

North Coast Regional Water Quality Control Board

**Mendocino City Community Services District
Waste Discharge Requirements and
Master Recycling Permit
Order R1-2022-0001
NPDES No. CA0022870
WDID No. 1B83129OMEN**

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

| | |
|------------------|--|
| Permittee | Mendocino City Community Services District (CSD) |
| Name of Facility | Mendocino City CSD Wastewater Treatment Plant |
| Facility Address | 10500 Kelly Street Mendocino, CA 95460 Mendocino County |

Table 1. Discharge Location

| Discharge Point | Effluent Description | Discharge Point Latitude (North-South) | Discharge Point Longitude (East-West) | Receiving Water |
|-----------------|-----------------------------|--|---------------------------------------|-----------------------|
| 001 | Tertiary Treated Wastewater | 39° 13' 21" | 123° 48' 30" | Pacific Ocean |
| 002 | Tertiary Treated Wastewater | --- | --- | Recycled Water System |

| | |
|---------------------------------------|-----------------------|
| This Order was adopted on: | June 9, 2022 |
| This Order shall become effective on: | August 1, 2022 |
| This Order shall expire on: | July 31, 2027 |

The Permittee shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than: **July 31, 2026**. The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, North Coast Region have classified this discharge as follows: **Minor discharge**

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, North Coast Region, on the date indicated above.

Matthias St. John, Executive Officer

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1. FACILITY INFORMATION

Information describing the Mendocino City Community Services District (CSD) (Permittee), Mendocino City CSD Wastewater Treatment Plant (Facility) is summarized on the cover page and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

2.1. Legal Authorities

This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Permittee to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order. This Order also serves as a Master Recycling Permit pursuant to article 4, chapter 7, division 7 of the Water Code (commencing with section 13500).

2.2. Background and Rationale for Requirements

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

2.3. Provisions and Requirements Implementing State Law

The provisions/requirements in subsections 3.5, 3.6, 3.8, 4.3, 5.2, and 6.3.5.1.1 of this Order and sections 7, 9.1, 10.4.4, 10.5.2, and 10.5.3 of the Monitoring and Reporting Program 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 Regional Water Board has notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them

with an opportunity to submit their written comments and recommendations.
Details of the notification are provided in the Fact Sheet.

2.5. Consideration of Public Comment

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that Order R1-2015-0039 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 Permittee shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

3. DISCHARGE PROHIBITIONS

- 3.1. The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.
- 3.2. Creation of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code is prohibited.
- 3.3. The discharge of sludge or digester supernatant is prohibited, except as authorized under section 6.3.5.3 of this Order (Sludge Disposal and Handling Requirements).
- 3.4. The discharge or recycling use of untreated or partially treated waste (receiving a lower level of treatment than described in section 2.1 of the Fact Sheet) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Attachment D, Standard Provisions 1.7 (Bypass) and 1.8 (Upset).
- 3.5. Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the state or (b) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050(m) is prohibited.
- 3.6. The discharge of waste to land that is not owned by the Permittee, governed by District ordinance, or under agreement to use by the Permittee, or for which the Permittee has explicitly permitted such use, is prohibited, except for use for fire suppression as provided in title 22, sections 60307(a) and 60307(b) of the CCR.
- 3.7. The discharge of waste at any point not described in Finding 2.2 of the Fact Sheet or authorized by a permit issued by the State Water Resources Control Board (State Water Board) or another Regional Water Board is prohibited.
- 3.8. The discharge of recycled, filtered wastewater to a use area other than those designated for that purpose is prohibited.
- 3.9. The average dry weather flow (ADWF) of waste through the Facility shall not exceed 0.3 million gallons per day (mgd). Peak daily wet weather flows through the Facility shall not exceed 1.0 mgd. Compliance with this prohibition shall be determined as defined in sections 7.10 and 7.11 of this Order.
- 3.10. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited under Water Code section 13375.
- 3.11. The discharge of sludge directly into the ocean or into a waste stream that discharges to the ocean is prohibited.
- 3.12. The bypassing of untreated or partially treated wastes containing concentrations of pollutants in excess of those of Ocean Plan Tables 3 or 4 (2019) is prohibited

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. Effluent Limitations – Discharge Point 001

4.1.1. Final Effluent Limitations – Discharge Point 001

Table 2. Effluent Limitations¹

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum | 6-Month Median |
|--|-----------------------|-------------------------|----------------|---------------|-----------------------|-----------------------|----------------|
| Biochemical Oxygen Demand 5-day @ 20°C | mg/L | 30 | 45 | --- | --- | --- | --- |
| Total Suspended Solids | mg/L | 30 | 45 | --- | --- | --- | --- |
| pH | standard units (s.u.) | --- | --- | --- | 6.0 | 9.0 | --- |
| Oil and Grease | mg/L | 25 | 40 | --- | --- | 75 | --- |
| Settleable Solids | mL/L | 1.0 | 1.5 | --- | --- | 3.0 | --- |
| Turbidity | NTU | 75 | 100 | --- | --- | 225 | --- |
| Total Residual Chlorine | mg/L | --- | --- | 0.81 | --- | 6.06 | 0.20 |
| TCDD Equivalents | µg/L | 3.94 x 10 ⁻⁷ | --- | --- | --- | --- | --- |

Table Notes

1. See Definitions in Attachment A and Compliance Determination discussion in section 7 of this Order.

- 4.1.1.1. The Permittee shall maintain compliance with the above effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, EFF-002, and EFF-003 as described in the Monitoring and Reporting Program, Attachment E:
- 4.1.1.2. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent. Percent removal shall be determined from the monthly average value of influent wastewater concentration in comparison to the monthly average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Locations INF-001 and EFF-001, respectively.
- 4.1.1.3. **Disinfection:** Disinfected effluent discharged from the wastewater treatment plant through Discharge Point 001 to the Pacific Ocean shall not contain total coliform bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-002:
 - 4.1.1.3.1. The median value of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 70 per 100 milliliters (mL), in a calendar month; and
 - 4.1.1.3.2. No samples shall exceed an MPN of 230 per 100 mL.

4.1.2. **Interim Effluent Limitations – Not Applicable**

This Order does not establish interim effluent limitations or schedules for compliance with final limitations.

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

This Order does not authorize land discharge.

4.3. **Water Recycling Specifications and Requirements – Discharge Point 002**

4.3.1. **Water Recycling Specifications**

- 4.3.1.1. The Permittee shall maintain compliance with the following specifications at Discharge Point 002, with compliance measured at Monitoring Location REC-001 as described in the attached MRP.

4.3.1.2.

Table 3. Recycled Water Discharge Specifications¹ – Discharge Point 002 (Monitoring Location REC-001)

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
|--|-------|-----------------|----------------|---------------|-----------------------|-----------------------|
| Biochemical Oxygen Demand 5-day @ 20°C | mg/L | 10 | 15 | 20 | --- | --- |
| Total Suspended Solids | mg/L | 10 | 15 | 20 | --- | --- |
| pH | s.u. | --- | --- | --- | 6.0 | 9.0 |
| Nitrate, Total (as N) | mg/L | 10 | --- | --- | --- | --- |

Table Notes

1. See Definitions in Attachment A and Compliance Determination discussion in section 7 of this Order.

4.3.1.3. **Disinfection.** Disinfected tertiary treated domestic wastewater discharged at Discharge Point 002 to the water recycling system shall not contain total coliform bacteria exceeding the following concentrations, as measured at Monitoring Location REC-001:

- 4.3.1.3.1. The median value of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 mL utilizing the bacteriological results of the last 7 days for which analyses have been completed;
- 4.3.1.3.2. The number of total coliform bacteria shall not exceed an MPN of 23 per 100 mL in more than one sample in any 30-day period; and
- 4.3.1.3.3. No single sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.

4.3.2. **Water Recycling Requirements**

- 4.3.2.1. The Permittee shall comply with applicable state and local requirements regarding the production and use of recycled wastewater, including requirements of Water Code sections 13500 – 13577 (Water Recycling) and State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW) regulations at title 22, sections 60301 – 60357 of the CCR (Water Recycling Criteria).
- 4.3.2.2. The Permittee shall maintain an up-to-date Division of Drinking Water (DDW) approved title 22 Recycled Water Engineering Report. The Permittee shall submit to DDW and the Regional Water Board a Recycled Water Engineering Report prepared in accordance with title 22 requirements within 6 months of the permit effective date. The Permittee shall receive approval of its title 22 Engineering Report from DDW prior to adding any new recycled water user(s).
- 4.3.2.3. The Permittee shall be responsible for ensuring that recycled water meets the quality standards of this Order and for the operation and maintenance of transport facilities and associated appurtenances. The Permittee shall hold the recycled water users responsible for the application and use of recycled water on their designated areas and associated operations and maintenance in accordance with all applicable title 22 requirements.
- 4.3.2.4. The Permittee shall be responsible for the operation and maintenance of transport facilities and associated appurtenances necessary to convey and distribute the recycled water from the point of production to the point of use.
- 4.3.2.5. The Permittee shall notify the Regional Water Board Executive Officer in anticipation of recycling water at a new location prior to commencement of water recycling activities at the new location. The notice shall include the following: site location, acreage involved, County Assessor Parcel number(s), name of property owner, name of use site supervisor, estimation of the anticipated volume of recycled water to be used, demonstration that recycled water will be applied at agronomic rates, a description of recycled water management facilities and BMPs that will be used to ensure compliance with the requirements of this Order, and demonstration of CEQA compliance.
- 4.3.2.6. The Permittee shall designate a Recycled Water Use Supervisor to operate and maintain the recycled water use areas. The Recycled Water Use Supervisor shall be responsible for the recycled water system. Specific responsibilities of the Recycled Water Use Supervisor, at a minimum, shall include the following:
 - 4.3.2.6.1. Proper installation, operation, and maintenance of the irrigation system;
 - 4.3.2.6.2. Control of onsite piping to prevent any cross-connections with potable water supplies;

- 4.3.2.6.3. Development and implementation of a set of procedures to verify on an ongoing basis that cross-connections have not occurred between potable water supplies and recycled water supplies;
- 4.3.2.6.4. Routine inspection and maintenance of backflow prevention devices installed to protect potable water supplies, consistent with section 7605 of title 17 of the CCR; and
- 4.3.2.6.5. General responsibilities to ensure compliance with this Order and continuous implementation of any BMPs identified as necessary to prevent potential hazards to public health and to protect the environment. The Permittee shall ensure that each recycled water user properly installs, operates, and maintains the irrigation system to ensure compliance with all requirements of this Order.
- 4.3.2.7. The Permittee shall conduct periodic inspections of the irrigation system, facilities, and operations to monitor and ensure compliance with the conditions of this Order.
- 4.3.2.8. The Permittee shall report all violations of this Order in the Permittee's recycled water/irrigation monitoring reports, including incidental runoff events that the Permittee is aware of.
- 4.3.2.9. The Permittee shall ensure that each recycled water user prevents surface runoff of recycled water. The Regional Water Board recognizes that even with diligent implementation of best management practices (BMPs), incidental runoff events may occur on occasion. Incidental runoff is defined as unintended small amounts of runoff implemented. Examples of incidental runoff include unintended, minimal over-spray from sprinklers that escapes the recycled water use area or accidental breakage of a sprinkler head on a properly maintained irrigation system. Water leaving an irrigation/recycled water use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence. Incidental runoff events are typically infrequent, low volume, accidental, not due to a pattern of neglect or lack of oversight, and are promptly addressed.
- 4.3.2.10. All runoff incidents, including incidental runoff shall be summarized in the Permittee's recycled water monitoring reports. Enforcement action shall be considered for runoff that is not incidental but inadequate oversight or response by the Permittee, repeated runoff incidents that were within the Permittee's control, where incidental runoff causes violations of water quality objectives, incidents that create a condition of pollution or nuisance, or discharges that reach surface waters in violation of Discharge Prohibitions in section 3 of this Order and/or Water Recycling Requirements specified in section 4.3.2 of this Order.

