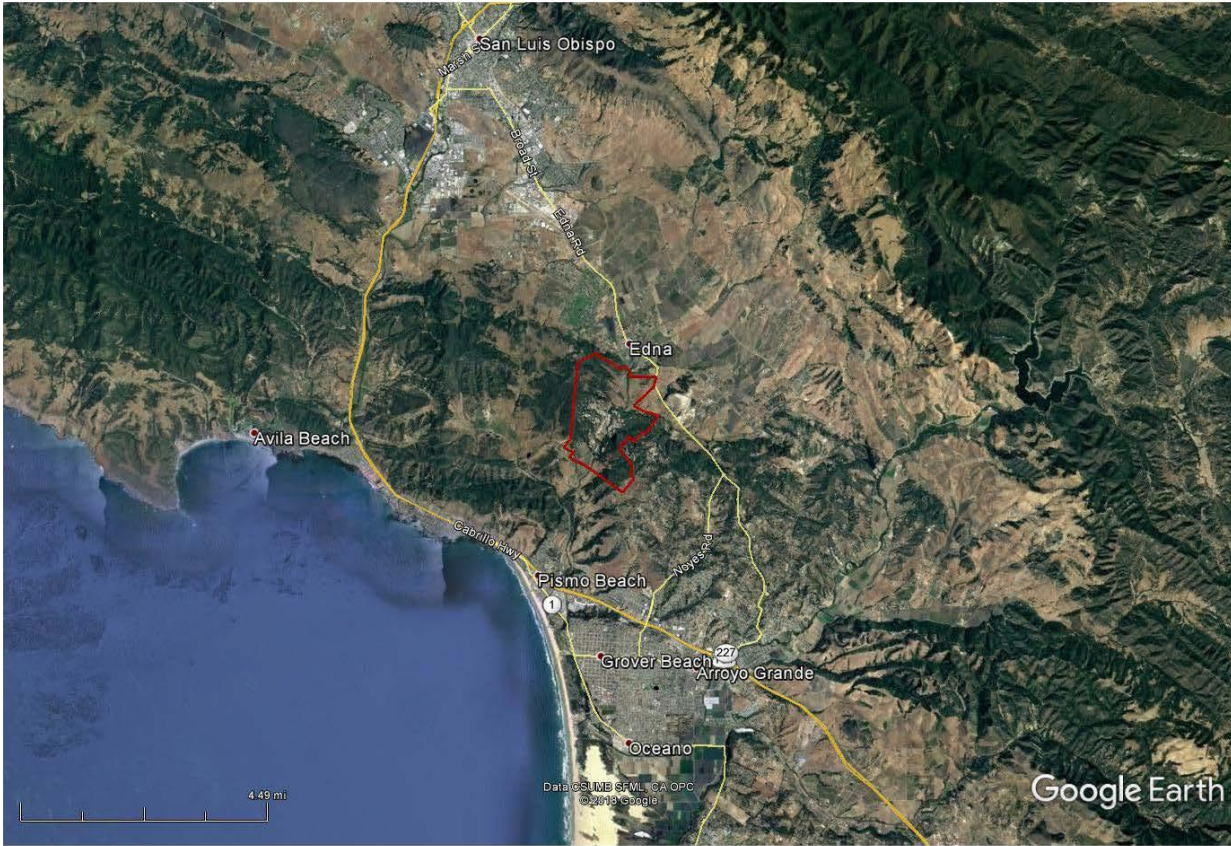
$$\text{Standard Deviation } (\sigma) = \frac{\Sigma(X-\mu)^2}{(n-1)^{0.5}}$$

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

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

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

**ATTACHMENT B – LOCATION MAPS**



**Figure 1 –**  
General  
location of the  
Arroyo Grande  
Oil Field.

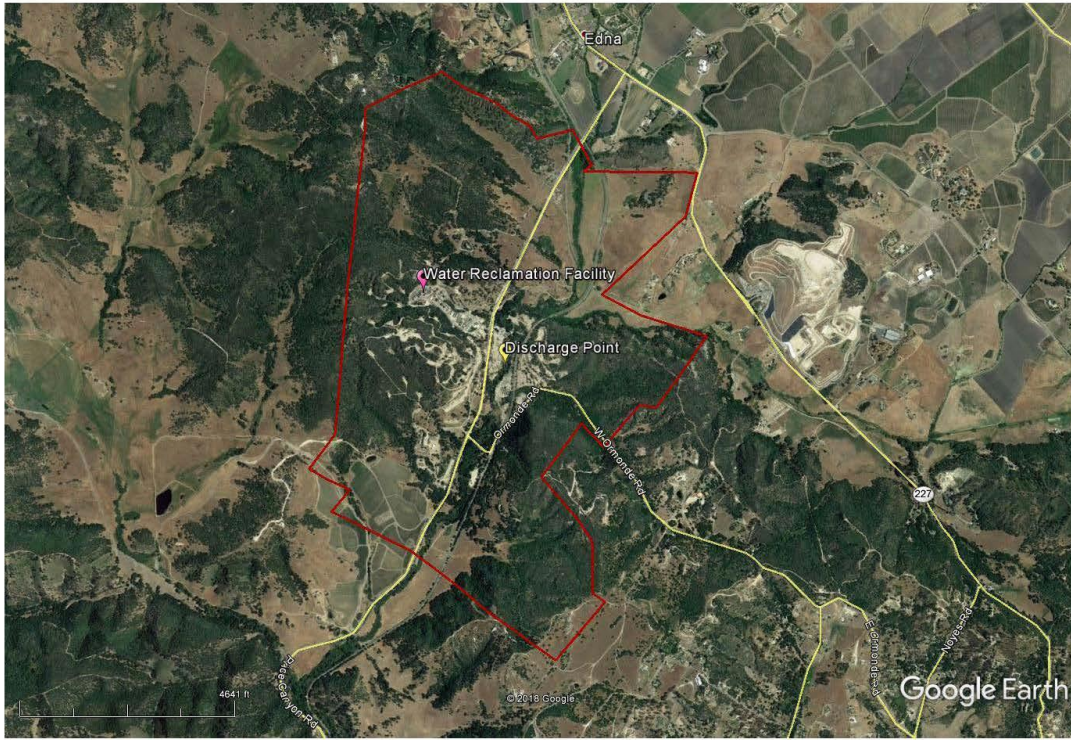


Figure 2 –  
Arroyo Grande  
Oil Field lease  
boundary.

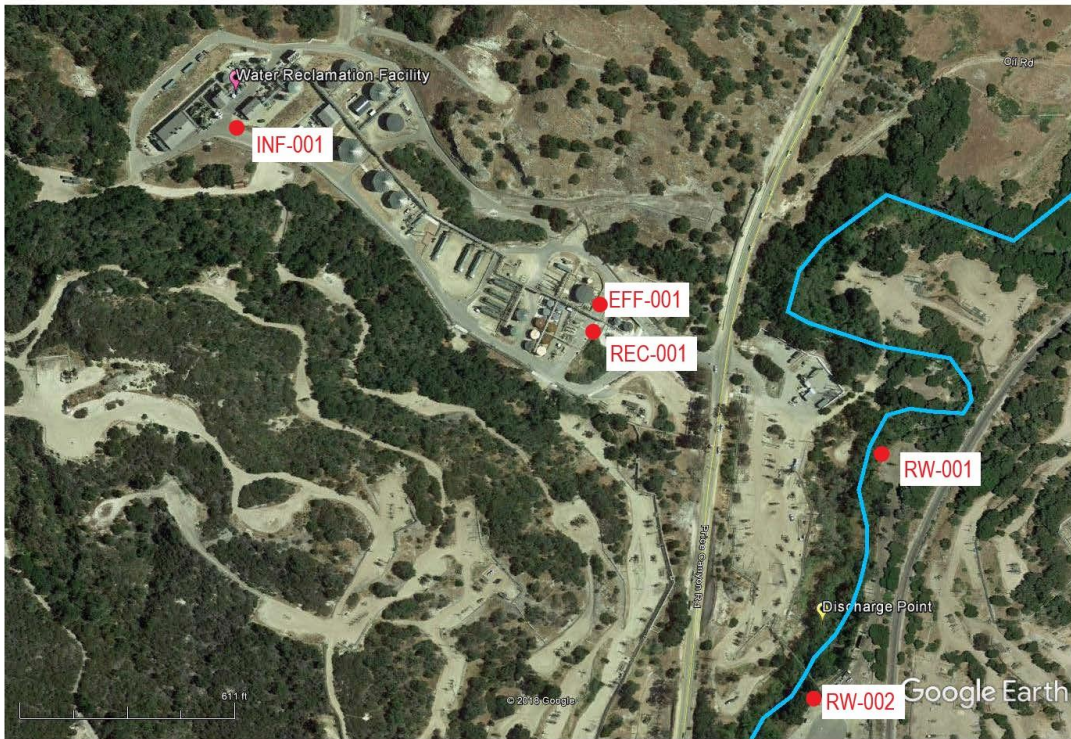
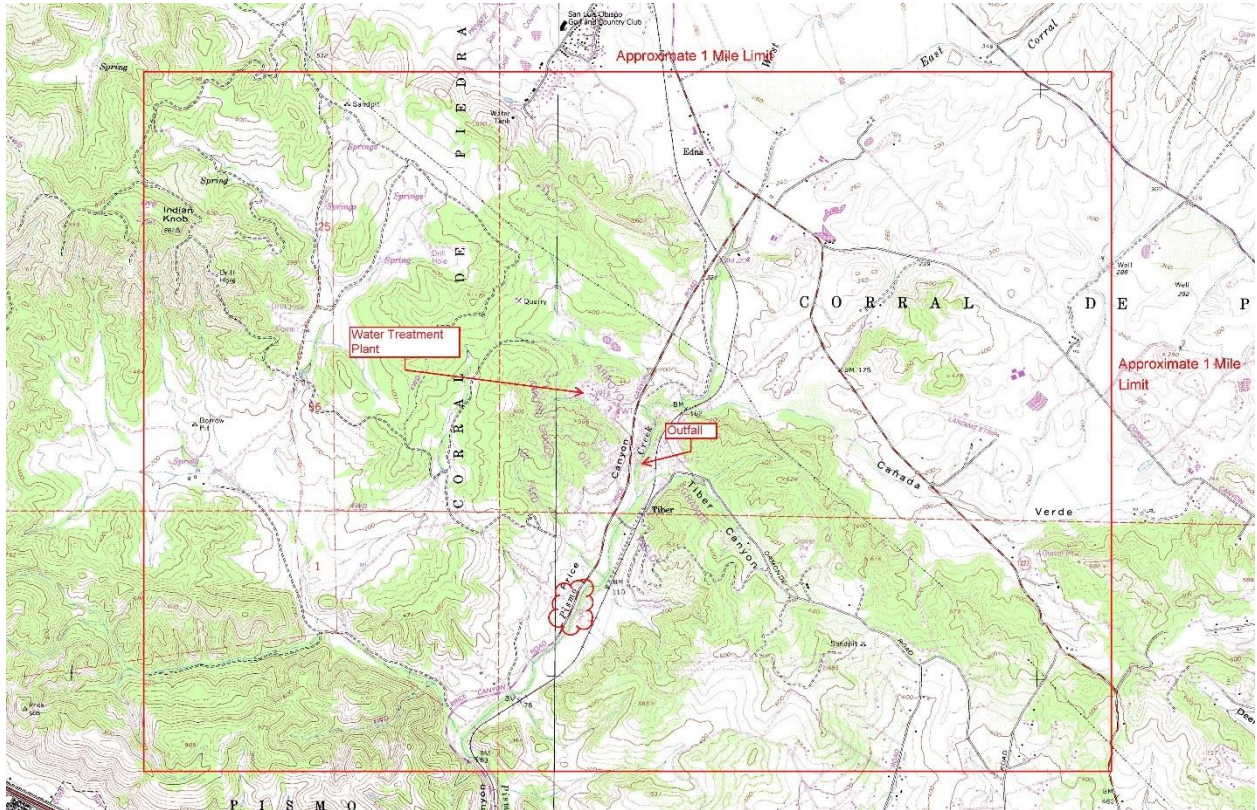