- 4.3.2.11. The use of treated effluent for irrigation shall not result in unreasonable waste of water.
- 4.3.2.12. All use of treated effluent for irrigation provided pursuant to this Order shall be treated and managed in conformance with all applicable provisions of the Recycled Water Policy.
- 4.3.2.13. The discharge or use of treated effluent for irrigation shall not cause or contribute to an exceedance of any applicable water quality standard. The Permittee shall be responsible for ensuring that all recycled water meets all terms and conditions of this Order, including the quality standards in sections 4 and 5 of this Order.
- 4.3.2.14. The Permittee shall discontinue all delivery of treated effluent for irrigation during any period that there is reason to believe that the requirements for use as specified in this Order or the requirements of DDW or USEPA are not being met. The delivery of treated effluent for irrigation shall not resume until all conditions have been corrected.
- 4.3.2.15. Disinfected tertiary recycled water shall not be irrigated within 50 feet of any domestic water supply well or domestic water supply surface intake, unless the technical requirements specified in CCR title 22, section 60310(a) have been met and approved by DDW.
- 4.3.2.16. The use of treated effluent for irrigation shall not cause degradation of any water supply.
- 4.3.2.17. Areas irrigated with treated effluent shall be managed to prevent ponding and conditions conducive to the proliferation of mosquitoes and other disease vectors, and to avoid creation of a public nuisance or health hazard. The following practices shall be implemented, at a minimum:
 - 4.3.2.17.1. Irrigation water shall infiltrate completely within a 48-hour period; and
 - 4.3.2.17.2. Low-pressure and unpressurized pipelines and ditches that may be accessible to mosquitoes shall not be used to store recycled water.
- 4.3.2.18. All areas where treated effluent is used for irrigation that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide that include the following wording: 'RECYCLED WATER – DO NOT DRINK'. [CCR title 22, section 60310(g)] Each sign shall display an international symbol similar to that shown in CCR title 22, Figure 60310-A. These warning signs shall be posted at least every 500 feet with a minimum of a sign at each corner and access road. DDW may accept alternative signage or wording, or an educational program, provided that the Permittee demonstrates to DDW that the alternative approach will assure an equivalent degree of public notification.

- 4.3.2.19. The seasonal nutritive loading of the treated effluent used for irrigation, including the nutritive value of organic and chemical fertilizers and of the treated effluent, shall not exceed the nutritive demand of the landscape.
- 4.3.2.20. Treated effluent used for irrigation shall not be allowed to escape from the distribution system and at the recycled water use areas in the form of surface runoff. [CCR title 22, section 60310(e)] However, incidental runoff of recycled water, as defined in section 4.3.2.9, above, is not a violation of this Order. Where appropriate, practices and strategies to prevent the occurrence of runoff shall include, but not be limited to:
 - 4.3.2.20.1. A minimum 50-foot setback to all surface waters or provide written documentation of appropriate BMPs that will be implemented to prevent or minimize the potential for runoff discharging to surface water;
 - 4.3.2.20.2. Implementation of an Operations and Maintenance Plan that provides for detection of leaks (for example from sprinkler heads), and correction within 72 hours of learning that runoff, or prior to release of 1,000 gallons, whichever comes first;
 - 4.3.2.20.3. Proper design and aim of sprinkler heads;
 - 4.3.2.20.4. Proper design and operation of the irrigation system;
 - 4.3.2.20.5. Refraining from application during precipitation events;
 - 4.3.2.20.6. Application at an agronomic rate that does not exceed the water or nutrient demand of the crop or vegetation being irrigated;
 - 4.3.2.20.7. Use of repeat start times and/or multiple water days with short run times to increase irrigation efficiency and reduce runoff potential. The goal of this BMP is to apply the volume of water needed to meet the needs of the crop or vegetation being irrigated by breaking the volume up into smaller volumes. For example, apply one hour of irrigation in four 15-minute applications, separated by an hour each. This will allow more water to soak into the ground and reduce runoff;
 - 4.3.2.20.8. Maintenance of irrigation infrastructure (pipelines, pumps, etc.) to prevent and minimize breakage and leaks; and
 - 4.3.2.20.9. Adequate protection of all effluent storage reservoirs and ponds against overflow, structural damage, or a reduction in efficiency resulting from a 25-year, 24-hour storm or flood event or greater, and notification of the Regional Water Board Executive Officer, if a discharge occurs. Use areas that are spray irrigated and allow public access shall be irrigated during periods of minimal use. Consideration shall be given to allow maximum drying time prior to subsequent public use.

- 4.3.2.21. Direct or windblown spray, mist, or runoff from irrigation areas shall not enter dwellings, designated outdoor eating areas, or food handling facilities, roadways, or any other area where the public would accidentally be exposed to recycled water. [CCR title 22, section 60310(e)(3)]
- 4.3.2.22. All irrigation equipment, pumps, piping, valves, quick couplers and outlets shall be a type or secured in a manner that only permits operation by authorized personnel and shall be appropriately marked to differentiate them from potable facilities.
- 4.3.2.23. The main shutoff valve of the irrigation system meter shall be tagged with a recycled water warning sign. The valve shall be equipped with an appropriate locking device to prevent unauthorized operation of the valve.
- 4.3.2.24. The Permittee shall implement the requirements of the California Health and Safety Code (CHSC), section 116815 regarding the installation of purple pipe. CHSC section 116815 requires that “all pipes installed above or below the ground, on or after June 1, 1993, that are designed to carry recycled water, shall be colored purple or distinctively wrapped with purple tape.” Section 116815 also contains exemptions that apply to municipal facilities that have established a labeling or marking system for recycled water used on their premises and for water delivered for agricultural use. The Permittee shall document compliance with this requirement on an annual basis in its annual monitoring report. The Permittee shall continue to implement the requirements of CHSC section 116815 during the term of this Order.
- 4.3.2.25. The use of recycled water for dust suppression shall only occur during periods of dry weather, shall be limited to periods of short duration, and shall be limited to areas under the control of the Permittee.

4.4. Other Requirements

4.4.1. Filtration Process Requirements

- 4.4.1.1. **Filtration Rate.** When discharging to the recycled water system, the rate of filtration through the tertiary filters, as measured at Monitoring Location INT-001, shall not exceed five (5) gallons per minute per square foot of surface area or other filtration rates authorized in writing by the Regional Water Board Executive Officer and under conditions recommended by DDW.
- 4.4.1.2. **Turbidity.** The effluent from the filtration system shall at all times be filtered such that the filtered effluent does not exceed any of the following specifications at Monitoring Location EFF-002, as described in the attached MRP (Attachment E):
 - 4.4.1.2.1. An average of 2 Nephelometric Turbidity Units (NTU) during any 24-hour period;

4.4.1.2.2. 5 NTU more than 5 percent of the time during any 24-hour period; and

4.4.1.2.3. 10 NTU at any time.

4.4.2. **Disinfection Process Requirements.**

Treated effluent shall be disinfected in a manner that ensures effective pathogen reduction as described in the following specifications, with compliance measured at Monitoring Location REC-001:

4.4.2.1. Before recycled water is used to irrigate the athletic fields, a CT value¹ of not less than 450 milligram-minutes per liter shall be achieved by maintaining a chlorine residual in the recycled water storage tank for a predetermined contact time. The minimum allowable contact time, between the time pumping from the Facility is stopped and the time irrigation begins, is 90 minutes.

4.4.2.2. Recycled water not meeting the CT criteria shall not be discharged for irrigation at the athletic fields.

4.4.3. **Storage Ponds.** Ponds used for the storage of recycled water shall be constructed in a manner that protects groundwater.

5. **RECEIVING WATER LIMITATIONS**

5.1. **Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. Receiving water conditions not in conformance with the limitation are not necessarily a violation of this Order. The Regional Water Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred and /or may consider other available information.

The discharge shall not cause the following in the receiving water upon completion of initial dilution:

5.1.1. **Ocean Plan**

5.1.1.1. **Bacterial Characteristics**

¹ The CT value is the product of total chlorine residual and modal contact time measured at the same period. The modal contact time is the amount of time that elapsed between the time that a tracer, such as salt or dye, is injected into the influent at the entrance of the chlorination chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber.

- 5.1.1.1.1. **Water-Contact Standards.** Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone designated for water contact recreation use by the Regional Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column:
- 5.1.1.1.1.1. A 30-day geometric mean of fecal coliform density not to exceed 200 per 100 mL, calculated based on the five most recent samples from each site, and a single sample maximum not to exceed 400 per 100 mL.
- 5.1.1.1.1.2. A 6-week rolling geometric mean of enterococci not to exceed 30 CFU per 100 mL, calculated weekly, and a statistical threshold value of 110 CFU per 100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
- 5.1.1.1.2. **Shellfish Harvesting Standards.** At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacterial objectives shall be maintained throughout the water column:
- 5.1.1.1.2.1. The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.
- 5.1.1.2. **Physical Characteristics**
- 5.1.1.2.1. Floating particulates and oil and grease shall not be visible.
- 5.1.1.2.2. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- 5.1.1.2.3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- 5.1.1.2.4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- 5.1.1.2.5. Trash shall not be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance.
- 5.1.1.3. **Chemical Characteristics**
- 5.1.1.3.1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.

- 5.1.1.3.2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- 5.1.1.3.3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- 5.1.1.3.4. The concentration of substances set forth in Chapter II, Table 3 of the Ocean Plan shall not be increased in marine sediments to levels which would degrade indigenous biota.
- 5.1.1.3.5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- 5.1.1.3.6. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
- 5.1.1.3.7. Discharges shall not cause exceedances of water quality objectives for ocean waters of the state established in Chapter II, Table 3 of the Ocean Plan.
- 5.1.1.4. **Biological Characteristics**
 - 5.1.1.4.1. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
 - 5.1.1.4.2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
 - 5.1.1.4.3. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- 5.1.1.5. **Radiological Standards**
 - 5.1.1.5.1. Discharge of radioactive waste shall not degrade marine life.
- 5.1.1.6. **General Standards**
 - 5.1.1.6.1. The discharge shall not cause a violation of any applicable water quality standard for the receiving waters adopted by the Regional Water Board or the State Water Board as required by the CWA and regulations adopted thereunder.
 - 5.1.1.6.2. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
 - 5.1.1.6.3. Waste discharged to the ocean must be essentially free of:

- 5.1.1.6.3.1. Material that is floatable or will become floatable upon discharge.
- 5.1.1.6.3.2. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.
- 5.1.1.6.3.3. Substances which will accumulate to toxic levels in marine waters, sediments or biota.
- 5.1.1.6.3.4. Substances that significantly decrease the natural light to benthic communities and other marine life.
- 5.1.1.6.3.5. Materials that result in aesthetically undesirable discoloration of the ocean surface.
- 5.1.1.6.4. Waste effluents shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.
- 5.1.1.6.5. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:
 - 5.1.1.6.5.1. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports.
 - 5.1.1.6.5.2. Natural water quality conditions are not altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
 - 5.1.1.6.5.3. Maximum protection is provided to the marine environment.
 - 5.1.1.6.5.4. The discharge does not adversely affect recreational beneficial uses such as surfing and beach walking.

5.2. **Groundwater Limitations**

- 5.2.1. The collection, treatment, storage, and use of wastewater or recycled water shall not cause degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements (e.g., Title 27) and reasonable best management practices, will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
- 5.2.2. The collection, treatment, storage, and use of wastewater or recycled water shall not cause or contribute to levels of chemical constituents in groundwater that exceed the maximum and secondary maximum contaminant levels (MCLs and SMCLs) established for these pollutants in the title 22, division 4, chapter

15, article 4, section 64431; article 5.5, section 64444; and article 16, section 64449 of the CCR.

- 5.2.3. The collection, treatment, storage, and use of wastewater or recycled water shall not cause or contribute to levels of radionuclides in groundwater in concentrations that cause nuisance or adversely affect beneficial uses, nor in excess of the MCLs and SMCLs established for these pollutants in title 22, division 4, chapter 15, article 5, sections 64442 and 64443 of the CCR.
- 5.2.4. The collection, treatment, storage, and use of wastewater or recycled water shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- 5.2.5. In groundwaters used for domestic or municipal supply (MUN), the collection, treatment, storage, and disposal of treated wastewater or use of recycled water shall not cause the median of the most probable number of coliform organisms over any 7-day period to exceed 1.1 MPN/100 mL or 1 colony/100 mL.
- 5.2.6. The collection, treatment, storage and use of wastewater or recycled water shall not cause groundwater to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, or that adversely affects beneficial uses. This limitation applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances.

6. PROVISIONS

6.1. Standard Provisions

- 6.1.1. **Federal Standard Provisions.** The Permittee shall comply with all Standard Provisions included in Attachment D.
- 6.1.2. **Regional Water Board Standard Provisions.** The Permittee shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - 6.1.2.1. 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 Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
 - 6.1.2.2. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, final effluent limitation, recycling specification, other specification, receiving water limitation, or provision of this Order that may result in a significant threat to human health or to the environment, such

as inundation of treatment components, breach of pond containment, recycled water main break or equivalent release, irrigation runoff, etc., that results in a discharge to a drainage channel or a surface water, the Permittee shall:

- 6.1.2.2.1. Notify Regional Water Board staff within 24 hours of having knowledge of such noncompliance. Spill notification and reporting shall be conducted in accordance with Section 5.5 of Attachment D and 10.5 of the Monitoring and Reporting Program (Attachment E).
- 6.1.2.2.2. Investigate the cause(s) of final effluent limitation and discharge specification exceedances and failures to comply with any prohibition, specification, or provision of this Order that may result in significant threat to human health or the environment.
- 6.1.2.2.3. Identify and implement corrective actions to prevent future exceedances or failures to comply with Order requirements.
- 6.1.2.2.4. Report the results of such investigations and corrective actions implemented in the monthly SMR as required by MRP section 10.2.6.2.5 and 10.2.6.2.6.

6.2. **Monitoring and Reporting Program (MRP) Requirements**

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

6.3. **Special Provisions**

6.3.1. **Reopener Provisions**

- 6.3.1.1. **Standard Revisions.** If applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.
- 6.3.1.2. **Reasonable Potential.** This Order may be reopened for modification to include an effluent limitation, if monitoring establishes that the discharge causes, or has the reasonable potential to cause or contribute to, an excursion above a water quality criterion or objective applicable to the receiving water.
- 6.3.1.3. **Whole Effluent Toxicity.** As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a narrative or numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include a numeric chronic toxicity effluent limitation based on that objective.

- 6.3.1.4. **303(d)-Listed Pollutants.** If an applicable total maximum daily load (TMDL) (see Fact Sheet, section 3.4) program is adopted, this Order may be reopened and effluent limitations for the pollutant(s) that are the subject of the TMDL modified or imposed to conform this Order to the TMDL requirements.
- 6.3.1.5. **Salt and Nutrient Management Plans (SNMPs).** The Recycled Water Policy adopted by the State Water Board on February 3, 2009, and effective May 14, 2009, recognizes the fact that some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives in the applicable Basin Plans, and that not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt or nutrients. The Recycled Water Policy finds that the appropriate way to address salt and nutrient issues is through the development of regional or subregional SNMPs rather than through imposing requirements solely on individual recycled water projects. This Order may be reopened to incorporate provisions consistent with any SNMP(s) adopted by the Regional Water Board.
- 6.3.1.6. **Title 22 Engineering Report.** This Order implements title 22 requirements to protect public health. If future revisions to the Permittee's title 22 engineering report require modifications to this Order to adequately implement title 22, this Order may be reopened and modified as necessary.

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

- 6.3.2.1. **Disaster Preparedness Assessment Report and Action Plan.** Natural disasters, extreme weather events, sea level rise, and shifting precipitation patterns, some of which are projected to intensify due to climate change, have significant implications for wastewater treatment and operations. Some natural disasters are expected to become more frequent and extreme according to the current science on climate change. In order to ensure that Facility operations are not disrupted, compliance with conditions of this Order are achieved, and receiving waters are not adversely impacted by permitted and unpermitted discharges, the Permittee shall submit a Disaster Preparedness Assessment Report and Action Plan to the Regional Water Board by June 1, 2024, for Executive Officer review and approval.

The Permittee shall: (1) conduct an assessment of the wastewater treatment facility, operations, collection, and discharge systems to determine areas of short- and long-term vulnerabilities related to natural disasters and extreme weather, including sea level rise and other conditions projected by climate change science, if applicable; the assessment shall consider, as applicable, impacts to plant operations due to changing influent and receiving water quality, rising sea level, storm surges, fires, floods, earthquakes, tsunamis, back-to-back severe storms, and other extreme conditions that pose a risk to plant operations and water quality; (2) identify control measures needed to

protect, improve, and maintain wastewater infrastructure, waste discharge compliance, and receiving water quality in the event of a natural disaster or, if applicable, under conditions resulting from climate change; (3) develop a schedule to implement necessary control measures. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate potential risks associated with extreme weather events and changing conditions resulting from climate change; and (4) implement the necessary control measures per the approved schedule of implementation.

6.3.2.2. **Effluent Discharge Evaluation.** The Permittee shall complete an Effluent Discharge Evaluation to establish the appropriate dilution ratio and to demonstrate that the Permittee's discharge meets all requirements of the California Ocean Plan regarding establishment of the Zone of Initial Dilution (and associated dilution ratio), and that the effluent discharge does not impact aquatic life and recreational beneficial uses in the vicinity of the outfall.

6.3.2.2.1. By **October 1, 2023**, the Permittee shall submit for Regional Water Board Executive Officer approval, a Work Plan for conducting the effluent discharge evaluation. The Work Plan shall identify specific tasks to be completed and a schedule for completing each task. The Permittee shall implement the Work Plan per the approved schedule.

6.3.2.2.2. The effluent discharge evaluation may be conducted in phases.

6.3.2.2.2.1. At a minimum the first phase shall include: a review of existing documents and monitoring data to determine if sufficient data is available to confirm the currently approved dilution ratio of 100 to 1. For example, the current or new minimum probable initial dilution (Dm) might be based on a recalculation of the results of a previously completed dye study or outfall design using updated variables.

6.3.2.2.2.2. If this first phase review does not establish a defensible basis for confirming the existing dilution ratio, in the next phase, the Permittee shall propose a plan for further evaluation of the dilution ratio using an updated method and new variables. This evaluation may include, but is not limited to, modelling, mixing zone study, and/or additional monitoring and evaluation, to demonstrate what the current dilution ratio is in accordance with requirements of the California Ocean Plan.

6.3.2.2.3. By **July 1, 2026**, the Permittee shall submit a final discharge evaluation report, for review and approval by the Regional Water Board Executive Officer, summarizing study findings and recommendation(s) for modifying the outfall or adding other discharge options, if necessary, to achieve compliance with all requirements of the Ocean Plan and this Order. The final report shall include a schedule of implementation for the recommended

action(s). This report shall be identified as a specific task in the Work Plan to be submitted on **October 1, 2023**. The Permittee shall implement the recommended action(s) per the approved schedule.

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

6.3.3.1. **Pollutant Minimization Program**

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

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

6.3.3.1.1.2. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section 10.2.5.

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

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

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

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

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

6.3.3.1.2.5. An annual status report that shall be submitted as part of the Annual Facility Report due March 1 to the Regional Water Board and shall include:

6.3.3.1.2.5.1. All PMP monitoring results for the previous year;

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

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

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

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

6.3.4.1. **Proper Operation and Maintenance.** This Order (Attachment D, Standard Provision 1.4) requires that the Permittee 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 Permittee to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance procedures.

6.3.4.2. **Operation and Maintenance Manual.** The Permittee shall maintain an updated Operation and Maintenance (O&M) Manual for the operational components of the Facility. The Permittee shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility. The Permittee shall operate and maintain the Facility in accordance with the most recently updated O&M Manual. The O&M Manual shall be readily available to operating personnel onsite and for review by state or federal inspectors. The O&M Manual shall include the following.

6.3.4.2.1. Description of the Facility's organizational structure showing the number of employees, duties and qualifications, and plant attendance schedules (daily, weekends and holidays, part-time, etc.). The description should include documentation that the personnel are knowledgeable and qualified to operate the Facility so as to achieve the required level of treatment at all times.

6.3.4.2.2. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

6.3.4.2.3. Description of laboratory and quality assurance procedures.

6.3.4.2.4. Process and equipment inspection and maintenance schedules.

6.3.4.2.5. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Permittee will be able to comply with requirements of this Order.

6.3.4.2.6. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

6.3.4.3. **Operating Records.** The Permittee shall maintain operating records at the Facility or at the Permittee's central depository. The records shall include: all analyses specified in the reclamation criteria; any documentation of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal; and documentation of all corrective or preventive actions taken.

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

6.3.5.1. **Wastewater Collection Systems**

6.3.5.1.1. **Statewide General WDRs for Sanitary Sewer Systems**

The Permittee has coverage under, and is separately subject to, the requirements of State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems, as amended by Order No. WQ 2013-0058-EXEC, and any subsequent revisions. As such, the Permittee provides notification and reporting of SSOs in accordance with the requirements of Order Nos. 2006-0003-DWQ and WQ 2013-0058-EXEC and any revisions thereto for operation of its wastewater collection system.

6.3.5.2. **Source Control and Pretreatment Provisions**

6.3.5.2.1. The Permittee shall perform source control functions and provide a summary of source control activities conducted in the annual report (due March 1 to the Regional Water Board). Source control functions and requirements shall include the following:

6.3.5.2.1.1. Implement the necessary legal authorities to monitor and enforce source control standards, restrict discharges of toxic materials to the collection system and inspect facilities connected to the system.

6.3.5.2.1.2. If waste haulers are allowed to discharge to the Facility, establish a waste hauler permit system, to be reviewed by the Executive Officer, to regulate waste haulers discharging to the collection system or Facility.

6.3.5.2.1.3. Perform public outreach to educate industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes to the wastewater treatment plant, at least once per year.

6.3.5.2.1.4. Perform on-going inspections and monitoring, as necessary, to ensure adequate source control.

6.3.5.2.2. In the event that the Permittee identifies industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment plant or the Regional Water Board or its Executive Officer determines that circumstances warrant pretreatment requirements in

order to prevent interference [40 C.F.R. §403.3(j)] with the wastewater treatment Facility or Pass Through [40 C.F.R. §403.3(n)], then:

- 6.3.5.2.2.1. The Permittee shall notify the Regional Water Board within 30 days after there are discharges that trigger the pretreatment requirements;
- 6.3.5.2.2.2. The Permittee shall submit a revised ROWD and the pretreatment program for the Regional Water Board's review and approval as soon as possible, but not more than one year after the Permittee's notification to the Regional Water Board of the need for pretreatment requirements being triggered;
- 6.3.5.2.2.3. The Permittee shall enforce the federal categorical pretreatment standards on all categorical industrial users (CIUs);
- 6.3.5.2.2.4. The Permittee shall notify each CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 C.F.R. Part 400-699). The Permittee may develop more stringent, technology-based local limits if it can show cause; and
- 6.3.5.2.2.5. The Permittee shall notify the Regional Water Board if any CIU violates its discharge effluent limits.
- 6.3.5.2.3. The Regional Water Board retains the right to take legal action against an industrial user and/or the Permittee where a user fails to meet the approved applicable federal, state, or local pretreatment standards.
- 6.3.5.2.4. The Regional Water Board may amend this Order, at any time, to require the Permittee to develop and implement an industrial pretreatment program pursuant to the requirements of 40 C.F.R. Part 403 if the Regional Water Board finds that the Facility receives pollutants from an IU that is subject to pretreatment standards, or if other circumstances so warrant.

6.3.5.3. **Sludge Disposal and Handling Requirements**

- 6.3.5.3.1. Sludge, as used in this Order, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Biosolids refers to sludge that has been treated, tested, and demonstrated to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.
- 6.3.5.3.2. All collected sludges and other solid waste removed from liquid wastes shall be removed from screens, sumps, ponds, and tanks as needed to ensure optimal plant operation and disposed of in accordance with applicable federal and state regulations.