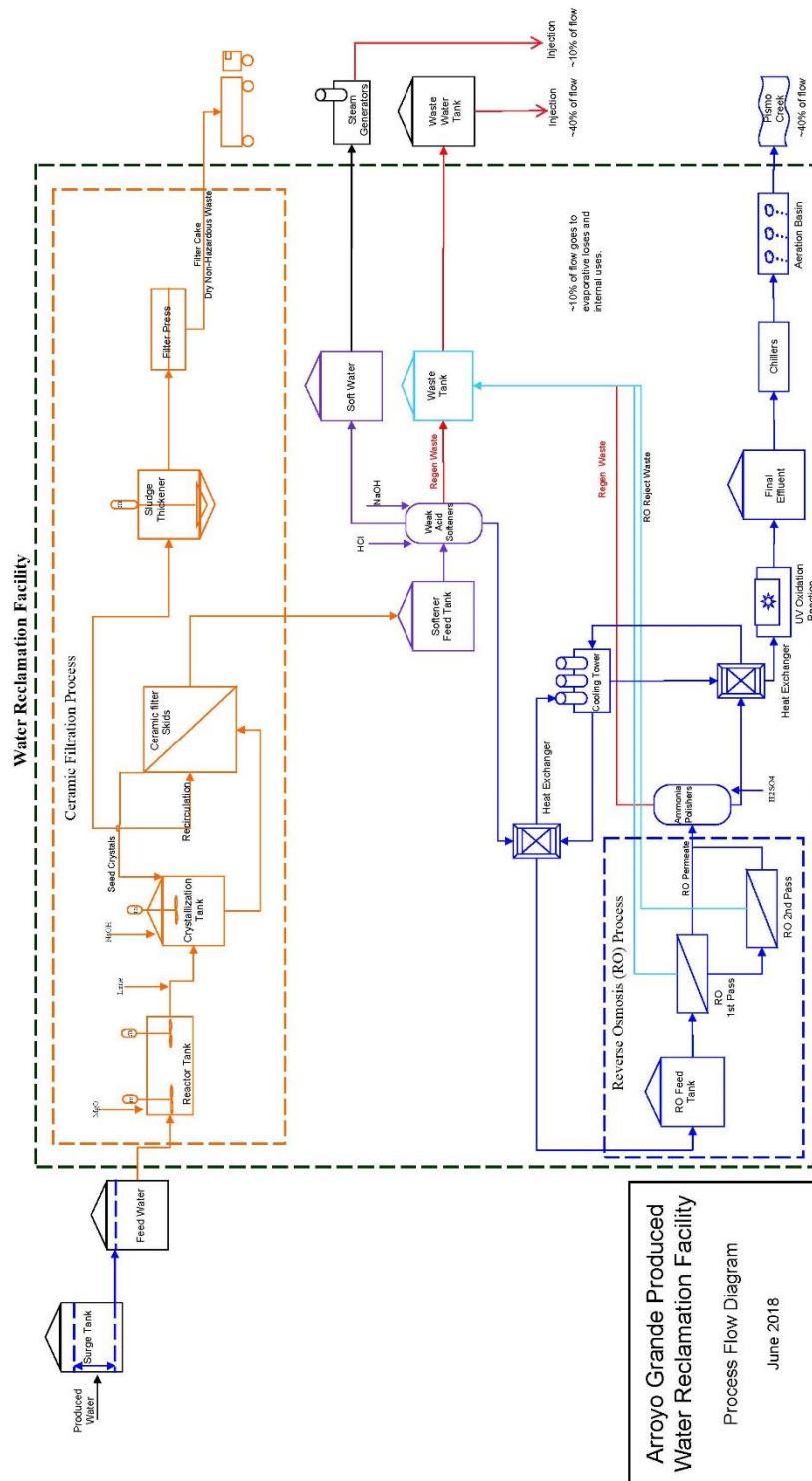
Figure 3 –  
Lower altitude  
image  
identifying  
location of the  
Water  
Reclamation  
Facility and the  
associated  
discharge point  
on Pismo Creek.

Pismo  
Creek





**ATTACHMENT C – PROCESS 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 of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (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 (CFR) 122.41(a); Water Code 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 and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 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 CFR 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 CFR 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 CFR 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 CFR 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 CFR 122.5(c))

### 1.6. Inspection and Entry

1.6.1. The Discharger shall allow the Central Coast Water Board, State Water Board, U.S. Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S. Code 1318(a)(4)(B); 40 CFR 122.41(i); Water Code 13267, 13383):

1.6.2. 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. Code 1318(a)(4)(B)(i); 40 CFR 122.41(i)(1); Water Code 13267, 13383);

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

1.6.4. 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. Code 1318(a)(4)(B)(ii); 40 CFR 122.41(i)(3); Water Code 13267, 13383); and

1.6.5. 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. Code 1318(a)(4)(B); 40 CFR 122.41(i)(4); Water Code 13267, 13383)

### 1.7. Bypass

#### 1.7.1. Definitions

- “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))
- “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 CFR 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 1.7.3, 1.7.4, and 1.7.5 below. (40 CFR 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 CFR 122.41(m)(4)(i)):

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));
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 CFR 122.41(m)(4)(i)(B)); and
3. The Discharger submitted notice to the Central Coast Water Board as required under Standard Provisions 1.7.5 below. (40 CFR 122.41(m)(4)(i)(C))

1.7.4. **Anticipated bypass.** 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 1.7.3 above. (40 CFR 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, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR 122.22, and 40 CFR part 127. (40 CFR 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 5.5 below (24-hour notice). The notice shall be sent to the Central Coast Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR 122.22, and 40 CFR part 127. (40 CFR 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 CFR 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 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 CFR 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 CFR 122.41(n)(3)):

1. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));
2. The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));
3. The Discharger submitted notice of the upset as required in Standard Provisions 5.5.2 below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and
4. The Discharger complied with any remedial measures required under Standard Provisions 1.3 above. (40 CFR 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 CFR 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 CFR 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 CFR 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 CFR 122.41(l)(3), 122.61)

## **3. STANDARD PROVISIONS – MONITORING**

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

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

- 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
- The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR 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 CFR part 136, or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR 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 CFR 122.41(j)(2))

#### **4.2. Records of monitoring information shall include:**

1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR 122.41(j)(3)(vi))

**4.3. Claims of confidentiality for the following information will be denied:**

1. The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and
2. Permit applications and included attachments, permits, and effluent data. (40 CFR 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 USEPA within a reasonable time, any information which the Central Coast Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Coast Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Water Code 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 USEPA shall be signed and certified in accordance with Standard Provisions 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 CFR 122.41(k))
- 5.2.2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 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 USEPA shall be signed by a person described in Standard Provisions 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  1. The authorization is made in writing by a person described in Standard Provisions 5.2.2 above (40 CFR 122.22(b)(1));

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 CFR 122.22(b)(2)); and
  3. The written authorization is submitted to the Central Coast Water Board and State Water Board. (40 CFR 122.22(b)(3))
- 5.2.4. If an authorization under Standard Provisions 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 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 CFR 122.22(c))
- 5.2.5. Any person signing a document under Standard Provisions 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 CFR 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 5.2, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 [National Pollutant Discharge Elimination System (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 MRP (Attachment E) in this Order. (40 CFR 122.41(l)(4))
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Coast Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions 5.10 and



comply with 40 CFR part 3, 40 CFR 122.22, and 40 CFR part 127. (40 CFR 122.41(l)(4)(i))

- 5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR 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 CFR 122.41(l)(4)(ii))
- 5.3.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR 122.41(l)(4)(iii))

#### **5.4. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(l)(5))

#### **5.5. Twenty-Four Hour Reporting**

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

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

All reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Central Coast Water Board. By December 21, 2025, notice shall also be submitted electronically to the initial recipient defined in Standard Provisions 5.10. The reports shall comply with 40 CFR part 3, 40 CFR part 122.22, and 40 CFR 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 CFR 122.41(l)(6)(i))

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

- Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR 122.41(I)(6)(ii)(A))
- Any upset that exceeds any effluent limitation in this Order. (40 CFR 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 CFR 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 CFR 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 CFR 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 CFR 122.41(I)(1)(ii))

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

## **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 CFR 122.41(I)(2))

## **5.8. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions 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 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 5.5 and the applicable required data in Appendix A to 40 CFR 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 CFR 122.41(l)(7))

### **5.9 Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Central Coast Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR 122.41(l)(8))

### **5.10. Initial Recipient for Electronic Reporting Data**

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in Appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group (40 CFR 127.2(c)). USEPA will update and maintain this listing. (40 CFR 122.41(l)(9))

## **6. STANDARD PROVISIONS – ENFORCEMENT**

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 CFR 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 CFR 122.42(a)(1)):

- 100 micrograms per liter (ug/L) (40 CFR 122.42(a)(1)(i));
- 200 ug/L for acrolein and acrylonitrile; 500 ug/L for 2,4 dinitrophenol and 2-methyl 4,6 dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 CFR 122.42(a)(1)(ii));
- Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(1)(iii)); or
- The level established by the Central Coast Water Board in accordance with 40 CFR 122.44(f). (40 CFR 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 CFR 122.42(a)(2)):

- 500 ug/L (40 CFR 122.42(a)(2)(i));
- 1 mg/L for antimony (40 CFR 122.42(a)(2)(ii));
- Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR 122.42(a)(2)(iii)); or
- The level established by the Central Coast Water Board in accordance with 40 CFR 122.44(f). (40 CFR 122.42(a)(2)(iv))

## **8. CENTRAL COAST WATER BOARD STANDARD PROVISIONS**

### **8.1. Central Coast Standard Provisions – 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 CWA 307(a) 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 an "indirect discharger" that:
  - Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or
  - Flow through the system to the receiving water untreated; and
  - 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 – Provisions**

- 8.2.1. Collection, treatment, and discharge of waste shall not create nuisance or pollution, as defined by Water Code 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 of in a manner approved by the Executive Officer.
- 8.2.5. Wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to title 23 California Code of Regulations (CCR).
- 8.2.6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
- violation of any term or condition contained in this order.
  - obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts.
  - 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.
  - 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:
- Promulgation of a new or revised effluent standard or limitation.
  - A material change in character, location, or volume of the discharge.
  - Access to new information that affects the terms of the permit, including applicable schedules.
  - Correction of technical mistakes or mistaken interpretations of law.
  - Other causes set forth under sub-part D of 40 CFR 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, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:
- identify possible situations that could cause "upset," "overflow," "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.)

- 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 National Fire Protection Association (NFPA) 70B, *Recommended Practice for Electrical Equipment Maintenance*; NFPA 70E, *Standard for Electrical Safety in the Workplace*; American National Standards and International Electrical Testing Association (ANSI/NETA MTS) *Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems*, or procedures established by insurance companies or other industry resources.
- 8.2.12. If the discharger's facilities are equipped with supervisory control and data acquisition (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 National Institute of Standards and Technology (NIST) Special Publication 800-53, *Recommended Security Controls for Federal Information Systems*, can provide guidance.
- 8.2.13. Production and use of recycled water is subject to the approval of the Central Coast Water Board. Production and use of recycled water shall be in conformance with reclamation criteria established in title 22 CCR chapter 3 and Water Code division 7, chapter 7. An engineering report pursuant to title 22 CCR 60323 is required and a waiver or water reclamation requirements from the Central Coast Water Board is required before recycled 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 8.7.13). 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 8.7.14).

- 8.3.2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Division of Drinking Water (DDW) for the constituents being analyzed. Bioassays performed to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Board and the State Department of Fish and Wildlife (DFW).
- 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 (MRP) shall include at least the following information:
- 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.).
  - 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.).
  - A description of the sampling procedures and preservation sequence used in the survey.
  - A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions 8.3 and Standard Provision 3. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.
  - 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 (ROWD) 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 years, the Discharger shall file a written report with the Central Coast Water Board. The report shall include:
- the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity.
  - 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.
- 8.4.5. All Dischargers shall submit required reports (e.g., electronic self-monitoring reports, discharger monitoring reports, technical reports) electronically through the California Integrated Water Quality System (CIWQS). Reports or related Facility correspondence not designated for submittal to CIWQS shall be sent electronically to the:
- California Regional Water Quality Control Board  
Central Coast Region  
centralcoast@waterboards.ca.gov
- 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 a 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 Central Coast Water 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 Standard Provision 2.
- 8.4.7. Except for data determined to be confidential under CWA 308 (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of USEPA. Please also see Standard Provision 4.



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:

- Both tabular and graphical summaries of the monitoring data obtained during the previous year.
- 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.
- An evaluation of wastewater flows with projected flow rate increases over time and the estimated date when flows will reach facility capacity.
- A discussion of operator certification and a list of current operating personnel and their grades of certification.
- The date of the facility's Operation and Maintenance Manual (including contingency plans as described in Central Coast Standard Provision 8.2.9), the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.
- A discussion of the laboratories used by the discharger to monitor compliance with effluent limits and a summary of performance relative to Standard Provision 8.3 General Monitoring Requirements.
- If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the MRP, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.
- 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**

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

### **8.6. Central Coast Standard Provisions – Enforcement**

8.6.1. Any person failing to file a ROWD 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 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 MRP 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 sewerage 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:
- the authorization is made in writing by a person described in the signatory paragraph of Standard Provision 5.2;
  - 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,
  - 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 8.7.2 and instantaneous maximum limits.
- 8.7.6. “Hazardous substance” means any substance designated under 40 CFR part 116 pursuant to CWA section 311.
- 8.7.7. “Incompatible wastes” are:
- Wastes that create a fire or explosion hazard in the treatment works.
  - Wastes that will cause corrosive structural damage to treatment works, or wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes.