- 6.3.5.3.3. The use and disposal of biosolids shall comply with all of the land application and disposal requirements in 40 C.F.R. Part 503, which are enforceable by the U.S. EPA, not the Regional Water Board. If during the life of this Order, the state accepts primacy for implementation of 40 C.F.R. Part 503, the Regional Water Board may also initiate enforcement where appropriate.
- 6.3.5.3.4. Sludge or biosolids that are disposed of in a municipal solid waste landfill or used as daily landfill cover shall meet the applicable requirements of 40 C.F.R. Part 258. In the annual self-monitoring report, the Permittee shall report the amount of sludge placed in a landfill and the landfill(s) which received the sludge or biosolids.
- 6.3.5.3.5. The Permittee shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that may adversely affect human health or the environment.
- 6.3.5.3.6. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- 6.3.5.3.7. Solids and sludge treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from a design storm with a 100-year recurrence interval and 24-hour duration.
- 6.3.5.3.8. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.
- 6.3.5.3.9. For the land application of biosolids as soil amendment, the Permittee shall submit a report of waste discharge or the Permittee may dispose of biosolids at another appropriately permitted facility.
- 6.3.5.3.10. New sludge treatment and storage facilities must comply with the requirements of the Water Code and title 27 of the CCR for the protection of water quality.

6.3.5.4. **Operator Certification**

Supervisors and operators of municipal wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with CCR title 23, section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment facility operator, the State Water Board may approve use of a water treatment facility operator of appropriate grade certified by the DDW where water recycling is involved.

6.3.5.5. **Adequate Capacity**

If the Facility will reach capacity within 4 years, the Permittee shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest 30-day flow. The Permittee shall demonstrate that adequate steps are being taken to address the capacity problem. The Permittee shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or **within 120 days after receipt of Regional Water Board notification** that the Facility will reach capacity within 4 years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself. [CCR title 23, section 2232].

6.3.6. **Other Special Provisions**

6.3.6.1. **Storm Water**

For the control of storm water discharges from the Facility, if required, the Permittee shall seek separate authorization to discharge under the requirements of the State Water Board's Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities, which is not incorporated by reference in this Order.

BMPs to control the run-on of storm water to the Facility site shall be maintained and upgraded as necessary. The Permittee shall describe the effectiveness of these storm water BMPs, as well as activities to maintain and upgrade these BMPs during the previous year, in its annual report to the Regional Water Board.

6.3.7. **Compliance Schedules – Not Applicable**

This Order does not establish interim effluent limitations or schedules of compliance for final numeric effluent limitations.

7. **COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in sections 3 and 4 of this Order will be determined as specified below.

7.1. Compliance with Effluent Limitations

- 7.1.1. **Single-Constituent Effluent Limitations.** The Permittee is out of compliance with the effluent limitation if the concentration of the pollutant (see section 7.2) in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
- 7.1.2. **Effluent Limitations Expressed as a Sum of Several Constituents.** The Permittee is out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as non-detect (ND) or detected but not quantified (DNQ).

7.2. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants, and more than one sample result is available, the Permittee shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure.

- 7.2.1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- 7.2.2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two middle values, 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 and a value of zero shall be used for the ND or DNQ value in the median calculation for compliance purposes only. Using a value of zero for DNQ or ND samples does not apply when performing reasonable potential or antidegradation analyses.

7.3. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection 7.2 above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee will be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when the discharge occurs. If there are ND

or DNQ results for a specific constituent in a calendar month, the Permittee shall calculate the median of all sample results within that month for compliance determination with the AMEL as described in section 7.2, above.

7.4. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by subsection 7.2 above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance.

If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Permittee will be considered out of compliance for that calendar week. The Permittee will only be considered out of compliance for days when the discharge occurs. If there are ND or DNQ results for a specific constituent in a calendar week, the Permittee shall calculate the median of all sample results within that week for compliance determination with the AWEL as described in section 7.2, above.

7.5. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection 7.2, above, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Permittee will be considered out of compliance for that parameter for that 1 day only within the reporting period.

7.6. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

If the Permittee monitors pH continuously, pursuant to 40 C.F.R. section 401.17, the Permittee shall be in compliance with the pH limitation specified herein provided that both of the following conditions are satisfied: (1) the total sum of time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (2) no individual excursion from the range of pH values shall exceed 60 minutes.

7.7. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Permittee will be considered out

of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

If the Permittee monitors pH continuously, pursuant to 40 C.F.R. section 401.17, the Permittee shall be in compliance with the pH limitation specified herein provided that both of the following conditions are satisfied: (1) the total sum of time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (2) no individual excursion from the range of pH values shall exceed 60 minutes.

7.8. **Six-Month Median Effluent Limitations**

The six-month median effluent limitations shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

7.9. **Bacteriological Limitations (Total Coliform Bacteria, Fecal Coliform Bacteria, and Enterococci)**

The following paragraphs describe how compliance is to be determined for effluent limitations for total coliform bacteria and receiving water limitations for total coliform bacteria, fecal coliform, and enterococcus contained in this Order.

7.9.1. **Median.** The median is the central tendency concentration of the pollutant. The data set shall be ranked from low to high, ranking the ND concentrations lowest, followed by quantified values. The median value is determined based on the number of data points in the set. 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, the median is the average of the two middle values, unless one or both points are ND or DNQ, in which case the median value shall be the lower of the two middle data points. DNQ is lower than a detected value, and ND is lower than DNQ.

7.9.2. **Geometric Mean (GM).** The geometric mean is a type of mean or average that indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the arithmetic mean which uses their sum). The geometric mean shall be calculated using the 5 most recent samples from a site using the following formula:

$$\text{Geometric Mean} = \sqrt[n]{(x_1)(x_2)(x_3) \dots (x_n)}$$

Where x is the sample value and n is the number of samples taken.

- 7.9.3. **Six-week Rolling Geometric Mean.** The rolling geometric mean shall be calculated using at least 5 sample results over a 6-week period from a site using the following formula:

$$\text{Geometric Mean} = \sqrt[n]{(x_1)(x_2)(x_3) \dots (x_n)}$$

Where x is the sample value and n is the number of samples taken.

- 7.9.4. **Statistical Threshold Value.** (1) The data set shall be ranked from low to high, ranking any ND concentrations lowest, followed by quantified values. (2) The number of sample results should then be multiplied by 90 percent then rounded up to the nearest whole number. (3) Count the values in the data set starting from lowest to highest until the number indicated in step (2) is reached. (4) To be compliant with the statistical threshold value in Receiving Water Limitation 5.1.1.1.2, all sample results less than the point described in step 3 must be less than 100 MPN/100 mL.

7.10. **Average Dry Weather Flow**

Compliance with the average dry weather flow prohibition in section 3.9 of this Order will be determined once each calendar year by evaluating all flow data collected in a calendar year. The flow through the Facility, measured daily and averaged monthly, must be 0.3 mgd or less for the month with the lowest average monthly flow.

7.11. **Peak Daily Wet Weather Flow**

The peak daily wet weather flow is the maximum flow rate that occurs over a 24-hour period. Compliance with the peak daily wet weather flow prohibition in section 3.9 of this Order will be determined daily by measuring the daily average flow at Monitoring Point INF-001. If the measured daily average flow exceeds 1.0 mgd, the discharge is not in compliance with Prohibition 3.9 of this Order.

7.12. **Chronic Toxicity**

The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge Instream Waste Concentration (IWC) using the Test of Significant Toxicity (TST) approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the

discharge IWC is defined and reported as $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the "Percent Effect" is ≥ 0.50 .

The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests, conducted within the same calendar month and analyzed using the TST approach, results in "Fail".

ATTACHMENT A - DEFINITIONS

Area of Special Biological Significance (ASBS)

Those areas designated by the State Water Resources Control Board (State Water Board) as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS

Arithmetic Mean (μ)

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

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

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.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

DDT

Shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD .

Degrade

Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

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

Dichlorobenzenes

Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

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.

Downstream Ocean Water

Waters downstream with respect to ocean currents.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as “spoil.”

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estimated Chemical Concentration

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

Geometric Mean

The geometric mean is a type of mean or average that indicates the central tendency or typical value of a set of numbers by using the product of their values (as opposed to the arithmetic mean which uses their sum). The geometric mean is defined as the nth root of the product of n numbers. The formula is expressed as:

$$\text{Geometric Mean} = \sqrt[n]{(x_1)(x_2)(x_3) \dots (x_n)}$$

Where:

x is the sample value and n is the number of samples taken.

Halomethanes

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH

The sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution

The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Water Board, whichever results in the lower estimate for initial dilution.

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).

Kelp Beds

For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera *Macrocystis* and *Nereocystis*. Kelp beds include the total foliage canopy of *Macrocystis* and *Nereocystis* plants throughout the water column.

Chronic Toxicity

This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response. See also Test of Significant Toxicity.

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

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. After the measurements are ranked in order, the median is the middle measurement if the number of measurements is odd. If the number of measurements is even, then the median is the arithmetic mean of the middle pair of ranked measurements.

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 C.F.R. part 136, Attachment B.

Minimum Level (ML)

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

Mixing Zone

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

Natural Light

Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND)

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

Ocean Waters

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4 benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls)

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

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 Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

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

Publicly Owned Treatment Works (POTW)

A treatment works as defined in section 212 of the Clean Water Act (CWA), which is owned by a government agency as defined by section 502(4) of the CWA. Section 502(4) of the CWA defines a municipality as a city, town, borough, county, parish, district, association, or other public body created by or pursuant to state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes. This definition includes any devices and systems used in the storage, treatment, recycling, and recycling of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

Recycled Water

Water which, as a result of treatment of municipal wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource (Water Code section 13050). The terms “recycled water” and “reclaimed water” have the same meaning (Water Code section 26).

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Permittee 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 Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

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.

Shellfish

Organisms identified by the California Department of Public Health as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

The highest allowable moving median of all daily discharges for any 180-day period.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a <Regional Water Board Name> Basin Plan.

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Statistical Threshold Value (STV)

The STV for the bacteria water quality objectives is a set value that approximates the 90th percentile of the water distribution of a bacterial population.

TCDD Equivalents

The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

| Isomer Group | Toxicity Equivalence Factor |
|-------------------|-----------------------------|
| 2,3,7,8-tetra CDD | 1.0 |
| 2,3,7,8-penta CDD | 0.5 |
| 2,3,7,8-hexa CDDs | 0.1 |
| 2,3,7,8-hepta CDD | 0.01 |
| octa CDD | 0.001 |

| Isomer Group | Toxicity Equivalence Factor |
|---------------------|------------------------------------|
| 2,3,7,8 tetra CDF | 0.1 |
| 1,2,3,7,8 penta CDF | 0.05 |
| 2,3,4,7,8 penta CDF | 0.5 |
| 2,3,7,8 hexa CDFs | 0.1 |
| 2,3,7,8 hepta CDFs | 0.01 |
| octa CDF | 0.001 |

Test of Significant Toxicity

The statistical approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R10-003, 2010). TST was developed by the U.S. Environmental Protection Agency (EPA) for analyzing WET and ambient toxicity data. Using the TST approach, the sample is declared toxic if there is greater than or equal to a 25% effect in chronic tests, or if there is greater than or equal to a 20% effect in acute tests at the permitted instream waste concentration (IWC) (referred to as the toxic regulatory management decision (RMD)). The sample is declared non-toxic if there is less than or equal to a 10% effect at the IWC in acute or chronic tests (referred to as the non-toxic RMD).

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.)