- Solid or viscous wastes in amounts that cause obstruction to flow in sewers or that cause other interference with proper operation of treatment works.
- Any waste, including oxygen-demanding pollutants (biochemical oxygen demand, 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.
- Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 104 degrees Fahrenheit 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:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n},$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (most probably number per 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:

$$\text{mass emission rate (lbs/day)} = 8.34 \times Q \times C$$

where "C" (in mg/L) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in million gallons per day, MGD) is the measured daily flowrate or the average of measured daily flowrates over the period of interest.

8.7.11. "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in Central Coast Standard Provision 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 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.

$$\text{Average} = (X1 + X2 + \dots + Xn) / n$$

in which "n" is the number of days that 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 CFR part 122, Appendix A.
- 8.7.19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using monthly averages of pollutant concentrations (C, in mg/L) of influent and effluent samples collected about the same time and the following equation (or its equivalent):
- $$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - (C_{\text{effluent}} / C_{\text{influent}}))$$
- 8.7.20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss to natural resources that 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:
- Discharge a daily pollutant loading in excess of that allowed by contract with the Discharger or by federal, state, or local law;
  - Discharge wastewater which substantially differs in nature or constituents from its average discharge;
  - Discharge pollutants, either alone or in conjunction with discharges from other sources, that results in a permit violation or prevents sewage sludge use or disposal; or
  - 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 CWA section 307 (a) (1) or under 40 CFR part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Standard Provisions 5.5).

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

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM**

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## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Clean Water Act (CWA) sections 308 and 122.41(h), (j)-(l), 122.44(i), and title 40 of the Code of Federal Regulations (CFR) section 122.48 require that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (Water Code) sections 13267 and 13383 also authorize the Central Coast Regional Water Quality Control Board (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. **Laboratory Certification:** Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), in accordance with the provision of Water Code 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided in the Sentinel Peak Resources California LLC's (Discharger's) annual summary report each time a new certification and/or renewal of the certification is obtained from the Environmental Laboratory Accreditation Program (ELAP).
- 1.2. **Sample Volume and Monitoring Locations.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Central Coast Water Board.
- 1.3. **Instrumentation and Calibration.** 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. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly installed, calibrated, and maintained 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. Devices selected shall be capable of measuring flows with a maximum deviation of less than plus/minus 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.
  - A Guide to Methods and Standards for the Measurement of Water Flow, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No.

C13.10:421. or online at

<https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication421.pdf>)

- Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 2001, 317 pp. (Available online at [https://www.usbr.gov/tsc/techreferences/mands/wmm/WMM\\_3rd\\_2001.pdf](https://www.usbr.gov/tsc/techreferences/mands/wmm/WMM_3rd_2001.pdf))
- Flow Measurement in Open Channels and Closed Conduits, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST, or online in two volumes at <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication484v1.pdf> and <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nbsspecialpublication484v2.pdf>)
- NPDES Compliance Sampling Manual, USEPA, Office of Water Enforcement, Publication 305-K-17-001, Interim Revised Version January 2017, 918 pp. (Available online at <https://www.epa.gov/compliance/compliance-inspection-manual-national-pollutant-discharge-elimination-system>)

1.4. **Monitoring Reporting Intervals.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the regular discharge monitoring reports.

1.5. **Monitoring Test Procedures.** Unless otherwise specified by this MRP, the Discharger must utilize analytical test methods and procedures in 40 CFR part 136 *Guidelines Establishing Test Procedures for the Analysis of Pollutants* as follows:

- A test procedure listed in 40 CFR 136.3; or
- An alternative test procedure approved by U.S. Environmental Protection Agency (USEPA) as provided in 40 CFR 136.4 or 136.5; or
- A test procedure listed in 40 CFR part 136, with modifications allowed by USEPA as provided in 40 CFR 136.6.

All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations.

Analysis for toxics listed by the California Toxics Rule (CTR) shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP), including the selection and use of appropriate minimum levels (MLs) for a given analytical parameter.



1.6. **Minimum Level and Analytical Method Selection.** USEPA published regulations for the Sufficiently Sensitive Methods Rule (SSM Rule) which became effective September 18, 2015. For the purposes of the NPDES program, when more than one test procedure is approved under 40 CFR part 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv). Both 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv) apply to the selection of a sufficiently sensitive analytical method for the purposes of monitoring and reporting under NPDES permits, including review of permit applications. A USEPA-approved analytical method is sufficiently sensitive where:

- A. The minimum level (ML) is at or below both the level of the applicable water quality criterion/objective and the permit limitation for the measured pollutant or pollutant parameter; or
- B. In permit applications, the ML is above the applicable water quality criterion/objective, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- C. The method has the lowest ML of the USEPA-approved analytical methods where none of the USEPA-approved analytical methods for a pollutant can achieve the MLs necessary to assess the need for effluent limitations or to monitor compliance with a permit limitation.

The MLs in *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) Appendix 4 remain applicable. However, there may be situations when analytical methods are published with MLs that are more sensitive than the MLs for analytical methods listed in the SIP. For instance, USEPA Method 1631E for mercury is not currently listed in SIP Appendix 4, but it is published with an ML of 0.5 nanograms per liter (ng/L) that makes it a sufficiently sensitive analytical method. Similarly, USEPA Method 245.7 for mercury is published with an ML of 5 ng/L.

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

- Daily:** Midnight through 11:59 PM, or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
- Weekly:** Sunday through Saturday (Note: For weekly monitoring and sampling periods that start in one monthly reporting period but end in the next, the Discharger may report the weekly data in the monthly monitoring report containing the last day of the weekly period.)
- Monthly:** 1st day of calendar month through last day of calendar month
- Quarterly:** First Quarter: January 1st through March 31st  
Second Quarter: April 1st through June 30th  
Third Quarter: July 1st through September 30th

Fourth Quarter: October 1st through December 31st

**Semi-Annually:** First Half: January 1st through June 30<sup>th</sup>  
Second half: July 1st through December 31st

**Annually:** January 1st through December 31st

- 1.8 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, if required, are submitted annually to the State Water Board at the following address:

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

## 2. MONITORING LOCATIONS

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

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

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Influent	INF-001	Influent wastewater, prior to discharge to the treatment facilities. Latitude: 35° 11' 12.138" N Longitude: -120° 37' 22.8072" W
Effluent	EFF-001	Location representative of final effluent following full treatment, prior to contact with the receiving water or other waste streams. Latitude: 35° 11' 13.65" N Longitude: -120° 37' 21.1908" W
Recycled Water	REC-001	Location representative of recycled water following full treatment, prior to distribution. Latitude: 35° 11' 12.49" N Longitude: -120° 37' 20.73" W
Upstream Receiving Water	RW-001	Pismo Creek immediately upstream of Discharge Point No. 001 where representative samples of background conditions in the receiving water, not influenced by this discharge, can be collected. Latitude: 35° 10' 59" N Longitude: -120° 37' 4" W

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Downstream Receiving Water	RW-002	Pismo Creek immediately downstream of Discharge Point No. 001 where representative samples of downstream conditions in the commingled stream can be collected. Latitude: 35° 10' 53" N Longitude: -120° 37' 9" W

### 3. INFLUENT MONITORING REQUIREMENTS

#### 3.1. Monitoring Location INF-001

Discharger shall monitor influent as follows, and using test methods and MLs as described in sections 1.5 and 1.6 of this MRP:

**Table E-2. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	million gallons per day (MGD)	continuous	Continuous
Total Daily Flow	MGD	calculated	Daily
Max Daily Flow	MGD	calculated	Monthly
Mean Daily Flow	MGD	calculated	Monthly
Total Dissolved Solids (TDS)	milligrams per liter (mg/L)	Grab	Annually
Calcium (Ca)	mg/L	Grab	Annually
Magnesium (Mg)	mg/L	Grab	Annually
Sodium (Na)	mg/L	Grab	Annually
Potassium (K)	mg/L	Grab	Annually
Chloride (Cl)	mg/L	Grab	Annually
Sulfate (SO <sub>4</sub> )	mg/L	Grab	Annually
Bicarbonate (HCO <sub>3</sub> )	mg/L	Grab	Annually
Carbonate (CO <sub>3</sub> )	mg/L	Grab	Annually
Nitrate (NO <sub>3</sub> as N)	mg/L	Grab	Annually
Boron (B)	mg/L	Grab	Annually
Fluoride (F)	mg/L	Grab	Annually

#### 4. EFFLUENT MONITORING REQUIREMENTS

##### 4.1. Monitoring Location EFF-001

Discharger shall monitor effluent as follows, and using test methods and MLs as described in sections 1.5 and 1.6 of this MRP:

**Table E-3. Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Flow	MGD	Continuous	Daily
Mean Daily Flow	MGD	--	Monthly
Maximum Daily Flow	MGD	--	Monthly
pH <sup>1</sup>	standard unit (s.u.)	Grab	Daily
Total Dissolved Solids (TDS)	mg/L	24-hr composite (C-24)	Weekly
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	C-24	Monthly
Total Suspended Solids (TSS)	mg/L	C-24	Monthly
Temperature <sup>1</sup>	degrees Fahrenheit (°F)	Grab	Monthly
Oil and Grease	mg/L	Grab	Monthly
Total Ammonia (as N) <sup>1</sup>	mg/L	Grab	Quarterly
Nitrate (as N)	mg/L	Grab	Quarterly
Phosphorus	mg/L	Grab	Quarterly
Hardness	mg/L CaCO <sub>3</sub>	Grab	Quarterly
Metals <sup>3</sup>	micrograms per liter (ug/L)	C-24	Quarterly
Acute Toxicity <sup>2</sup>	acute toxicity unit (TUa)	C-24	Twice per year
Chronic Toxicity <sup>2</sup>	chronic toxicity unit (TUc)	C-24	Twice per year
Radium-226 and 228, combined	picocuries per liter (pCi/L)	Grab	Annually
Phthalate Esters	ug/L	Grab	Annually
Boron	mg/L	Grab	Annually
Cobalt	mg/L	Grab	Annually
Iron	mg/L	Grab	Annually

Parameter	Units	Sample Type	Minimum Sampling Frequency
Lithium	mg/L	Grab	Annually
Manganese	mg/L	Grab	Annually
Methylene Blue Activated Substances	mg/L	Grab	Annually
Molybdenum	mg/L	Grab	Annually
Vanadium	mg/L	Grab	Annually
Calcium	mg/L	Grab	Annually
Magnesium	mg/L	Grab	Annually
Sodium	mg/L	Grab	Annually
Potassium	mg/L	Grab	Annually
Chloride	mg/L	Grab	Annually
Sulfate	mg/L	Grab	Annually
Bicarbonate	mg/L	Grab	Annually
Carbonate	mg/L	Grab	Annually
CTR Pollutants 14-126 <sup>4</sup>	ug/L	C-24/Grab	Annually
Title 22 Pollutants <sup>5</sup>	ug/L	C-24	Annually

Table E-3 Notes:

1. Temperature and pH shall be measured simultaneously with the sample taken for measurement of total ammonia. Results shall be used to calculate un-ionized ammonia concentration.
2. Whole effluent acute and chronic toxicity monitoring shall be conducted according to the requirements established in section 5 of this MRP. Acute and chronic testing will alternate each quarter, such that each are tested twice per year.
3. Metals include the CTR metals identified as pollutant numbers 1-13 at 40 CFR 131.38 (b), the title 22 metals for which maximum contaminant levels are established by Table 64431-A, in title 22 of the Code of California Regulations (CCR) section 64431; and those metals with applicable water quality objectives established in Tables 3-2 and 3-3 of the Water Quality Control Plan for the Central Coastal Basin (Basin Plan) for the protection of agriculture and aquatic life beneficial uses – aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium (+3 and +6), chromium total, cobalt, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.
4. The CTR priority 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 SIP. The Discharger shall instruct its analytical laboratory to

establish calibration standards so that the MLs presented in Appendix 4 of the SIP are the lowest calibrated 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. Monitoring for the CTR pollutants in effluent shall occur simultaneously with monitoring required for the CTR pollutants in receiving water.