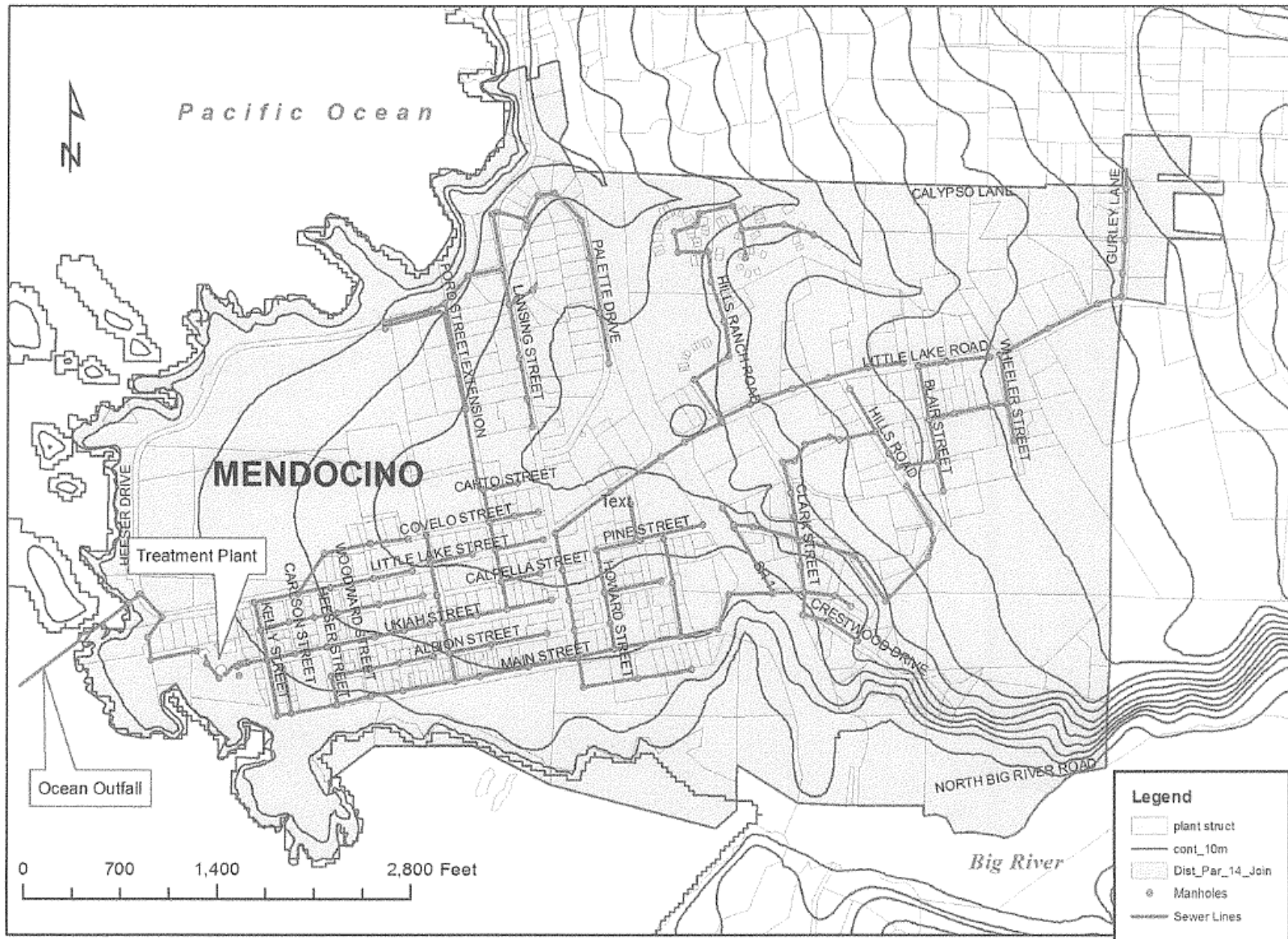
Waste

As used in the Ocean Plan, waste includes a Discharger’s total discharge, of whatever origin, i.e., gross, not net, discharge.

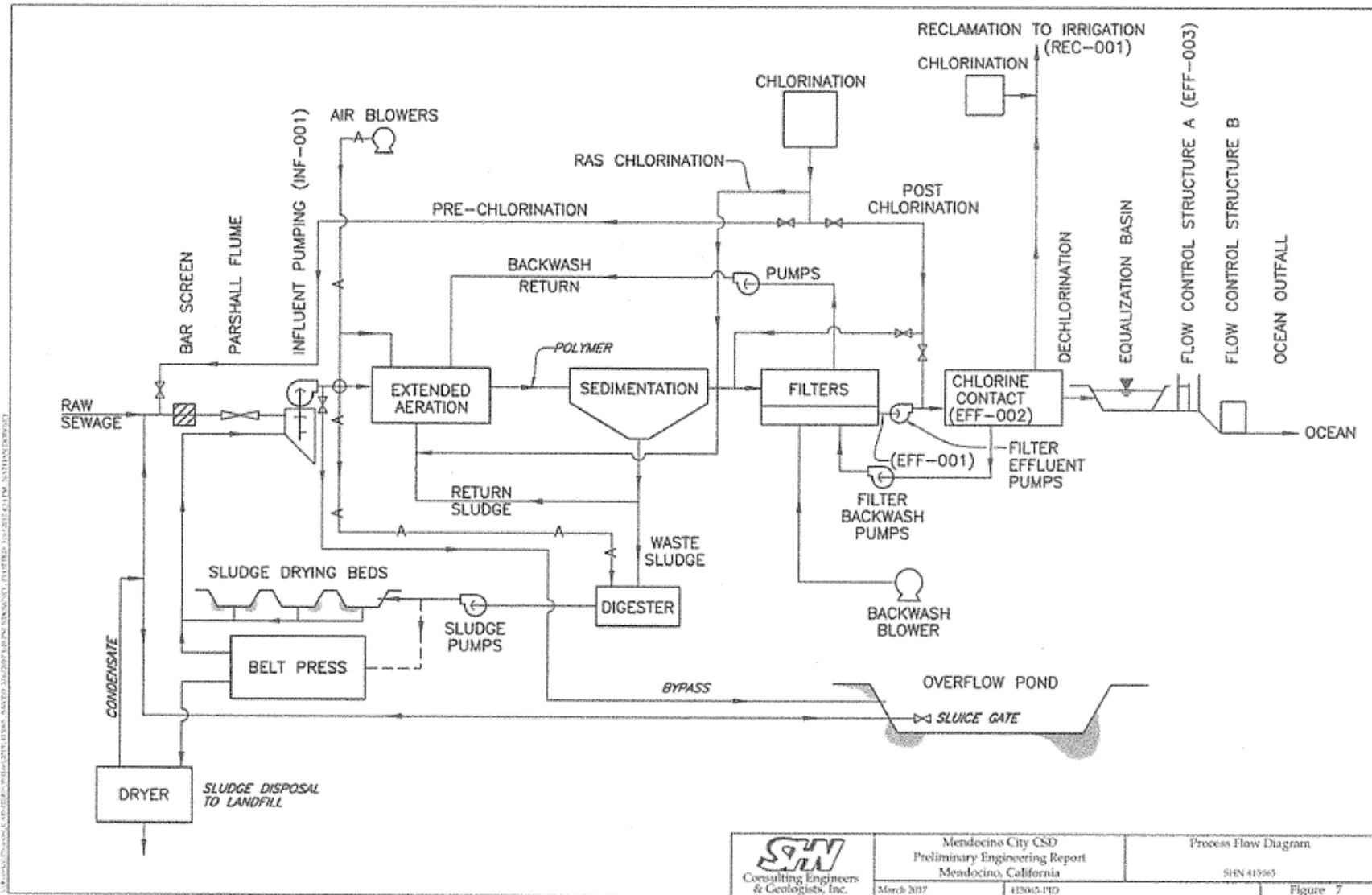
Water Recycling

The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B - MAP



ATTACHMENT C - FLOW SCHEMATIC



ATTACHMENT D - STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

- 1.1.1. The Permittee 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 and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
- 1.1.2. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1))

1.2. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c))

1.3. Duty to Mitigate

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

1.4. Proper Operation and Maintenance

The Permittee 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 Permittee to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e))

1.5. Property Rights

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

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

1.6. **Inspection and Entry**

The Permittee shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

- 1.6.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
- 1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
- 1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and
- 1.6.4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

1.7. **Bypass**

1.7.1. **Definitions**

- 1.7.1.1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i))
- 1.7.1.2. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii))
- 1.7.2. **Bypass not exceeding limitations.** The Permittee may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not

subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. § 122.41(m)(2))

- 1.7.3. **Prohibition of bypass.** Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - 1.7.3.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - 1.7.3.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - 1.7.3.3. The Permittee submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C))
- 1.7.4. **Burden of Proof.** In any enforcement proceeding, the permittee seeking to establish the bypass defense has the burden of proof.
- 1.7.5. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii))
- 1.7.6. **Notice**
 - 1.7.6.1. **Anticipated bypass.** If the Permittee 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 Regional Water Board. As of December 1, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i))
 - 1.7.6.2. **Unanticipated bypass.** The Permittee shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii))

1.8. Upset

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

- 1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2))
- 1.8.2. **Conditions necessary for a demonstration of upset.** A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - 1.8.2.1. An upset occurred and that the Permittee can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - 1.8.2.2. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - 1.8.2.3. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting 5.5.2.2 below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - 1.8.2.4. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance 1.3 above. (40 C.F.R. § 122.41(n)(3)(iv))
- 1.8.3. **Burden of proof.** In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4))

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General

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

2.2. Duty to Reapply

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

2.3. Transfers

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

3. STANDARD PROVISIONS – MONITORING

- 3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1))
- 3.2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
 - 3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
 - 3.2.2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N for the measured pollutant or pollutant parameter.

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

In the case of sludge use or disposal approved under 40 C.F.R. part 136, monitoring must be conducted according to test procedures in part 503 unless

otherwise specified in 40 C.F.R. or other test procedures have been specified in this Order.

4. STANDARD PROVISIONS – RECORDS

4.1. Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Permittee 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 <Regional Water Board Name> Executive Officer at any time. (40 C.F.R. § 122.41(j)(2))

4.2. Records of monitoring information shall include:

- 4.2.1.** The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
- 4.2.2.** The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
- 4.2.3.** The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
- 4.2.4.** The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
- 4.2.5.** The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
- 4.2.6.** The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi))

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

- 4.3.1.** The name and address of any permit applicant or Permittee (40 C.F.R. § 122.7(b)(1)); and
- 4.3.2.** Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2))

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Permittee shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause

exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Permittee shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

- 5.2.1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k))
- 5.2.2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3)).
- 5.2.3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.2.2 above (40 C.F.R. § 122.22(b)(1));
 - 5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - 5.2.3.3. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3))
- 5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c))

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

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

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

5.3. Monitoring Reports

- 5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4))
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 2025, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i))
- 5.3.3. If the Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii))
- 5.3.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii))

5.4. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall

be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5))

5.5. Twenty-Four Hour Reporting

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

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

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Permittee to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i))

- 5.5.2. The following shall be included as information that must be reported within 24 hours:
- 5.5.2.1. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A))
- 5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B))
- 5.5.3. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B))

5.6. **Planned Changes**

The Permittee shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

- 5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
- 5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii))
- 5.6.3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions— Notification Levels 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii))

5.7. **Anticipated Noncompliance**

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

5.8. **Other Noncompliance**

The Permittee shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. As of December 21, 2025, the Regional Water Board may also require the Permittee to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7))

5.9. **Other Information**

When the Permittee 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 Regional Water Board, State Water Board, or U.S. EPA, the Permittee shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8))

5.10. Initial Recipient for Electronic Reporting Data

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

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Regional 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. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

- 7.1.1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
- 7.1.2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2))
- 7.1.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3)).

ATTACHMENT E - MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

1. GENERAL MONITORING PROVISIONS

- 1.1. **Wastewater Monitoring Provision.** Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed 1 hour.
- 1.2. **Supplemental Monitoring Provision.** If the Permittee monitors any pollutant more frequently than required by this Order, using test procedures approved by 40 C.F.R. part 136 or as specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharge monitoring reports.
- 1.3. **Laboratory Certification.** Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board) in accordance with the provisions of Water Code section 13176, and must include quality assurance / quality control data with their analytical reports.