5. The title 22 pollutants are those for which primary maximum contaminant levels (MCLs) have been established by the Division of Drinking Water (DDW) and which are listed in Tables 64431-A and 64444-A of the 22 CCR division 4, chapter 15. Where these pollutants are included in other groups of pollutants (such as CTR’s priority pollutants), monitoring does not need to be duplicated. Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by 22 CCR 64432 and 64445.1. 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 – Monitoring Location EFF-001

- 5.1.1. The Discharger shall perform monitoring for acute toxicity as specified in Table E-3. Bioassays shall be conducted using the fathead minnow (*Pimephales promelas*) and the water flea (*Ceriodaphnia dubia*) unless the Executive Officer specifies in writing otherwise. The fathead minnow shall be used to study the effluent effect on larval survival and the water flea shall be used to study the effluent effect on survival.

**Table E-4. Approved Test for Acute Toxicity**

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow	<i>Pimephales promelas</i>	Larval Survival	4
Water Flea	<i>Ceriodaphnia dubia</i>	Survival	4

- 5.1.2. All bioassays shall be performed in accordance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition (EPA 821-R-02-012), or subsequent editions.

### 5.2. Whole Effluent Chronic Toxicity – Monitoring Location EFF-001

#### 5.2.1. Chronic Toxicity Monitoring Requirements

- 5.2.1.1. **Toxicity Trigger.** A toxicity trigger of 1 TUc is established for the discharge of effluent through Discharge Point No. 001.
- 5.2.1.2. **Sampling.** The Discharger shall collect 24-hour composite (C-24) samples of the effluent at EFF-001, as specified in Table E-3 above, for critical life stage

toxicity testing as indicated below. For toxicity testing requiring renewals, 24-hour composite samples collected on consecutive days are required. The Discharger may request approval from the Executive Officer for an alternative to the renewal sampling requirements above.

- 5.2.1.3. **Test Species.** The test species shall be *Pimephales promelas*. The Executive Officer may change the test species if data suggest that another test species is more sensitive to the discharge.

**Table E-5. Short-Term Methods for Estimating Chronic Toxicity – Fresh Water**

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow	<i>Pimephales promelas</i>	Larval Survival	7

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

- 5.2.1.5. **Dilution Series.** The Discharger shall conduct tests at 100%, 75%, 50%, 25%, and 12.5%. The “%” represents percent effluent as discharged. The Discharger may use the biological buffer MOPS (3-(N-Morpholino) propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test.

## 5.2.2. Chronic Toxicity Reporting Requirements

- 5.2.2.1. **Routine Reporting.** Toxicity test results for the current reporting period shall include, at a minimum, for each test:
- i. Sample dates
  - ii. Test initiation date
  - iii. Test species
  - iv. End point values for each dilution (e.g. number of young, growth rate, percent survival)
  - v. No observed effect concentration (NOEC) values in percent effluent
  - vi. IC15, IC25, IC40, and IC50 values (or EC15, EC25 ... etc.) in percent effluent; where IC is the inhibitory concentration and EC is the effective concentration and the number following indicates the percent affectation.
  - vii. TUC values (100/NOEC, 100/IC25, or 100/EC25)

- viii. Mean percent mortality (plus/minus standard deviation) after 96 hours in 100% effluent (if applicable)
- ix. NOEC and lowest observable effect concentration (LOEC) values for reference toxicant tests
- x. IC50 or EC50 values for reference toxicant tests
- xi. Available water quality measurements for each test (pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia)

5.2.2.2. **Compliance Summary.** The results of the chronic toxicity testing shall be provided in the next self-monitoring report (SMR) and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above in section 5.2.2.1, item numbers i, iii, v, vi (IC25 or EC25), vii, and viii.

### 5.3. Quality Assurance

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

### 5.4. Accelerated Monitoring Requirements

- 5.4.1. When acute toxicity is detected in the effluent above an effluent limitation established by this Order or when the chronic toxicity trigger of 1 TUc is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall resample immediately to verify the effluent toxicity. If the retest results in acute toxicity less than 90 percent survival or chronic toxicity greater than 1 TUc, the Discharger shall initiate accelerated monitoring.



- 5.4.2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results, or as otherwise instructed by the Executive Officer. Test results shall be submitted to the Central Coast Water Board within 15 days of the conclusion of each test.
- 5.4.3. Unless otherwise specified by the Executive Officer, if the implementation of the generic toxicity reduction evaluation (TRE) work plan indicates the source of the exceedance of the 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 evaluation (TIE) and TRE.
- 5.4.4. Unless otherwise specified by the Executive Officer, if none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.

## **5.5. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations**

- 5.5.1. If toxicity is confirmed to be present in the effluent during accelerated monitoring, a TIE may be required as part of the TRE.

Toxicity shall be confirmed if the acute toxicity effluent limitations established in section 4.4.1 are not met or chronic toxicity tests result in greater than 1 TUc.

- 5.5.2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the USEPA which include the following:
- *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, (USEPA, 1992a) (EPA-600-6-91-005F);
  - *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures*, Second Edition (USEPA, 1991a) (EPA-600-R-91-003);
  - *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity* (USEPA, 1993a) (EPA-600-R-92-080); and
  - *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (USEPA, 1993b) (EPA-600-R-92-081).
- 5.5.3. As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity

tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE includes the following:

- *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (TREs) (USEPA, April 1989) (EPA/600/2-88/070);
- *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (USEPA, August 1999) (EPA/833B-99/002) <https://www3.epa.gov/npdes/pubs/tre.pdf>; and
- *Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program*, dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement. [https://www.epa.gov/sites/production/files/2015-10/documents/owmfinaltreie\\_1\\_1.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/owmfinaltreie_1_1.pdf)

**6. LAND DISCHARGE MONITORING REQUIREMENTS- NOT APPLICABLE**

**7. RECYCLING MONITORING REQUIREMENTS**

**7.1. Monitoring Location REC-001**

The Discharger shall monitor recycled water as specified below at monitoring location REC-001 using test methods and MLs as described in sections 1.5 and 1.6 of this MRP:

**Table E-6. Recycled Water Monitoring Requirements**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
Total Flow	MGD	Continuous	Daily
Mean Daily Flow	MGD	Calculated	Monthly
Maximum Daily Flow	MGD	Calculated	Monthly
pH	s.u.	Grab	Daily
Total Dissolved Solids (TDS)	mg/L	C-24	Weekly
Oil and Grease	mg/L	Grab	Monthly

7.1.1. The Discharger shall maintain records of the volumes of water delivered to each reclamation site. For each location of reclamation/reuse, the following information shall be maintained and reported:

1. Locations and uses of recycled water
2. Landowners on whose property recycled water is used.
3. Total volume and maximum daily volume of water recycled during the reporting period
4. Percent of total flow that is recycled.

## 8. RECEIVING WATER MONITORING REQUIREMENTS

### 8.1. Monitoring Locations RW-001 and RW-002

The Discharger shall monitor receiving water in Pismo Creek as specified below at monitoring locations RW-001 and RW-002 using test methods and MLs as described in sections 1.5 and 1.6 of this MRP:

**Table E-7. Receiving Water Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	Every other year
TDS	mg/L	Grab	Every other year
Temperature	degrees F	Grab	Every other year
Oil and Grease	mg/L	Grab	Every other year
CTR Pollutants <sup>2</sup>	ug/L	Grab	Every other year
Title 22 Pollutants <sup>3</sup>	ug/L	Grab	Every other year
Basin Plan Table 3-1 Pollutants <sup>4</sup>	varies	Grab	Every other year
Basin Plan Table 3-2 Pollutants <sup>5</sup>	mg/L	Grab	Every other year

Table E-7 Notes:

1. Monitoring shall include sampling in a dry season and in a wet season during the expected five-year permit term that begins at the time of permit adoption.
2. CTR pollutants are those 126 pollutants identified in the CTR at 40 CFR 131.38. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the SIP.
3. Title 22 pollutants are those pollutants with primary MCLs established at Tables 64431-A and 64444-A of 22 CCR division 4, chapter 15.
4. Basin Plan Table 3-1 pollutants are those with water quality standards established in the Basin Plan's Table 3-1, *Guidelines for Interpretation of Quality of Water for Irrigation*.
5. Basin Plan Table 3-2 pollutants are those pollutants with water quality standards established in the Basin Plan's Table 3-2, *Water Quality Objectives for Agricultural Water Use*.

**9. OTHER MONITORING REQUIREMENTS – NOT APPLICABLE**

**10. REPORTING REQUIREMENTS**

**10.1. General Monitoring and Reporting Requirements**

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

**10.2. Self-Monitoring Reports**

10.2.1. The Discharger shall electronically submit SMRs using the State Water Board’s [California Integrated Water Quality System \(CIWQS\) Program website](http://www.waterboards.ca.gov/water_issues/programs/ciwqs) ([http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs](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. The Discharger shall use the current version of the Permittee Entry Template (PET) tool to configure data into the applicable CIWQS data format, and shall update that template according to this Order (e.g., add/delete parameters, revise limits, update monitoring locations, etc). Blank versions of the latest PET tool are available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/chc\\_npdes.shtml](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml)

10.2.2. The Discharger shall maintain sufficient staffing and resources to ensure it submits SMRs that are complete, accurate, and timely. This includes provision of training and supervision of individuals on how to prepare and submit SMRs.

10.2.3. 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 USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

10.2.4. Sampling and monitoring as required by this MRP shall begin on the effective date of this Order. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-8. Monitoring Periods and Reporting Schedule**

SMR Name	Order Limitations Section and MRP Table References	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report - General	Order section 4.1 and MRP Table E-2 (Influent) and Table E-3 (Effluent)	Monthly	First day of second calendar month following period of sampling

SMR Name	Order Limitations Section and MRP Table References	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report – Recycled Water	Order section 4.3 and MRP Table E-6 (Recycled Water)	Monthly	First day of second calendar month following period of sampling
NPDES Monitoring Report - Quarterly Constituents	Order section 4.3 and MRP Table E-3 (Effluent)	Quarterly	1 <sup>st</sup> Quarter: May 1 <sup>st</sup> 2 <sup>nd</sup> Quarter: Aug 1 <sup>st</sup> 3 <sup>rd</sup> Quarter: Nov 1 <sup>st</sup> 4 <sup>th</sup> Quarter: Feb 1 <sup>st</sup>
NPDES Monitoring Report - Chronic Toxicity	Order section 4.1 and MRP Table E-3 (Effluent)	Semi-annually	1 <sup>st</sup> half: May 1 <sup>st</sup> (following 1 <sup>st</sup> Qtr sampling) 2 <sup>nd</sup> half: Nov 1 <sup>st</sup> (following 3 <sup>rd</sup> Qtr sampling)
NPDES Monitoring Report - Acute Toxicity	Order section 4.1 and MRP Table E-3 (Effluent)	Semi-annually	1 <sup>st</sup> half: Aug 1 <sup>st</sup> (following 2 <sup>nd</sup> Qtr sampling) 2 <sup>nd</sup> half: Feb 1 <sup>st</sup> (following 4 <sup>th</sup> Qtr sampling)
NPDES Monitoring Report – CTR and Title 22	Order section 4.1 and MRP Table E-3 (Effluent)	Annually	February 1 <sup>st</sup> (following calendar year of sampling)
Summary Report	Attachment D, Central Coast Water Board Standard Provision 8.4.8	Annually	February 1 <sup>st</sup> (following calendar year of sampling)
NPDES Monitoring Report – Receiving Water	Order section 5.0 and MRP Table E-7 (Receiving Water)	Biennially	February 1 <sup>st</sup> , 2022, 2024, and 2026 (following sampling in calendar year 2021 dry season, 2023 wet season, and 2025 wet or dry season)
Report of Waste Discharge (ROWD) (application for reissuance)	Standard Conditions 2.2	Once per permit	January 1, 2026

10.2.5. **Reporting Protocols.** The Discharger shall report with each sample result the applicable reporting limit (RL) and the current method detection limit (MDL), as determined by the procedure in 40 CFR part 136. The Discharger shall report

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

- 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).
- Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as detected, but not quantified (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 (plus/minus a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- Sample results less than the laboratory's MDL shall be reported as not detected (ND).
- 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.

10.2.6. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and the definitions found in 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 RL.

10.2.7. **Multiple Sample Data.** When determining compliance with an average monthly effluent limit (AMEL), average weekly effluent limit (AWEL), or maximum daily effluent limit (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- 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.
- 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.

10.2.8. **Data and Violation reporting.** The Discharger shall submit SMRs in accordance with the following requirements:

- 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.
- The Discharger shall upload, as attachments to the SMR, all lab data sheets associated with all monitoring data being reported. This shall include all quality assurance, quality control, chain of custody, sample result sheets, and all other data sheets which provide the ability to verify and review the reported lab data the Discharger has entered into CIWQS.
- 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. Violations must also be created and reported electronically using the SMR module within CIWQS.

### 10.3. Discharge Monitoring Reports

DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version within CIWQS. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the [DMR website](http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring) at: [http://www.waterboards.ca.gov/water\\_issues/programs/discharge\\_monitoring](http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring)

### 10.4. Other Reports

The Discharger shall report the results of any special studies required by Special Provisions 6.3.2 (Special Studies, Technical Reports, and Additional Monitoring) of the Order with the first monthly SMR following the respective due date.

**ATTACHMENT F – FACT SHEET**

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**ATTACHMENT F – FACT SHEET**

As described in section 2.2 of this Order, the Central Coast Regional Water Quality Control Board (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 discharge. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

**1. PERMIT INFORMATION**

The following table summarizes administrative information related to the Arroyo Grande Produced Water Reclamation Facility.

**Table F-1. Facility Information**

WDID	3 400412441
Discharger	Sentinel Peak Resources California LLC
Name of Facility	Arroyo Grande Produced Water Reclamation Facility
Facility Address	1821 Price Canyon Road San Luis Obispo, CA 93401 San Luis Obispo County
Facility Contact, Title and Phone	Simon Ghosh Environmental Specialist (661) 395-5249 office
Authorized Person to Sign and Submit Reports	Simon Ghosh Environmental Specialist (661) 395-5249 office (661) 857-2861 cell
Mailing Address	1821 Price Canyon Road San Luis Obispo, CA 93401
Billing Address	SAME
Type of Facility	Industrial, Treatment of Produced Water Derived from Oil Extraction
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	A

Pretreatment Program	No
Recycling Requirements	Yes, Producer and on-site user
Facility Permitted Flow	0.84 million gallons per day (MGD)
Facility Design Flow	0.84 MGD
Watershed	Pismo Creek
Receiving Water	Pismo Creek (below the Hyla Crossing)
Receiving Water Type	Inland fresh surface water

1.1. Sentinel Peak Resources California LLC (Discharger) is the owner and operator of the Arroyo Grande Produced Water Reclamation Facility (Facility), an industrial wastewater treatment plant. The Facility has been previously owned by Freeport-McMoRan Oil and Gas and Plains Exploration and Production.

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 Pismo Creek (within the Estero Bay hydrologic unit), a water of the United States, tributary to the Pacific Ocean. The Discharger was previously regulated by Order No. R3-2013-0029 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0050628 adopted on December 5, 2013, which expired on February 1, 2019. Attachment B provides maps of the area around the Facility. Attachment C provides a treatment process and flow schematic of the Facility.

1.3. The Discharger filed a Report of Waste Discharge (ROWD) and applied for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on July 19, 2018. The application was deemed complete on August 15, 2018.

1.4. Regulations at title 40 of the Code of Federal Regulations (CFR) section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to title 23 of the California Code of Regulations (CCR) 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.

## 2. FACILITY DESCRIPTION

### 2.1. Description of Wastewater Treatment and Controls

The Discharger owns and operates a crude oil recovery facility within the Arroyo Grande Oil Field. As part of those operations, the Discharger operates an industrial wastewater reclamation facility for treatment of the produced water generated by the oil extraction process. Produced water is all water associated with oil and gas producing formations when the reservoir is produced and brought to the surface. The water may include flow

from above or below the hydrocarbon zone or flow from an injection recovery facility. No municipal or domestic wastewater is treated at the Facility. The treatment process utilizes two phases. The first phase consists of warm-lime softening, microfiltration to remove particulates, strong-acid cation softening, and cooling of the produced water as a pretreatment before the second phase. The second series of treatments include a two-pass reverse osmosis system, weak-ion exchange ammonia removal, chemical polishing, storage, cooling, and aeration. A portion of the treated water goes into a storage tank for periodic onsite irrigation uses, and the remainder of the treated water is discharged into the Pismo Creek, with volumes not to exceed 0.84 MGD. The treatment facilities are located approximately 1,700 feet from Pismo Creek and the outfall location.

**2.2. Discharge Points and Receiving Waters**

Effluent from the Facility is discharged to Pismo Creek below the Hydra Crossing, a water of the United States, located within the Estero Bay hydrologic unit.

**Table F-2. Discharge Locations**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Produced Water	35° 10' 56.928" N	-120° 37' 5.0448" W	Pismo Creek

On July 11, 2006, the Discharger submitted a report, “Revised Hydrologic, Water Quality, and Biological Characterization of the Pismo Creek Report,” in which Pismo Creek was characterized as possessing measured base flow conditions ranging from 0.58 to 1.1 MGD (0.9 to 1.76 cubic feet per second (cfs)).

A 2002 Department of Water Resources (DWR) report, titled “Water Resources of the Arroyo Grande – Nipomo Mesa,” states that groundwater in the area of the discharge is recharged by stream infiltration from Pismo Creek. Based on this information and the fact that agricultural wells are located immediately downstream from the discharge location, the Central Coast Water Board has determined that the discharge contributes to recharging groundwater used for agricultural purposes downstream of the discharge point.

The 2002 DWR report does not clearly indicate whether seawater intrusion (which had been identified in an earlier report) was occurring in the Pismo Creek basin. However, the report does clearly warn of potential seawater intrusion into the groundwater basin if groundwater extraction rates exceed the rate of recharge. Because the discharge has been found to contribute to groundwater recharge, the discharge also serves to prevent and/or reduce the potential for seawater intrusion into groundwater sources.

A 2009 California Department of Fish and Game (now known as California Department of Fish and Wildlife) report, titled “Pismo Creek/Edna Area Water Management Plan” (prepared on behalf of the Pismo Creek/Edna Area Steering Committee), states that ocean water, at high tide, flows into Pismo Creek for about 0.5 miles, up to a point where there is a levee protecting the Pismo Beach Wastewater Treatment Plant (WWTP). The Facility is upstream of the Pismo Beach WWTP, and as inflows are

stopped at the WWTP, the receiving waters of Pismo Creek at the Facility can be inferred to be freshwater.

In 2008, the Central Coast Water Board adopted Order No. R3-2008-0004 for the Facility, prior to complete construction of the Facility’s treatment processes and infrastructure. Order No. R3-2013-0029 rescinded the 2008 order as part of the normal five-year permit cycle. However, at the time of the renewed Order’s adoption in late December 2013, the Facility still had not reported any discharge, but was in the final stages of commissioning. Effluent discharge began in February 2014. Therefore, this Order No. R3-2021-0010 represents the first time the Central Coast Water Board has historic monitoring data to consider as part of the permit reissuance process.

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

Effluent limitations contained in the existing 2013 Order for discharges from Discharge Point No. 001 and representative monitoring data from Monitoring Location EFF-001 for the term of the previous Order are as follows:

**Table F-3. 2014-2020 Effluent Limitations and Monitoring Data**

Parameter	Units	R3-2013-0029 Effluent Limit: Average Monthly	R3-2013-0029 Effluent Limit: Maximum Daily	Highest Average Monthly Monitoring Result	Highest Maximum Daily Monitoring Result
Flow	MGD	--	0.84	--	0.82
Total Dissolved Solids (TDS)	mg/L	--	450	--	210
Oil and Grease	mg/L	--	35	--	Detected, but not quantified (less than 1 mg/L)
Acute Toxicity	TUa	--	1.0	--	0.41
Benzene	ug/L	1.0	2.0	0.88	0.88
Phenol	ug/L	1.0	2.0	Not detected	Not detected

Table F-3 Note: Monitoring data is from February 1, 2014, through December 1, 2020, as reported to CIWQS database from the Discharger’s SMRs. Units acronyms are million gallons per day (MGD), milligrams per liter (mg/L), acute toxicity units (TUa), and micrograms per liter (ug/L)

The R3-2013-0029 pH effluent limitation was 7.0 to 8.3 at all times. Daily grab sampling data from 2014-2020 has recorded effluent pH from 7.0 to 8.13.

## 2.4. Compliance Summary

The Discharger has an excellent compliance history since beginning effluent discharge in 2014. There have been no violations of limitations during the previous order and only one late monitoring event during one annual sampling cycle. Recycled water has been used in relatively limited volume onsite, and typically only for a few months of the year. The treated effluent discharge to Pismo Creek has not been reported or observed to cause any erosion, flooding, or habitat issues. During the late fall and early winter, the natural creek flows are reduced to less than one cubic feet per second due to natural conditions. The effluent discharge during those periods makes up the majority of creek flow below the effluent discharge point, providing additional flow for steelhead and critical habitat for the species. The Discharger continues to provide the Central Coast Water Board copies of the reports produced as part of the Discharger's monitoring related to National Marine Fisheries Service (NMFS) conditions.

This Order represents the first time the Discharger and Central Coast Water Board have had real-world monitoring data from the Facility and receiving waters to evaluate during preparation of discharge limitations and conditions. The analysis of the data indicates the Facility is operating as well, or better, than originally designed.

## 2.5. Planned Changes

Currently, no changes are planned.

## 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 Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order.

### 3.2. California Environmental Quality Act (CEQA)

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

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

3.3.1. **Water Quality Control Plan.** In 1975, the Central Coast Water Board first adopted the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan), with the most recent Basin Plan update being the June 14, 2019 edition.

The Basin Plan 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 Resources Control Board (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 applicable to Pismo Creek are as follows:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Ground Water Recharge (GWR)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Wildlife Habitat (WILD)
- Cold Fresh Water Habitat (COLD)
- Warm Fresh Water Habitat (WARM)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Rare, Threatened, or Endangered Species (RARE)
- Freshwater Replenishment (FRESH)
- Commercial and Sport Fishing (COMM)

Groundwater throughout the Central Coast Region is designated as having beneficial use for 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) on January 7, 1971, and amended this plan on September 18, 1975. The Thermal Plan has a specific water quality objective for warm interstate waters that “elevated temperature wastes shall not cause the temperature of warm interstate waters to increase by more than 5 degrees Fahrenheit (F) above natural temperature at any time or place.” This Order’s receiving water limitation 5.1.13 implements that objective. Requirements of this Order implement the Thermal Plan.

The discharge of treated effluent to Pismo Creek may at times be warmer than the temperature of the natural creek flow, most notably during late fall and early winter cold weather, and possibly during low flow conditions resulting from

sustained drought periods. Since sustained creek flow represents a benefit for steelhead habitat, the Discharger has additional criteria from NMFS to protect against an increase of harm or adverse effect to steelhead and critical habitat for the species due to the discharge conditions. In light of the benefit of continued creek flow, NMFS modified their original January 16, 2009 temperature criteria to allow for a variance of more than 5 degrees F, when the surface water temperature in Pismo Creek falls below 55 degrees F, so long as the effluent discharge is 60 degrees F or lower (email correspondence dated March 18, 2016, from NMFS to Discharger).

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

3.3.5. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA 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 USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005.

On May 2, 2017, the State Water Board adopted and approved *Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions* (SIP Part 2). With SIP Part 2's approval, the State Water Board approved one new narrative and four new numeric mercury water quality objectives to apply to those inland surface waters, enclosed bays, and estuaries of the state that have any of the following beneficial use designations: COMM, CUL, T-SUB, WILD, MAR, RARE, WARM, COLD, EST, or SAL. The provisions of SIP Part 2 are to be implemented through NPDES permits and WDRs, among other actions the Regional Water Boards may take. The SIP, including its new applicable revisions from SIP Part 2 for mercury, establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP and SIP Part 2.

3.3.6. **Domestic Water Quality.** In compliance with Water Code 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 maximum contaminant levels implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.

- 3.3.7. **Antidegradation Policy.** Federal regulation 40 CFR 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 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 CFR 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 CFR 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 Wildlife Code 2050 to 2097) or the Federal Endangered Species Act (16 U.S. Code 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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

CWA section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants in its regional area, the Central Coast Water Board must develop and implement total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources.

The USEPA approved the State's 2014/2016 303(d) list of impaired water bodies on April 6, 2018. The 2014/2016 303(d) list identifies Pismo Creek as impaired for *E. coli*, fecal coliform, dissolved oxygen, turbidity, and salinity (sodium and chloride). Currently, there are no TMDLs established for Pismo Creek. A TMDL for turbidity is scheduled to be completed by 2023, and the remaining pollutants' TMDLs are scheduled to be completed by 2027.

Due to the non-municipal source of wastewater to the Facility and type/level of treatment provided by the Facility, the discharge allowed by this Order is not expected to contribute to the impairment of the receiving water.

### 3.5. Other Plans, Policies and Regulations

- 3.5.1. **Stormwater Management.** For the control of stormwater discharged from the site of the wastewater treatment facilities, the Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order No. 2014-0057-DWQ and subsequent amendments, NPDES General Permit No. CAS000001, *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activities*, if applicable.
- 3.5.2. **Recycled Water Policy.** The State Water Board's Recycled Water Policy, which was adopted via Resolution No. 2009-0011, calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. Pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution No. 2009-0011, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff. The policy was added to establish participation in development of a regional groundwater basin/sub-basin salt/nutrient management plan.