The Permittee may analyze pollutants with short hold times (e.g., pH, chlorine residual, etc.) with field equipment or its on-site laboratory provided that the Permittee has written standard operating procedures (SOPs) that identify quality assurance/quality control procedures to be followed to ensure accurate results. The Permittee must demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.

- 1.4. **Instrumentation and Calibration Provision.** All monitoring instruments and devices used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated no less than the manufacturer's recommended intervals or one-year intervals, (whichever comes first) to ensure continued accuracy of the devices.

- 1.5. **Minimum Levels (ML) and Reporting Levels (RL).** U.S. EPA published regulations for the Sufficiently Sensitive Methods Rule (SSM Rule) which became effective September 18, 2015. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 C.F.R. 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using U.S. EPA approved methods. For the purposes of the NPDES program, when more than one test procedure is approved under 40 C.F.R., part 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).

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 in Table 3 of the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (2019)* (Ocean Plan) shall also adhere to guidance and requirements contained in the Ocean Plan. 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 Ocean Plan. For instance, U.S. EPA Method 1631E for mercury is not currently listed in Ocean Plan Appendix II, but it is published with an ML of 0.5 ng/L that makes it a sufficiently sensitive analytical method. Similarly, U.S. EPA Method 245.7 for mercury is published with an ML of 5 ng/L.

A U.S. EPA-approved analytical method is sufficiently sensitive where:

- 1.5.1. The 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
- 1.5.2. 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
- 1.5.3. The method has the lowest ML of the U.S. EPA-approved analytical methods where none of the U.S. EPA-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.

1.6. **Discharge Monitoring Report Quality Assurance (DMR-QA) Study.** The Permittee shall participate in the DMR-QA program and ensure that the results of the DMR-QA Study or the most recent Water Pollution Performance Evaluation Study from each laboratory providing testing services for the permit are submitted annually to the State Water Board at qualityassurance@waterboards.ca.gov. For more information on the DMR-QA Program, contact State DMR-QA Coordinator at the aforementioned email address.

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|-----------------------------|---------------------------------|---|
| --- | INF-001 | Influent wastewater prior to treatment and following all significant input of wastewater to the treatment system. |
| --- | INT-001 | Location for monitoring the surface loading rate through filters. |
| 001 | EFF-001 | A location where representative samples of the treated wastewater can be collected from the effluent wet well, immediately following the tertiary filters. |
| 001 | EFF-002 | A location where representative samples of the treated wastewater can be collected from the chlorine contact chamber prior to discharge to the flow equalization pond. |
| 001 | EFF-003 | A location where representative samples of the treated wastewater overflow from the flow equalization pond at Structure A can be collected prior to contact with the receiving water. Latitude: 39° 18' 21" N Longitude: -123° 48' 30" W |
| 002 | REC-001 ¹ | A location where representative samples of treated wastewater to be recycled can be collected. |

Table Notes

1. For ocean discharges, the Permittee monitors BOD₅ and TSS at the effluent wet well following the tertiary filters and total coliform bacteria and pH from the chlorine contact chamber. During periods of discharge to the recycled water system, monitoring at these locations shall be reported at Monitoring Location REC-001.

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

3. INFLUENT MONITORING REQUIREMENTS

3.1. Monitoring Location INF-001

3.1.1. The Permittee shall monitor influent to the facility at Monitoring Location INF-001 as follows:

Table E-2. Influent Monitoring – Monitoring Location INF-001

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|-------|-----------------|----------------------------|---------------------------------|
| Influent Flow ¹ | mgd | Meter | Continuous | --- |
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 24-hr Composite | Monthly | Standard Methods ² |
| Total Suspended Solids (TSS) | mg/L | 24-hr Composite | Monthly | Standard Methods ² |

Table Notes

1. Each month, the Permittee shall report the maximum daily and mean daily influent flow rates.
2. In accordance with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

4.1.1. The Permittee shall monitor treated effluent at Monitoring Location EFF-001 during periods of discharge as follows.

Table E-3. Effluent Monitoring – Monitoring Location EFF-001

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|-------|-----------------|----------------------------|---------------------------------|
| Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅) ¹ | mg/L | 24-hr Composite | Weekly | Standard Methods ³ |
| Total Suspended Solids (TSS) ¹ | mg/L | 24-hr Composite | Weekly | Standard Methods ³ |
| Settleable Solids ¹ | mL/L | 24-hr Composite | Weekly | Standard Methods ³ |
| Turbidity | NTU | Meter | Continuous | Standard Methods ³ |
| Oil and Grease ² | mg/L | Grab | Quarterly | Standard Methods ³ |

Table Notes

1. Accelerated Monitoring. If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the two weeks following receipt of the second sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps to return to compliance.
2. Accelerated Monitoring. If a test result exceeds an effluent limitation the Permittee shall take two more samples, one within 14 days and one within 21 days following receipt of the initial sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance.
3. In accordance with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.

4.2. Monitoring Location EFF-002

- 4.2.1. The Permittee shall monitor treated effluent at Monitoring Location EFF-002 during periods of discharge as follows:

Table E-4. Effluent Monitoring – Monitoring Location EFF-002

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--------------------------------------|------------|-------------|----------------------------|---------------------------------|
| pH | s.u. | Grab | Weekly | Standard Methods ² |
| Total Coliform Bacteria ¹ | MPN/100 mL | Grab | Weekly | Standard Methods ² |

Table Notes

1. Accelerated Monitoring. If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the two weeks following receipt of the second sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance.
2. In accordance with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.

4.3. Monitoring Location EFF-003

4.3.1. The Permittee shall monitor treated effluent prior to contact with receiving water at Monitoring Location EFF-003 during periods of discharge as follows:

Table E-5. Effluent Monitoring – Monitoring Location EFF-003

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--|------------------------|------------------------|----------------------------|---------------------------------|
| Effluent Flow ¹ | mgd | Meter | Continuous | --- |
| Total Residual Chlorine ² | mg/L | Grab | Weekly | Standard Methods ³ |
| TCDD Equivalents ⁴ | µg/L | 24-hr Composite | Annually | Standard Methods ³ |
| Ammonia Nitrogen, Total (as N) | mg/L | Grab | Monthly | Standard Methods ³ |
| Ocean Plan Table 3 Pollutants ⁵ | µg/L. | Composite ⁶ | Annually | Standard Methods ³ |
| Chronic Toxicity ⁷ | Pass or Fail, % Effect | Grab | Annually | See Section 5 below: |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--|-------|-------------|----------------------------|---------------------------------|
| <p><u>Table Notes</u></p> <ol style="list-style-type: none"> Each month, the Permittee shall report the maximum daily and mean daily flows. Accelerated Monitoring. If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the two weeks following receipt of the second sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance. In accordance with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136. TCDD-equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors. Excluding Table 3 pollutants with specific monitoring requirements established by Tables E-4, E-5, and E-6 and acute toxicity. Grab samples shall be used for volatile chemicals listed in Table 3 of the Ocean Plan (2019). Composite samples shall be used for all other Ocean Plan Table 3 parameters. The median monthly summary result shall be reported as “Pass” or “Fail”. The maximum daily single result shall be reported as “Pass” or “Fail” with a “% Effect”. Exactly three independent toxicity results are required when one toxicity test results in “Fail”. Refer to section 5.1.8 for accelerated monitoring. | | | | |

5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

5.1. Chronic Toxicity Testing

The Permittee shall conduct chronic toxicity testing in accordance with the following chronic toxicity testing requirements:

- 5.1.1. Test Frequency.** The Permittee shall conduct chronic WET testing in accordance with the schedule established by this MRP while discharging at Discharge Point 001 as summarized in MRP section 4.3 and Table E-5 above.
- 5.1.2. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC for this discharge is 1 percent effluent.
- 5.1.3. Sample Volume and Holding Time.** The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection.

For toxicity tests requiring renewals (*Atherinops affinis*), a minimum of three samples shall be collected. The lapsed time (holding time) from sample collection to first use of each sample must not exceed 36 hours.

- 5.1.4. **Chronic Marine Test Species and Test Methods.** If effluent samples are collected from outfalls discharging to receiving waters with salinity >1 ppt, the Permittee shall conduct the following chronic toxicity tests on effluent samples at the IWC for the discharge in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995).

Artificial sea salts or hypersaline brine prepared from natural seawater shall be used to increase sample salinity. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

- 5.1.4.1. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.011).
- 5.1.4.2. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the mussel, *Mytilus spp* (Embryo-Larval Shell Development Test Method), or a static non-renewal toxicity test with the red abalone, *Haliotis rufesens* (Abnormal Shell Development Test Method).
- 5.1.4.3. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).
- 5.1.5. **Species Sensitivity Screening.** Species sensitivity screening shall be conducted during this permit's first required sample collection. The Permittee shall collect a single effluent sample and concurrently conduct three chronic toxicity tests using the fish, an invertebrate, and the alga species identified in section 5.1.4, above. This sample shall also be analyzed for the parameters required for the discharge in Table E-3 and Table E-4, above. The species that exhibits the highest "Percent (%) Effect" at the discharge IWC during species sensitivity screening shall be used for subsequent testing during the permit term.
- 5.1.6. **Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.
- 5.1.6.1. The discharge is subject to determination of "Pass" or "Fail" and "Percent (%) Effect" for chronic toxicity tests using the TST approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R10-003, 2010), Appendix A, Figure A-

1, and Table A-1. The null hypothesis (H_0) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response.

A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$. The IWC for the chronic toxicity test is 1 percent effluent.

- 5.1.6.2. If the effluent toxicity test does not meet the minimum effluent or reference toxicant test acceptability criteria (TAC) specified in the referenced test method, then the Permittee shall re-sample and re-test within 14 days.
- 5.1.6.3. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- 5.1.6.4. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.
- 5.1.6.5. The Permittee shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the MRP and the rationale is explained in the Fact Sheet (Attachment F).
- 5.1.6.6. **Ammonia Removal.** Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittee must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.
 - 5.1.6.6.1. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
 - 5.1.6.6.2. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
 - 5.1.6.6.3. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
 - 5.1.6.6.4. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent.

Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent.

- 5.1.7. **Notification.** The Permittee shall notify the Regional Water Board verbally within 72 hours and in writing within 14 days after the receipt of a result of “Fail” during routine or accelerated monitoring.
- 5.1.8. **Accelerated Monitoring Requirements.** Accelerated monitoring for chronic toxicity is triggered when a chronic toxicity test, analyzed using the TST approach, results in “Fail” and the “Percent Effect” is ≥ 0.50 . Within 24 hours of the time the Permittee becomes aware of a summary result of “Fail”, the Permittee shall implement an accelerated monitoring schedule consisting of four toxicity tests—consisting of 5-effluent concentrations (including the discharge IWC) and a control—conducted at approximately 2-week intervals, over an 8-week period. If each of the accelerated toxicity tests results is “Pass,” the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results is “Fail”, the Permittee shall immediately implement the TRE Process conditions set forth in section 5.2, below.
- 5.1.9. **Reporting**
- 5.1.9.1. **Routine Reporting.** Chronic toxicity monitoring results for effluent at Monitoring Location EFF-001 shall be submitted with the quarterly self-monitoring report (SMR) for the quarter in which chronic toxicity monitoring was performed. Routine reporting shall include the following in order to demonstrate compliance with permit requirements:
- 5.1.9.1.1. WET reports shall include the contracting laboratory’s complete report provided to the Permittee and shall be consistent with the appropriate “Report Preparation and Test Review” sections of the methods manual and this MRP. The WET test reports shall contain a narrative report that includes details about WET test procedures and results, including the following:
- 5.1.9.1.1.1. Receipt and handling of the effluent sample that includes a tabular summary of initial water quality characteristics (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia);
- 5.1.9.1.1.2. The source and make-up of the lab control/diluent water used for the test;
- 5.1.9.1.1.3. Any manipulations done to lab control/diluent and effluent such as filtration, nutrient addition, etc.;