The Recycled Water Policy was amended on January 22, 2013, and December 11, 2018. The current version of the Recycled Water Policy can be found here: [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2018/121118\\_7\\_final\\_amendment\\_oal.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf)

## 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 CFR: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, water quality-based effluent limitations (WQBELs) may be established using one or more of three methods described at 40 CFR 122.44(d) - 1) WQBELs may be established using a calculated

water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using USEPA criteria guidance published under CWA Section 304(a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

#### 4.1. Discharge Prohibitions

- 4.1.1. **Discharge Prohibition 3.1** (Discharge of waste not specifically regulated by this Order is prohibited): This prohibition is similar to the previous orders and is based on 40 CFR 122.21(a), duty to apply, and Water Code 13260, which requires filing a ROWD before discharges can occur. Discharges not described in the ROWD, and subsequently in this Order, are prohibited.
- 4.1.2. **Discharge Prohibition 3.2** (No discharge at a location or in a manner except as described by this Order). The Order authorizes a single, specific point of discharge to surface waters, and the limitations and conditions established by the Order are based on specific information provided by the Discharger and gained by the Central Coast Water Board through site visits, monitoring reports, and other information. Discharges to surface waters at locations not contemplated by this Order or discharges of a character not contemplated by this Order are therefore viewed as inconsistent with CWA 402's prohibition against discharges of pollutants except in compliance with the CWA's permit requirements, effluent limitations, and other enumerated provisions. This prohibition has been retained from the previous Order.
- 4.1.3 **Discharge Prohibition 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). The discharge of untreated or partially treated produced water from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR 122.41(m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order. This prohibition has been retained from the previous Order.
- 4.1.4. **Discharge Prohibition 3.4** (Creation of pollution, contamination, or nuisance, as defined by Water Code 13050, is prohibited). This prohibition is carried over from the previous Order and is based on Water Code 13050.
- 4.1.5. **Discharge Prohibition 3.5** (Discharge flow shall not exceed 0.84 MGD.) The purpose of the prohibition is to assure that the treatment plant's design capacities are not exceeded, and thereby, to assure efficient treatment of wastewater.

#### 4.2. Technology-Based Effluent Limitations

##### 4.2.1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 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. The discharge authorized by this Order must meet minimum federal technology-based requirements based on *Effluent Limitations Guidelines and Standards for the Oil and Gas Extraction Point Source Category* in 40 CFR 435, as well as meet Best Professional Judgment (BPJ) in accordance with 40 CFR 125, specifically, 40 CFR 125.3.

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

- **Best practicable treatment control technology (BPT)** represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- **Best available technology economically achievable (BAT)** represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- **Best conventional pollutant control technology (BCT)** represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.
- **New source performance standards (NSPS)** represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the Central Coast Water Board must consider specific factors outlined in 40 CFR 125.3. This Order did not use BPJ to derive any technology-based effluent limitations.

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

The Discharger's Produced Water Reclamation Facility is subject to technology-based effluent limitations established in 40 CFR 435, Effluent Guidelines and Standards for the Oil and Gas Extraction Point Source Category, Subpart C (Onshore Subcategory). The Effluent Guidelines and Standards prohibit

discharges from these operations, however certain exceptions to the discharge prohibitions are allowed.

Prior to the adoption of the original 2008 Order, the Discharger submitted documentation to the Central Coast Water Board justifying the exception to the discharge prohibition established at 40 CFR 435 Subpart E, for the Agricultural and Wildlife Water Use Subcategory. This exception permits discharges of produced water when it has a use in agriculture or wildlife propagation, meaning that the produced water is of high enough quality to be used for wildlife or livestock watering or other agricultural uses and that the produced water is actually put to such use during periods of discharge (40 CFR 435.51 (c)). USEPA established this exception because, in arid portions of the western United States, low-salinity produced waters are often a significant source of usable water for agricultural and wildlife propagation purposes (44 Fed. Reg. 22069, 22072 (April 13, 1979)). For a Discharger to qualify, the discharge must be necessary for irrigation or animal watering, among other uses (41 Fed. Reg. 44942, 4948 (October 13, 1976)).

As discussed in section 2.2 of this Fact Sheet, the Discharger submitted documentation that the discharge contributes to recharging groundwater used for agricultural purposes downstream and will contribute to recharge groundwater in a manner that will help prevent and/or reduce potential seawater intrusion. The water quality of the discharge (as per requirements in this permit) is adequate to support wildlife in and around Pismo Creek. Due to this qualification, the discharge meets applicable criteria for exception to the federal prohibition of discharge, based upon its use in agricultural and wildlife propagation.

Applicable Effluent Guidelines and Standards for the Agricultural and Wildlife Water Use Subcategory require that there be no discharge of pollutants from any source (other than produced water) associated with production, field exploration, drilling, well completion, or well treatment (i.e., drilling muds, drill cuttings, and produced sands), and that oil and grease in discharges of produced water shall not exceed a maximum daily effluent limit (MDEL) of 35 mg/L. These requirements are incorporated into this Order as discharge prohibitions and an MDEL for oil and grease.

### **4.3. Water Quality-Based Effluent Limitations**

#### **4.3.1. Scope and Authority**

CWA section 301(b) and 40 CFR 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 CFR 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) USEPA

criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

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

#### **4.3.2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

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

#### **4.3.3. Determining the Need for WQBELs**

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

The SIP, statewide policy that became effective on May 22, 2000, establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP, and the associated revisions to those procedures as outlined in SIP Part 2, 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 Discharger has been monitoring and reporting for its discharge and the receiving water conditions according to the previous Order No. R3-2013-0029 since February 2014. These monitoring data from February 2014 to December 2020 are the input for the RPA presented herein.

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 collected four receiving water samples upgradient of their discharge location. The hardness results ranged from 120 to 490 mg/L as CaCO<sub>3</sub>, with an average hardness of 295 mg/L. The Central Coast Water Board's Central Coast Ambient Water Monitoring Program conducts sampling of Pismo Creek near the Highway 101 crossing (downgradient of the effluent discharge location). The 71 samples collected from 2001 to 2015 by CCAMP ranged from 160 to 844 mg/L

as CaCO<sub>3</sub> hardness, with an average of 452 mg/L as CaCO<sub>3</sub>. In accordance with the SIP, the RPA adjusted the appropriate metals freshwater quality criteria and objectives using the minimum receiving water hardness (120 mg/L as CaCO<sub>3</sub>) as measured upstream of the discharge location.

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

- Trigger 1 – If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.
- Trigger 2 – If B is greater than C, and the pollutant is detected in effluent (MEC greater than ND), there is reasonable potential, and an effluent limitation is required.
- 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.

- **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 Pismo Creek, the applicable water column concentration is 0.012 micrograms per liter (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 0.2 ug/L in the previous orders to 0.012 ug/L in this Order. In other words, the mercury water quality objective is over 10 times more stringent than the previous objective.
- **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 0.011 ug/L. The Discharger collects effluent mercury samples on a quarterly basis.
- **Maximum ambient background concentration.** Instead of using the highest observed mercury concentration in the upstream receiving water (referred to as "B"), the value of B is to be determined as an arithmetic mean of all

mercury samples during a calendar year. For this RPA, the highest calendar year arithmetic mean based on the revised methodology for mercury in the receiving water was 0.0165 ug/L. However, note the revised methodology uses one half the detection limit for samples that are reported as non-detect by the laboratory. The receiving water samples did not have any detections above the detection limits, so the annual average represents one half the detection limit for those samples. The Discharger collects receiving water mercury samples every other year.

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

During the term of the previous orders, the Discharger submitted data from three sampling events in January 2007 of untreated produced water. This “worst-case” dataset was used in the RPA for the previous orders and was also submitted in a document titled *Revised Hydrologic Water Quality and Biological Characterization of Pismo Creek*. This resulted in reasonable potential findings (by Trigger 1) for both benzene and phenol. This Order is the first time the Central Coast Water Board had real-world monitoring data representative of the Facility’s treatment process and natural creek flows. Those data have been used in lieu of the theoretical data from previous permits. Of note, benzene and phenol no longer result in reasonable potential findings based on the actual treatment performance of the Facility.

The following table summarizes the RPA for each priority, toxic pollutant or title 22 pollutant that was measured in effluent during monitoring events from February 2014 through December 2020.

**Table F-4. Summary of RPA Results**

Pollutant	Units	MEC (ug/L)	Maximum Receiving Water Background (ug/L)	Most stringent water quality objective/criteria (ug/L)	RPA endpoint- Need effluent limit?
		(MEC)	(B)	(C)	
1,1,1-Trichloroethane	ug/L	<0.055	<0.072	200	No
1,1,2,2-Tetrachloroethane	ug/L	<0.075	<0.079	0.17	No
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/L	<0.050	<0.050	1200	No
1,1,2-Trichloroethane	ug/L	<0.054	<0.077	0.6	No
1,1-Dichloroethane	ug/L	<0.050	<0.050	5	No
1,1-Dichloroethylene	ug/L	<0.050	<0.050	0.057	No



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Pollutant	Units	MEC (ug/L)  (MEC)	Maximum Receiving Water Background (ug/L)  (B)	Most stringent water quality objective/criteria (ug/L)  (C)	RPA endpoint- Need effluent limit?
1,2,4-Trichlorobenzene	ug/L	<0.050	<0.080	5	No
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	<0.002	<0.002	0.2	No
1,2-Dichlorobenzene	ug/L	<0.050	<0.060	600	No
1,2-Dichloroethane	ug/L	<0.059	<0.092	0.38	No
1,2-Dichloropropane	ug/L	<0.050	<0.050	0.52	No
1,2-Diphenylhydrazine	ug/L	<0.200	<0.340	0.04	No
1,3-Dichlorobenzene	ug/L	<0.050	<0.050	400	No
1,3-Dichloropropylene	ug/L	<0.110	<0.120	0.5	No
1,4-Dichlorobenzene	ug/L	<0.050	<0.050	5	No
2,3,7,8-TCDD (Dioxin)	ug/L	<0.000	<0.151	1.3E-08	No
2,4,5-TP (Silvex)	ug/L	<0.016	<0.016	10	No
2,4,6-Trichlorophenol	ug/L	<0.200	<0.340	2.1	No
2,4-D	ug/L	<0.057	<0.057	70	No
2,4-Dichlorophenol	ug/L	<0.230	<0.260	93	No
2,4-Dimethylphenol	ug/L	<0.200	<0.200	540	No
2,4-Dinitrophenol	ug/L	<0.200	<0.200	70	No
2,4-Dinitrotoluene	ug/L	<0.260	<0.260	0.11	No
2,6-Dinitrotoluene	ug/L	<0.200	<0.410	No Criteria	No
2-Chloroethylvinyl Ether	ug/L	<0.200	<0.240	No Criteria	No
2-Chloronaphthalene	ug/L	<0.200	<0.230	1700	No
2-Chlorophenol	ug/L	<0.200	<0.370	120	No
2-Methyl-4,6-Dinitrophenol	ug/L	<0.240	<0.340	13.4	No
2-Nitrophenol	ug/L	<0.200	<0.280	No Criteria	No
3,3-Dichlorobenzidine	ug/L	<0.410	<0.410	0.04	No
4,4-DDD	ug/L	<0.002	<0.002	0.00083	No
4,4-DDE	ug/L	<0.002	<0.002	0.00059	No
4,4-DDT	ug/L	<0.001	<0.001	0.00059	No
4-Bromophenyl Phenyl Ether	ug/L	<0.200	<0.200	No Criteria	No
4-Chloro-3-methylphenol	ug/L	<0.200	<0.400	No Criteria	No
4-Chlorophenyl Phenyl Ether	ug/L	<0.200	<0.200	No Criteria	No
4-Nitrophenol	ug/L	<0.300	<0.660	No Criteria	No
Acenaphthene	ug/L	<0.200	<0.220	1200	No
Acenaphthylene	ug/L	<0.200	<0.200	No Criteria	No
Acrolein	ug/L	<1.000	<1.100	3	No
Acrylonitrile	ug/L	<0.400	<0.400	0.059	No
Alachlor	ug/L	<0.068	<0.074	2	No
Aldrin	ug/L	<0.230	<0.280	0.00013	No
alpha-BHC	ug/L	<0.200	<0.270	0.0039	No
alpha-Endosulfan	ug/L	<0.002	<0.002	0.056	No
Aluminum	ug/L	<14	140	50	No
Ammonia (as N)	mg/L	0.69	<0.033	3.18228	No
Anthracene	ug/L	<0.200	<0.200	9600	No
Antimony, Total Recoverable	ug/L	0.13	0.18	6	No
Arsenic, Total Recoverable	ug/L	<0.700	5.1	10	No
Asbestos	MFL	<0.190	<0.190	7	No

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Pollutant	Units	MEC (ug/L)	Maximum Receiving Water Background (ug/L)	Most stringent water quality objective/criteria (ug/L)	RPA endpoint- Need effluent limit?
		(MEC)	(B)	(C)	
Atrazine	ug/L	<0.036	<0.036	1	No
Barium	ug/L	2.3	110	1000	No
Bentazon	ug/L	<0.130	<0.130	18	No
Benzene	ug/L	0.88	<0.050	1	No
Benzidine	ug/L	<1.600	<2.700	0.00012	No
Benzo(a)anthracene	ug/L	<0.210	<0.300	0.0044	No
Benzo(a)pyrene	ug/L	<0.200	<0.200	0.0044	No
Benzo(b)fluoranthene	ug/L	<0.240	<0.410	0.0044	No
Benzo(ghi)perylene	ug/L	<0.220	<0.220	No Criteria	No
Benzo(k)fluoranthene	ug/L	<0.290	<0.290	0.0044	No
Beryllium, Total Recoverable	ug/L	<0.140	<0.140	4	No
beta-BHC	ug/L	<0.200	<0.250	0.014	No
beta-Endosulfan	ug/L	<0.001	<0.001	0.056	No
Bis (2-Chloroethoxy) Methane	ug/L	<0.200	<0.270	No Criteria	No
Bis (2-Chloroethyl) Ether	ug/L	<0.200	<0.680	0.031	No
Bis (2-Chloroisopropyl) Ether	ug/L	<0.300	<0.300	1400	No
Bis (2-Ethylhexyl) Phthalate	ug/L	<0.200	<0.200	1.8	No
Bromoform	ug/L	<0.050	<0.110	4.3	No
Butylbenzyl Phthalate	ug/L	<0.200	<0.260	3000	No
Cadmium, Total Recoverable	ug/L	0.11	-	0.8	No
Cadmium, Total Recoverable	ug/L	-	<0.110	2.8	No
Carbofuran	ug/L	<5.000	<5.000	0.5	No
Carbon tetrachloride	ug/L	<0.050	<0.050	0.25	No
Chlordane	ug/L	<0.380	<0.380	0.00057	No
Chloride	mg/L	No Data	92	106	Additional Monitoring Needed
Chlorobenzene	ug/L	<0.050	<0.050	70	No
Chlorodibromomethane	ug/L	<0.053	<0.074	0.41	No
Chloroethane	ug/L	<0.053	<0.053	No Criteria	No
Chloroform	ug/L	<0.050	<0.050	80	No
Chromium (III)	ug/L	<0.500	-	50	No
Chromium (III)	ug/L	-	<5.000	50	No
Chromium (total)	ug/L	2.6	1.7	50	No
Chromium (VI)	ug/L	2.6	0.037	11	No
Chrysene	ug/L	<0.200	<0.260	0.0044	No
cis-1,2-Dichloroethene	ug/L	<0.050	<0.081	6	No
Cobalt	ug/L	<0.2	0.28	50	No
Copper, Total Recoverable	ug/L	2	-	2.6	No
Copper, Total Recoverable	ug/L	2	1.2	11	No
Cyanide, Total (as CN)	ug/L	<1.4	<1.4	5.2	No
Dalapon	ug/L	<0.310	<0.330	110	No
delta-BHC	ug/L	<0.200	<0.280	No Criteria	No

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Pollutant	Units	MEC (ug/L)	Maximum Receiving Water Background (ug/L)	Most stringent water quality objective/criteria (ug/L)	RPA endpoint- Need effluent limit?
		(MEC)	(B)	(C)	
Di(2-ethylhexyl)adipate	ug/L	<0.025	<0.047	400	No
Dibenzo(a,h)anthracene	ug/L	<0.260	<0.260	0.0044	No
Dichlorobromomethane	ug/L	<0.050	<0.050	0.56	No
Dieldrin	ug/L	<0.390	<0.410	0.00014	No
Diethyl Phthalate	ug/L	<0.200	<0.200	23000	No
Dimethyl Phthalate	ug/L	<0.200	<0.250	313000	No
Di-n-butyl Phthalate	ug/L	<0.200	<0.200	2700	No
Di-n-octyl Phthalate	ug/L	<0.210	<0.310	No Criteria	No
Dinoseb	ug/L	<0.034	<0.034	7	No
Diquat	ug/L	<0.380	<0.380	0.5	No
Endosulfan Sulfate	ug/L	<0.003	<0.003	110	No
Endothal	ug/L	<0.750	<0.750	100	No
Endrin	ug/L	<0.001	<0.001	0.036	No
Endrin Aldehyde	ug/L	<0.370	<0.370	0.76	No
Ethylbenzene	ug/L	0.11	<0.050	300	No
Ethylene Dibromide	ug/L	<0.003	<0.004	0.05	No
Fluoranthene	ug/L	<0.200	<0.200	300	No
Fluorene	ug/L	<0.200	<0.200	1300	No
Fluoride	mg/L	0.034	0.59	1	No
gamma-BHC	ug/L	<0.001	<0.001	0.019	No
Glyphosate	ug/L	<2.100	<2.100	700	No
Heptachlor	ug/L	<0.001	<0.001	0.00021	No
Heptachlor Epoxide	ug/L	<0.001	<0.001	0.0001	No
Hexachlorobenzene	ug/L	<0.009	<0.009	0.00075	No
Hexachlorobutadiene	ug/L	<0.130	<0.240	0.44	No
Hexachlorocyclopentadiene	ug/L	<0.010	<0.010	50	No
Hexachloroethane	ug/L	<0.200	<0.320	1.9	No
Indeno (1,2,3-cd) Pyrene	ug/L	<0.260	<0.260	0.0044	No
Isophorone	ug/L	<0.200	<0.310	8.4	No
Lead, Total Recoverable	ug/L	0.35	-	15	No
Lead, Total Recoverable	ug/L	-	0.15	4	No
Manganese	ug/L	<0.450	330	50	No
Mercury, Total Recoverable	ug/L	0.011	0.0165	0.012	No
Methoxychlor	ug/L	<0.001	<0.001	0.03	No
Methyl Bromide	ug/L	<0.055	<0.066	48	No
Methyl Chloride	ug/L	<0.050	<0.090	No Criteria	No
Methylene Chloride	ug/L	<0.063	<0.080	4.7	No
Methyl-tert-butyl ether (MTBE)	ug/L	<0.050	<0.054	5	No
Molinate (Ordram)	ug/L	<0.036	<0.053	13	No
Molybdenum	ug/L	0.51	8	10	No
Naphthalene	ug/L	<0.072	<0.200	No Criteria	No
Nickel, Total Recoverable	ug/L	1.1	-	15	No
Nickel, Total Recoverable	ug/L	-	5.1	61	No
Nitrate (as N)	mg/L	0.081	<0.021	10	No
Nitrite (as N)	mg/L	<0.010	<0.010	1	No
Nitrobenzene	ug/L	<0.200	<0.260	17	No

Pollutant	Units	MEC (ug/L)	Maximum Receiving Water Background (ug/L)	Most stringent water quality objective/criteria (ug/L)	RPA endpoint- Need effluent limit?
		(MEC)	(B)	(C)	
N-Nitrosodimethylamine	ug/L	<0.560	<0.560	0.00069	No
N-Nitrosodi-n-Propylamine	ug/L	<0.210	<0.560	0.005	No
N-Nitrosodiphenylamine	ug/L	<0.200	<0.270	5	No
Oxamyl	ug/L	<20.000	<20.000	50	No
Polychlorinated biphenyls	ug/L	<0.020	<0.020	0.00017	No
Pentachlorophenol	ug/L	<0.012	<0.012	0.28	No
Phenanthrene	ug/L	<0.200	<0.200	No Criteria	No
Phenol, Single Compound	ug/L	110	<0.200	21000	No
Picloram	ug/L	<0.032	<0.032	500	No
Pyrene	ug/L	<0.220	<0.260	960	No
Radium-226+228	pCi/L	2.34	No data	5.0	No
Selenium, Total Recoverable	ug/L	0.61	1.8	5	No
Silver, Total Recoverable	ug/L	0.47	-	100	No
Silver, Total Recoverable	ug/L	-	<0.100	5.6	No
Simazine (Princep)	ug/L	<0.066	<0.078	4	No
Styrene	ug/L	<0.050	<0.050	100	No
Tetrachloroethylene	ug/L	<0.053	<0.053	0.8	No
Thallium, Total Recoverable	ug/L	<0.100	<0.100	1.7	No
Thiobencarb	ug/L	<0.035	<0.035	1	No
Toluene	ug/L	0.15	<0.054	150	No
Total Dissolved Solids	mg/L	210	720	450	<b>Yes</b>
Toxaphene	ug/L	<0.420	<0.420	0.0002	No
trans-1,2-Dichloroethylene	ug/L	<0.050	<0.050	10	No
Trichloroethylene	ug/L	<0.063	<0.072	2.7	No
Trichlorofluoromethane	ug/L	<0.059	<0.079	150	No
Vinyl Chloride	ug/L	<0.068	<0.068	0.5	No
Xylenes	ug/L	<0.150	<0.150	1750	No
Zinc, Total Recoverable	ug/L	27	-	34	No
Zinc, Total Recoverable	ug/L	-	14	140	No

Table F-4 Notes:

1. There are two rows for each of the hardness-dependent metals. The top row for each metal is for comparison of the MEC with the associated effluent-governing criteria, and the bottom row is for comparison of the maximum background concentration with the receiving water-governing criteria.
2. The MEC and maximum background concentrations are actual detected concentrations, with the exception of mercury concentrations, which as described previously are calendar year arithmetic means. Where the pollutant was not detected, the concentration is provided with a less-than symbol before the laboratory's reported detection limit.

The results of the RPA did not indicate a reasonable potential for any priority, toxic pollutants to cause or contribute to water quality objective exceedances. Using the SIP's evaluation procedure, TDS (not a priority, toxic pollutant) did show a

reasonable potential. Therefore, the existing effluent limitation is retained from the previous Order.

Additionally, the RPA was inconclusive for chloride due to the lack of effluent monitoring data. This Order includes quarterly effluent chloride monitoring. The additional monitoring data will provide the needed data to evaluate the reasonable potential during a subsequent permit renewal.

#### 4.3.4. **WQBEL Calculations**

If reasonable potential exists for a priority, toxic pollutant to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:

- If applicable and available, use of the WLA established as part of a TMDL.
- Use of a steady-state model to derive maximum daily effluent limits (MDELs) and average monthly effluent limits (AMELs).
- Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Central Coast Water Board.

Since many of the streams in the Central Coast region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed. Pismo Creek does not have approved TMDLs, and therefore there are no WLAs for this Facility. There is also no dynamic model approved by the Central Coast Water Board. Therefore, if priority, toxic pollutant WQBELs are required for this Order, the procedure is to use the steady-state model to derive MDELs and AMELs.

##### 4.3.4.1. **WQBELs Calculation Example**

The following demonstrates how WQBELs are established when reasonable potential exists for priority, toxic pollutants using a steady-state model to derive MDELs and AMELs.

###### Concentration-Based Effluent Limitations

Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

###### **Calculation of aquatic life AMEL and MDEL:**

**Step 1:** For each constituent requiring an effluent limitation, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state equation:

$$\begin{aligned} ECA &= C + D(C-B) && \text{when } C \text{ great than } B, \text{ and} \\ ECA &= C && \text{when } C \text{ less than or equal } B, \end{aligned}$$

Where C = The priority pollutant criterion/objective, adjusted if necessary, for hardness, pH and translators.

D = The dilution credit, and

B = The ambient background concentration

As discussed above, for this Order, dilution was not allowed; therefore  $ECA = C$

**Step 2:** For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of 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. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

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

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

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. All samples were reported as non-detect, and as such a CV of 0.6 was used for all.

**Step 3:** Select the most limiting (lowest) of the LTA.

$$LTA = \text{most limiting of } LTA_{acute} \text{ or } LTA_{chronic}$$

**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 CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$$

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

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

**Calculation of human health AMEL and MDEL:**

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

$$AMEL_{\text{human health}} = ECA_{\text{human health}}$$

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

$$MDEL_{\text{human health}} = AMEL_{\text{human health}} \times (\text{Multiplier}_{\text{MDEL}} / \text{Multiplier}_{\text{AMEL}})$$

**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.

**4.3.4.2. Calculated WQBELs.**

As shown in Table F-4, none of the priority, toxic pollutants resulted in a reasonable potential to exceed applicable water quality criteria or objectives. As a result, no WQBELs were required to be established using the steady-state model procedure detailed above.