- 5.1.9.1.1.4. Tabular summary of test results for control water and each effluent dilution and statistics summary to include calculation of the NOEC, TUc, and IC25;
- 5.1.9.1.1.5. Identification of any anomalies or nuances in the test procedures or results;
- 5.1.9.1.1.6. WET test results shall include, at a minimum, for each test:
 - 5.1.9.1.1.6.1. Sample date(s);
 - 5.1.9.1.1.6.2. Test initiation date;
 - 5.1.9.1.1.6.3. Test species;
 - 5.1.9.1.1.6.4. Determination of “Pass” or “Fail” and “Percent Effect” following the TST hypothesis testing approach in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010). The “Percent Effect” shall be calculated as follows:

$$\text{“Percent Effect” (or Effect, in \%)} = ((\text{Control mean response} - \text{IWC mean response}) \div \text{Control mean response}) \times 100$$
 - 5.1.9.1.1.6.5. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - 5.1.9.1.1.6.6. NOEC value(s) in percent effluent;
 - 5.1.9.1.1.6.7. IC15, IC25, IC40, and IC50 values (or EC15, EC25...etc.) in percent effluent;
 - 5.1.9.1.1.6.8. TUc values (100/NOEC);
 - 5.1.9.1.1.6.9. Mean percent mortality (\pm s.d.) after 96 hours in 100 percent effluent (if applicable);
 - 5.1.9.1.1.6.10. NOEC and LOEC values for reference toxicant test(s);
 - 5.1.9.1.1.6.11. IC50 or EC50 value(s) for reference toxicant test(s);
 - 5.1.9.1.1.6.12. Available water quality measurements for each test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia);
 - 5.1.9.1.1.6.13. Statistical methods used to calculate endpoints;
 - 5.1.9.1.1.6.14. The statistical program (e.g., TST calculator, CETIS, etc.) output results, which includes the calculation of percent minimum significant difference (PMSD); and

- 5.1.9.1.1.6.15. Results of applicable reference toxicant data with the statistical output page identifying the species, NOEC, LOEC, type of toxicant, dilution water used, concentrations used, PMSD and dates tested; the reference toxicant control charts for each endpoint, to include summaries of reference toxicant tests performed by the contracting laboratory; and any information on deviations from standard test procedures or problems encountered in completing the test and how the problems were resolved.
- 5.1.9.2. **TRE/TIE Results.** The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. TRE/TIE results shall be submitted to the Regional Water Board within 60 days of completion.

5.2. Toxicity Reduction Evaluation (TRE) Process

- 5.2.1. **TRE Work Plan.** The Permittee submitted a TRE Work Plan to the Regional Water Board on December 30, 2015. The Permittee's TRE Work Plan shall be reviewed for consistency with permit requirements and the Permittee's procedures and updated as necessary in order to remain current and applicable to the discharge and requirements of this Order.

The Permittee shall notify the Regional Water Board of this review and submit any revisions of the TRE Work Plan within 90 days of the notification, to be ready to respond to toxicity events. The TRE Work Plan shall describe the steps the Permittee intends to follow if toxicity is detected, and should include at least the following items:

- 5.2.1.1. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- 5.2.1.2. A description of the facility's methods of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in the operation of this Facility.
- 5.2.1.3. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).
- 5.2.2. **Preparation and Implementation of a Detailed TRE Work Plan.** If one of the accelerated toxicity tests described in section 5.1.8, above, results in "Fail", the Permittee shall immediately initiate a TRE using EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989) and within 30 days of receipt submit the accelerated monitoring result to the Regional Water Board Executive Officer. The Permittee shall also submit a Detailed TRE Work Plan, which shall follow the generic TRE Work Plan revised as appropriate for the toxicity event described in section 5.1.8 of this MRP. The Detailed TRE Work Plan shall include the following

information, and comply with additional conditions set by the Regional Water Board Executive Officer:

- 5.2.2.1. Further actions by the Permittee to investigate, identify, and correct causes of toxicity.
- 5.2.2.2. Actions the Permittee will take to mitigate effects of the discharge and prevent the recurrence of toxicity.
- 5.2.2.3. A schedule for these actions, progress reports, and the final report.
- 5.2.3. **TIE Implementation.** The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test methods and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.
- 5.2.4. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
- 5.2.5. The Permittee shall conduct routine effluent monitoring for the duration of the TRE process. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.
- 5.2.6. The Regional Water Board recognizes that toxicity may be episodic and identification of the causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

6. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

7. RECYCLING MONITORING REQUIREMENTS

7.1. Monitoring Location REC-001

7.1.1. The Permittee shall monitor treated effluent during periods of water recycling at Monitoring Location REC-001 as follows:

Table E-6. Recycled Water Monitoring Requirements

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--|------------|-----------------|----------------------------|---------------------------------|
| Flow ¹ | mgd | Meter | Continuous | --- |
| Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅) | mg/L | 24-hr Composite | Weekly | Standard Methods ² |
| pH | s.u. | Grab | Weekly | Standard Methods ² |
| Total Suspended Solids (TSS) | mg/L | 24-hr Composite | Weekly | Standard Methods ² |
| Total Coliform Bacteria | MPN/100 mL | Grab | Daily ³ | Standard Methods ² |
| Total Residual Chlorine | mg/L | Meter | Continuous | Standard Methods ² |
| Disinfection Contact Time | Minutes | Measurement | Daily | --- |
| Disinfection CT Value | mg-min/L | Calculation | Daily | --- |
| Nitrate Nitrogen, Total (as N) ⁴ | mg/L | Grab | 5 | Standard Methods ² |
| Nitrite Nitrogen, Total (as N) ⁴ | mg/L | Grab | 5 | Standard Methods ² |
| Ammonia Nitrogen, Total (as N) ⁴ | mg/L | Grab | 5 | Standard Methods ² |
| Organic Nitrogen, Total (as N) ⁴ | mg/L | Grab | 5 | Standard Methods ² |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|----------------------------------|-------|-------------|----------------------------|---------------------------------|
| Total Dissolved Solids (TDS) | mg/L | Grab | 5 | Standard Methods ² |
| Chloride | mg/L | Grab | 5 | Standard Methods ² |
| Boron | mg/L | Grab | 5 | Standard Methods ² |
| Sodium | mg/L | Grab | 5 | Standard Methods ² |
| Visual Observations ⁶ | --- | --- | --- | --- |

Table Notes

1. For each month, the Permittee shall record the number of days that treated wastewater was used for recycled water irrigation at the Mendocino High School athletic fields or other approved recycled water use sites, as well as the average and maximum daily flow rate.
2. In accordance with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.
3. Total coliform monitoring shall occur each day that recycled water is transferred from the wastewater treatment plant to the recycled water system. All total coliform samples shall be analyzed by the Permittee utilizing analytical equipment in the Permittee’s laboratory. Once a week, two coliform samples shall be collected at the same time, with one sample to be submitted to a certified laboratory for analysis and the other sample to be analyzed in the Permittee’s laboratory.
4. Monitoring for nitrate, nitrite, ammonia, and organic nitrogen is for the purpose of determining total nitrogen concentration for agronomic rate calculations.
5. Nutrients (nitrate, nitrite, ammonia, total organic nitrogen) and salts (TDS, chloride, boron, and sodium) shall be monitored two times during the 2023 recycled water delivery season.
6. During periods of discharge to the irrigation system, visual observations shall be conducted at least monthly for agronomic applications to verify compliance with recycled water requirements in Order section 4.3, Recycling Specifications and Requirements. The inspection frequency shall be increased for use sites with a history of non-compliance with water recycling requirements established in this Order. Visual monitoring shall confirm proper operations of the recycled water system and associated BMPs. The Permittee shall include a record of any malfunctions or findings of improper operations, including, but not limited to odors, evidence of surface runoff, or ponding that exceeds 24 hours. Visual observations may be performed by the irrigation users in accordance with the Permittee’s user agreements. The quarterly recycled water report shall include the daily volume of

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--|-------|-------------|----------------------------|---------------------------------|
| treated wastewater discharged to the irrigation system and any observations indicating non-compliance with the provisions of the recycling requirements. | | | | |

7.1.2. The Permittee shall comply with Water Recycling Specifications and Requirements contained in section 4.3 of this Order.

7.2. Recycled Water Production and Use

7.2.1. Recycled water quality characteristics and precipitation data shall be used to ascertain nitrogen loading rates at each recycled water use site. The following information shall be reported for each use site or use site type.

7.2.2. Reporting of the required monitoring shall be provided annually in the Annual Recycled Water Report to the Regional Water Board, and annually to recycled water users.

Table E-7. Recycled Water Production and Use.

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Reporting Frequency |
|--|----------------|-------------|----------------------------|---------------------|
| Volume of Recycled Water ^{1,2} | acre-feet | Meter | Monthly ³ | Annually |
| Total Area of Application | acres | Observation | Monthly ³ | Annually |
| Total Nitrogen Application Rate ^{4,5} | Lbs/acre-month | Calculation | Monthly ³ | Annually |

Table Notes

1. Estimation of the volume of the recycled water shall not include other potable or non-potable “make-up” water used in conjunction with recycled water.
2. May be estimated based on daily percentage of recycled water supplied via a non-potable water supply system.
3. May be based on available data (e.g., meters read every other month or quarterly).
4. Nitrogen application rate shall consider nutrients contained in the recycled water, based on analytical data obtained by the Permittee.
5. Nitrogen concentrations shall be calculated and reported “as N”. For example, nitrate-nitrogen = 27 mg/L as NO₃ shall be converted and reported as nitrate-nitrogen = 6 mg/L as N., evidence of surface runoff, or ponding that exceeds 24 hours. Visual observations may be performed by the irrigation users in accordance with the Permittee’s user agreements. The quarterly recycled water report shall

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Reporting Frequency |
|--|-------|-------------|----------------------------|---------------------|
| include the daily volume of treated wastewater discharged to the irrigation system and any observations indicating non-compliance with the provisions of the recycling requirements. | | | | |

8. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

8.1. Surface Water Monitoring – Not Required

This Order does not require surface water monitoring at this time.

8.2. Groundwater Monitoring – Not Required

This Order does not require groundwater monitoring at this time.

9. OTHER MONITORING REQUIREMENTS

9.1. Filtration Process Monitoring

Filtration process monitoring shall demonstrate compliance with section 4.3.3.1 (Filtration Process Requirements) of the Order and applies when discharging to the recycled water system. The Permittee is required to implement the following filtration process monitoring:

9.1.1. Filter Monitoring (Monitoring Location INT-001)

9.1.1.1. Monitoring. The Permittee shall calculate on a daily basis the surface loading rate in gallons per minute per square feet and report the maximum surface loading rate and any exceedances of the surface loading rate limitations specified in section 4.3.3.1.1 of the Order. The rate of flow through the tertiary filters shall be measured at Monitoring Location INT-001.

9.1.1.2. Compliance. Compliance with the maximum daily filter surface loading rate as specified in section 60301.320 of title 22 shall be calculated based on the flow rate through each filter unit.

9.1.1.3. Reporting. The maximum daily filter surface loading rate shall be reported on the quarterly self-monitoring report.

9.1.2. Filter Monitoring (Monitoring Location EFF-002)

9.1.2.1. Monitoring. The turbidity of the filter effluent shall be continuously measured and recorded at Monitoring Location EFF-002 during periods of water recycling. Should the turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2 hours may be substituted for a period of up to 24

hours. The recorded data shall be maintained by the Permittee for at least 3 years. The daily average, daily maximum and 95th percentile turbidity results shall be reported on the quarterly monitoring reports.