**4.3.5. Whole Effluent Toxicity**

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

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

Because impacts of toxicity are not always lethal and not detectable through acute toxicity, and effluent data is not available for the discharge, a narrative chronic toxicity effluent limitation and monitoring requirements from the previous Order has been retained to evaluate compliance with the Basin Plan’s narrative toxicity objective.

The Discharger is required to conduct acute and chronic WET testing and/or monitoring, as specified in the Monitoring and Reporting Program (MRP-Attachment E, section 5). Special Provision 6.3.2 of this Order requires the Discharger to investigate the causes of effluent toxicity and identify and implement corrective actions to reduce or eliminate effluent toxicity. If the discharge demonstrates toxicity exceeding the acute toxicity effluent limitations or numeric chronic toxicity monitoring trigger, the Discharger may be required to initiate a TRE in accordance with an approved TRE workplan. The numeric chronic toxicity monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to perform accelerated chronic toxicity monitoring, as well as the threshold to evaluate the need to initiate a TRE if effluent toxicity has been demonstrated.

**4.3.6. Basin Plan Effluent Limitations**

**4.3.6.1 pH.** The Basin Plan establishes a water quality objective for pH of between 6.5 to 8.3 standard units for the protection of receiving waters with the beneficial use(s) of MUN, AGR, REC1 and REC2. In addition, the Basin Plan establishes a water quality objective 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 7.0 to 8.3 and this limitation is retained in the current permit.

**4.3.6.2. Total Dissolved Solids.** Produced waters generated during the production of crude petroleum and natural gas will contain a variety of dissolved salts with concentrations varying and dependent upon geographical locations. A 1976 USEPA study showed levels in produced waters from onshore facilities in California ranging from 580 mg/L to 27,300 mg/L TDS [USEPA, *Developmental Document for Interim Final Effluent Limitations Guidelines and Proposed New Source Performance Standards for the Oil and Gas Extraction Point Source Category*, EPA 440/1-76/055-a (1976)]. Due to potential future use of produced waters for regional agricultural purposes and the potential for elevated levels of TDS in the produced waters, the Central Coast Water Board established a water quality based effluent limitation for TDS of 450 mg/L in the previous Order, reflecting a recommended standard for waters used in agriculture. [Central Coast Water Board, *A Compilation of Water Quality Goals* (August 2000)]. Further, this effluent limitation is protective of the median groundwater objectives and surface water objectives for TDS of 900 mg/L and 650 mg/L, respectively, in the San Luis Obispo Creek sub-area of the Estero Bay basin and hydrologic unit. Although Pismo Creek is not located within the San Luis Obispo Creek sub-area, the treated water from this Facility may be recycled beneficially in that sub-area in the future given the agricultural activities in that sub-area and their proximity to the Facility. This effluent limitation is retained in this Order.

**4.3.6.2. Chloride.** The reasonable potential for the effluent to exceed water quality objectives for chloride was inconclusive due to lack of effluent monitoring



data. An effluent limitation is not triggered by the inconclusive result. However, this Order establishes annual effluent monitoring for chloride to provide the necessary information during the next RPA.

#### **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 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for benzene and phenol. The effluent limitations for these two pollutants have been removed in this Order.

This relaxation of effluent limitations is consistent with the exceptions listed in the anti-backsliding requirements of the CWA and federal regulations. Section 402(o)(2)(B)(i) of the CWA states that a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation if “information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.” The previous permit’s effluent limitations for benzene and phenol were derived from untreated samples of effluent, before construction of the processes had been completed. The current monitoring data, reflecting actual treatment performance, was not available at the time of the original permitting for the Facility and therefore represent new information which was not available at the time of original permit issuance. Benzene and phenol do not demonstrate a reasonable potential after the treatment process, and the removal of these effluent limitations is consistent with the anti-backsliding exception for new information.

##### **4.4.2. Antidegradation Policies**

Provisions of the Order are consistent with applicable antidegradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. This Order does not authorize increases in discharge rates or pollutant loadings, and its limitations and conditions otherwise ensure maintenance of the existing quality of receiving waters.

##### **4.4.3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of a restriction on oil and grease. The restriction on oil and grease is discussed in section 4.2.2 of this Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

An RPA was performed to determine the need for WQBELs 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. If priority, toxic pollutant(s) had been found to have a reasonable potential, then WQBEL(s) would have been established for those pollutants using the steady-state model procedures. To the extent that priority, toxic pollutant WQBELs would have been derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The procedures for calculating the individual WQBELs for priority pollutants are based on the CTR implemented by the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR 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.

#### **4.5. Interim Effluent Limitations – Not Applicable**

#### **4.6. Land Discharge Specifications – Not Applicable**

#### **4.7. Recycling Specifications**

This Order includes reclamation specifications reflecting Basin Plan water quality objectives for agricultural supply water. The reclamation limitations are consistent with effluent limitations described above, except that a broader range of pH (6.5 to 8.4) is allowed due to the less pH sensitive use and consistent with Basin Plan criteria. Also, toxicity limitations applicable to the stream discharge (for protection of aquatic life) are not applicable to irrigation uses and do not appear in the reclamation limitations.

Reclamation requirements have been carried over from Order No. R3-2013-0029.

### **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. All receiving water limitations are retained from the previous Order, including applicable limitations for chemical constituents identified in Tables 3-1, 3-2, and 3-3 of the Basin Plan.

## 5.2. Groundwater

Groundwater limitations included in section 5.2 of the Order include general objectives as established in Chapter 3, Section 3.3.4 of the Basin Plan. All groundwater limitations in this Order are retained from the previous Order.

## 6. RATIONALE FOR PROVISIONS

### 6.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable in 40 CFR 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR 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 CFR allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code 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 CFR parts 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

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

**Toxicity Reduction Requirements.** The Order retains the requirement to perform a TRE if the acute toxicity limitation is exceeded or if chronic toxicity is detected in the effluent above 1 chronic toxicity unit (TU<sub>c</sub>). When toxicity monitoring measures acute or chronic toxicity in the effluent above the limitation or trigger established by the Order, the Discharger is required to resample and retest. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement TRE requirements, or whether other measures are warranted.

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

The Discharger is required to develop and implement a BMP plan which prevents, or minimizes the potential for, release of toxic substances from ancillary activities to the waters of the United States through plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs include “methods, measures, or practices, selected by an agency to meet its nonpoint source control needs.” BMP plans may include structural and nonstructural controls and operation and maintenance procedures. This Order requires the Discharger to implement and update the BMP plan on an ongoing basis to ensure that no contaminated stormwater leaves the Facility’s property and enters surrounding surface waters.

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

### 6.2.5. **Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable**

### 6.2.6. **Other Special Provisions**

**Discharges of Stormwater.** For the control of stormwater discharged from the site of wastewater treatment and disposal facilities, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Resources Quality Control Board’s Water Quality Order 2014-0057-DWQ, *NPDES General Permit No. CAS0000001, NPDES General Permit for Storm Water Discharges Associated with Industrial Activities.*

### 6.2.7. **Compliance Schedules**

In general, an NPDES permit must include final effluent limitations that are consistent with CWA section 301 and with 40 CFR 122.44(d). There are exceptions to this general rule. The State Water Board’s Resolution 2008-0025 “Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits” (Compliance Schedule Policy) allows compliance schedules for new, revised, or newly interpreted water quality objectives or criteria, or in accordance with a TMDL. All compliance schedules must be as short as possible and may not exceed ten years from the effective date of the adoption, revision, or new interpretation of the applicable water quality objective or criterion, unless a TMDL allows a longer schedule. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric effluent limitations for that constituent or parameter, interim requirements and dates toward achieving compliance, and compliance reporting within 14 days after each interim date. The Order may also include interim requirements to control the pollutant, such as pollutant minimization and source control measures.

The permit limitations contained in this Order are not more stringent than the limitations previously implemented, therefore no compliance schedules are warranted.

## **7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

CWA 308 and 40 CFR 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code 13383 authorizes the Central Coast Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements related to discharges to navigable waters or publicly owned treatment works. Water Code 13267 further authorizes the Central Coast Water Board to establish such requirements related to discharges to any waters of the state within its region. The MRP (Attachment E of this Order) establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the inclusion of the monitoring and reporting requirements contained in the MRP for this facility and for the determination that the burden, including costs, of these requirements bears a reasonable relationship to the need for and benefits to be obtained through the provision of these reports

### **7.1. Influent Monitoring**

Influent monitoring requirements have been retained from the previous order.

Annual influent monitoring for major cations and anions have been added consistent with other Central Coast Water Board monitoring programs, such as Central Coast Ambient Monitoring Program and Irrigated Lands Program. The additional parameters will help efforts to discern sources of water quality impacts in the watershed through cation and anion mapping of various water sources.

### **7.2. Effluent Monitoring**

Effluent monitoring requirements have been retained from the previous order, with the exception of benzene, phenol, and radium-226+radium-228. Benzene and phenol monitoring requirements have been reduced from monthly to annually based on the results of the RPA, consistency of the existing monitoring data, and level of treatment provided at the Facility. Radium-226+radium-228 sampling has been reduced from quarterly to annually based on the results of the RPA, consistency of the existing monitoring data, and level of treatment provided at the Facility. The previous Order required a minimum of eight consecutive quarters of radium sampling before potential reduction to annual monitoring frequency, and the Discharger has completed 15 consecutive quarters. The new minimum sampling frequencies for these effluent parameters will be adequate for assessing permit compliance and provide needed data for future RPA evaluation.

Annual effluent monitoring for phthalate esters, boron, cobalt, iron, lithium, manganese, methylene blue activated substances, molybdenum, vanadium, calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate, and carbonate has been added to provide consistency with other Central Coast Water Board monitoring programs, such as the Central Coast Ambient Monitoring Program and the Irrigated Lands Program. The additional parameters will help:

- Efforts to discern sources of water quality impacts in the watershed through cation and anion mapping of various water sources.
- Address the lack of effluent data for chloride in the RPA evaluation which yielded an inconclusive result.
- Address the absence of effluent data for corresponding receiving water quality limitations derived from Basin Plan objectives.

### **7.3. Whole Effluent Toxicity Testing Requirements**

WET limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and or growth. This Order retains limitations for acute toxicity and a chronic toxicity trigger of 1 TUc, as well as monitoring requirements for acute and chronic toxicity for Discharge Point No. 001.

### **7.4. Recycled Water Monitoring**

Recycled water monitoring is necessary to determine compliance with applicable limitations and evaluate compliance. Monitoring requirements are retained from the previous Order, with frequencies established consistent with effluent monitoring requirements, with the exception of benzene and phenol. The recycled water is treated identically to effluent at the Facility. Therefore, the requirements for effluent sampling for benzene and phenol are adequate as effluent and recycled water both have the same influent source and treatment processes at the Facility.

### **7.5. Receiving Water Monitoring**

Surface water receiving water monitoring requirements are retained from the previous Order as necessary to determine compliance with surface water limitations and for the protection of public health.

### **7.5. Other Monitoring Requirements – Not Applicable**

#### **7.5.1. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program**

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA 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. If required to participate, 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 USEPA's DMR-QA Coordinator and Quality Assurance Manager.

## 8. PUBLIC PARTICIPATION

The Central Coast Water Board considered the reissuance of WDRs that will serve as an NPDES permit for the Sentinel Peak Resources Arroyo Grande Produced Water Facility. As a step in the WDR renewal process, Central Coast Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

### 8.1. Notification of Interested Persons

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

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

<https://waterboards.ca.gov/centralcoast>

### 8.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process.

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 **February 12, 2021**. No comments were received during this comment period.

### 8.3. Public Hearing

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

Date:	April 16, 2021
Time:	8:00 am-5:00 pm
Location:	Via web conference as mandated by State guidance on public gatherings

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

respond to questions. No questions on the proposed order were presented during the consideration of the item, and it was approved 5-0 on the consent agenda.

#### **8.4. Reconsideration of Waste Discharge Requirements**

Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and 23 CCR 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](mailto:waterqualitypetitions@waterboards.ca.gov)

For [instructions on how to file a water quality petition for review](#), please use this website link:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wqpetition\\_instr.shtml](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

#### **8.5. Information and Copying**

The ROWD, other supporting documents, and comments received are on electronic file and may be inspected. Due to State guidance in response to Covid-19, please contact the Central Coast Water Board to facilitate the electronic review of documents in lieu of a physical office visit. Copying of documents may be arranged through the Central Coast Water Board by contacting the Central Coast Water Board at [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov) or 805-549-3147.

#### **8.6. Register of Interested Persons**

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

#### **8.7. Additional Information**

Requests for additional information or questions regarding this order should be directed to Katie DiSimone, Central Coast Water Board Water Resource Control Engineer, at [katie.disimone@waterboards.ca.gov](mailto:katie.disimone@waterboards.ca.gov) or 805-542-4638.