- 9.1.2.2. **Compliance.** Compliance with the turbidity specification specified in section 4.3.3.1.2 (Filtration Process Requirements) of this Order shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period.
- 9.1.2.3. **Reporting.** If the filter effluent turbidity exceeds an average of 2 NTU during a 24-hour period, 5 NTU more than 5 percent of the time during a 24-hour period, or 10 NTU at any time, the incident shall be reported in the quarterly self-monitoring report and the incident shall be reported to the Regional Water Board by telephone within 24 hours in accordance with Provision 6.1.2.2 of the Order only if the non-compliant effluent was sent to the recycled water distribution system. A written report describing the incident and the actions undertaken in response shall be included in the quarterly self-monitoring report. Mitigation of the event shall consist of ceasing the discharge to the recycled water storage tank, diverting the non-compliant effluent, or automatically activated chemical addition to comply with title 22 requirements (sections 60304 and 60307).
- 9.1.3. **Disinfection Process Monitoring (Monitoring Location REC-001)**
- 9.1.3.1. **Monitoring.** The chlorine residual of the effluent shall be monitored continuously at the end of the chlorine contact chamber and recorded, and the modal contact time shall be determined at the same point.
- 9.1.3.2. **Compliance.** The chlorine disinfection CT (the product of total chlorine residual and modal contact time) shall not fall below 450 mg-min/L, with modal contact time of at least 90 minutes, as required by section 4.3.3.2 of this Order.
- 9.1.3.3. **Reporting.** If the chlorination equipment fails or the chlorine disinfection CT is less than 450 mg-min/L, the event shall be reported in the quarterly self-monitoring report and the incident shall be reported to the Regional Water Board by telephone within 24 hours in accordance with Provision 6.1.2.2 of the Order only if the non-compliant effluent was sent to the recycled water distribution system. A written report describing the incident and the actions undertaken in response shall be included in the quarterly self-monitoring report. Upon discovery of any equipment failure or failure to achieve 450 mg-min/L after disinfection, inadequately treated and disinfected wastewater shall be diverted to a storage basin or an upstream process for adequate treatment.

9.2. **Outfall Inspection**

9.2.1. The Permittee shall visually inspect (e.g., divers, dye study, etc.) the outfall structure, including the diffuser ports, at least once during the life of this permit to verify operational status and integrity of the outfall and diffuser structure. A report documenting outfall condition and maintenance, including any observed cracks, breaks, malfunctions, and appropriate repairs, shall be submitted within 90 days of completing the inspection and no later than May 31, 2026. The Permittee shall submit to the Regional Water Board Executive Officer for approval an Outfall Inspection Work Plan no later than January 1, 2024 that includes the following:

- 9.2.1.1. A description of the of the outfall as originally constructed and maintenance history;
- 9.2.1.2. Documentation of the current outfall condition, including any observed cracks, breaks, leaks, plugged ports, and other actual or potential malfunctions;
- 9.2.1.3. Verification assessment to determine whether the current outfall condition is consistent with the underlying assumptions of the minimum initial dilution authorized in this Order and whether the approach and assumptions used to formulate the minimum initial dilution credit are still valid; and
- 9.2.1.4. A corrective action plan and schedule for addressing any maintenance or repairs necessary to return the outfall to satisfactory condition.

9.3. **Biological Survey**

9.3.1. The Permittee shall conduct a comparative evaluation of indigenous biota in the vicinity of the outfall using a qualified aquatic biologist, at least once every 5 years. The biologist shall prepare a report of observations, including objectionable aquatic growths, floating particulates or grease and oil, aesthetically undesirable discoloration of the ocean surface, color of fish or shellfish, and any evidence of degradation of indigenous biota attributable to the rate of deposition of inert solids, settleable material, nutrient materials, increased concentrations of organic materials, or increased concentrations of Ocean Plan Table 3 substances. The Permittee shall submit to the Regional Water Board Executive Officer for approval a Biological Survey work plan no later than December 1, 2023, in order to complete the survey and prepare a final report by the due date for receipt of an application for permit renewal. The final report shall be submitted no later than May 31, 2026.

10. **REPORTING REQUIREMENTS**

10.1. **General Monitoring and Reporting Requirements**

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

10.2. Self-Monitoring Reports (SMRs)

- 10.2.1. The Permittee 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/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal. The Permittee shall maintain sufficient staffing and resources to ensure it submits SMRs that are complete and timely. This includes provisions of training and supervision of individuals on how to prepare and submit SMRs.
- 10.2.2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP under sections 3 through 9. The Permittee shall submit quarterly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- 10.2.3. All monitoring results reported shall be supported by the inclusion of the complete analytical report from the laboratory that conducted the analyses.
- 10.2.4. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule

Table E-8. Monitoring Periods and Reporting Schedule

| Sampling Frequency | Monitoring Period Begins On... | Monitoring Period | SMR Due Date |
|---------------------------|--|---|--|
| Continuous | Permit effective date | All | First day of second calendar month following the end of each quarter |
| Daily | Permit effective date | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling | First day of second calendar month following the end of each quarter |
| Weekly | Sunday following permit effective date or on permit effective date if on a Sunday | Sunday through Saturday | First day of second calendar month following the end of each quarter |
| Monthly | First day of calendar month following permit effective date or on permit effective date if that date is first day of the month | First day of calendar month through last day of calendar month | First day of second calendar month following the end of each quarter |
| Quarterly | First day of calendar quarter following permit effective date or on permit effective date if that date is first day of the month | January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31 | First day of second calendar month following the end of each quarter |
| Annually | January 1 following (or on) permit effective date | January 1 through December 31 | March 1 (of the following year) |

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

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

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to Est. Conc.).

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 (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

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

10.2.5.4. Permittees 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 Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

10.2.6. The Permittee shall submit SMRs in accordance with the following requirements:

10.2.6.1. The Permittee 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 Permittee 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 Permittee shall electronically submit the data in a tabular format as an attachment.

10.2.6.2. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:

- 10.2.6.2.1. Facility name and address;
 - 10.2.6.2.2. WDID number;
 - 10.2.6.2.3. Applicable period of monitoring and reporting;
 - 10.2.6.2.4. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
 - 10.2.6.2.5. Corrective actions taken or planned; and
 - 10.2.6.2.6. The proposed time schedule for corrective actions and/or any corrective actions implemented.
- 10.2.6.3. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the CIWQS Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>).

In the event that that an alternate method for submittal of SMRs is required, the Permittee shall submit the SMR electronically via e-mail to NorthCoast@waterboards.ca.gov or on disk (CD or DVD) in Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

- 10.2.6.4. At any time during the term of this permit, the Regional Water Board may notify the Permittee to electronically submit both technical and Self-Monitoring Reports (SMRs) to the State Water Board's GeoTracker database in searchable Portable Document Format (pdf). In addition, analytical data will be required to be uploaded to the GeoTracker database under a site-specific global identification number that will be assigned to the Permittee. Information on the GeoTracker database is provided on the State Water Board website at: https://www.waterboards.ca.gov/resources/data_databases/groundwater.shtm

10.3. Discharge Monitoring Reports (DMRs)

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

10.4. Other Reports

10.4.1. Special Study Reports and Progress Reports. Special study and progress reports shall be submitted in accordance with the following reporting requirements.

Table E-9. Reporting Requirements for Special Provisions Reports

| Order Section | Special Provision Requirement | Reporting Requirement |
|---|---|--|
| Special Provision 6.3.2.1 | Disaster Preparedness Assessment Report and Action Plan | June 1, 2024 |
| Special Provision 6.3.3.1.2.5 | Pollutant Minimization Program, Annual Facility Report | March 1 , annually, following development of Pollutant Minimization Program |
| Special Provision 6.3.4.2 | Operation and Maintenance Manual updates | As necessary |
| Special Provision 6.3.5.2.1 | Source Control and Pretreatment Provisions, Annual Report | March 1 , annually |
| Special Provision 6.3.5.5 | Adequate Capacity, Technical Report | Within 120 days of notification that the Facility will reach capacity within 4 years |
| MRP General Monitoring Provision 1.6 | DMR-QA Study Report | Annually , per State Water Board instructions |
| MRP Effluent Monitoring Requirement 5.1.7 | Verbal and written notification of chronic toxicity fail result | Within 72 hours (verbal) and 14 days (written) after receipt of a “fail” result. |
| MRP Effluent Monitoring Requirement 5.1.9.2 | Notification of TRE/TIE Results | No later than 30 days from the completion of each aspect of the TRE/TIE analyses. |
| MRP Effluent Monitoring Requirement 5.1.9.2 | TRE/TIE Results | Within 60 days of completion of TRE/TIE analyses |
| MRP Effluent Monitoring Requirement 5.2.1 | TRE Work Plan review and update (as necessary) | As necessary |
| MRP Effluent Monitoring Requirement 5.2.2 | Detailed TRE Work Plan | Within 30 days of an accelerated monitoring test that results in “Fail” |

| Order Section | Special Provision Requirement | Reporting Requirement |
|--|--|--|
| MRP Other Monitoring Requirement 9.2.1 | Outfall Inspection Work Plan | January 1, 2024 |
| MRP Other Monitoring Requirement 9.2.1 | Outfall Inspection Report | Within 90 days of inspection completion and no later than May 31, 2026 |
| MRP Other Monitoring Requirement 9.3.1 | Biological Survey Work Plan | December 1, 2023 |
| MRP Other Monitoring Requirement 9.3.1 | Biological Survey Report | May 31, 2026 |
| MRP Reporting Requirement 10.4.2 | Annual Report | March 1, annually |
| MRP Reporting Requirements 10.4.3 | Annual Volumetric Reporting to GeoTracker | April 30, annually |
| MRP Reporting Requirement 10.5.1 | Notification of spills and unauthorized discharges. | Oral reporting within 24 hours and written report within 5 days |
| MRP Reporting Requirement 10.5.3.1.1 | Notification of tertiary recycled water spills greater than or equal to 50,000 gallons | Notification as soon as becoming aware of the discharge and notification is possible |
| MRP Reporting Requirement 10.5.3.1.2 | Notification of tertiary recycled water spills greater than 1,000 gallons and less than 50,000 gallons | Notification as soon as possible , but no longer than 3 days after becoming aware of the discharge |

10.4.2. **Annual Report.** The Permittee shall submit an annual report to the Regional Water Board for each calendar year through the CIWQS Program Web site. In the event that an alternate method of submitting the annual report is required, the Permittee shall submit the report to the e-mail address in section 10.2.6.3., above. The report shall be submitted by March 1 of the following year. The report shall, at a minimum, include the following:

10.4.2.1. Where appropriate, tabular and/or graphical summaries of the monitoring data and disposal records from the previous year. If the Permittee monitors any pollutant more frequently than required by this Order, using test procedures approved under 40 C.F.R. part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted in the SMR.

- 10.4.2.2. A comprehensive discussion of the Facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.
- 10.4.2.3. The names and general responsibilities of all persons employed at the Facility;
- 10.4.2.4. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations; and
- 10.4.2.5. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
- 10.4.2.6. **Source Control Activity Reporting.** The Permittee shall submit, as part of its annual report to the Regional Water Board, a description of the Permittee's source control activities, as required by Special Provision 6.3.5.2., over the previous 12 months. This annual report is due on March 1 of each year, beginning on March 1, 2023, and shall contain:
 - 10.4.2.6.1. A copy of the source control standards, including a table presenting local limits.
 - 10.4.2.6.2. A description of the waste hauler permit system; if applicable.
 - 10.4.2.6.3. A summary of the compliance and enforcement activities taken by the Permittee during the past year, which ensures industrial user compliance. The summary shall include the names and addresses of any industrial or commercial users under surveillance by the Permittee, an explanation of whether they were inspected, sampled, or both, the frequency of these activities at each user, and the conclusions or results from the inspection or sampling of each user.
 - 10.4.2.6.4. A summary of public outreach activities to educate and inform the public about the importance of preventing discharges of inappropriate wastes (e.g., fats, oils, and grease, pharmaceuticals, pesticides and other toxic materials) to the Facility.
- 10.4.2.7. **Sludge Handling and Disposal Activity Reporting.** The Permittee shall submit, as part of its annual report to the Regional Water Board, a description of the Permittee's solids handling, disposal and reuse activities, as required by Special Provision 6.3.5.3 of this Order, over the previous 12 months. At a minimum, the report shall contain:
 - 10.4.2.7.1. Annual sludge production, in dry tons and percent solids;
 - 10.4.2.7.2. Sludge monitoring results;

- 10.4.2.7.3. A schematic diagram showing sludge handling facilities (e.g., digesters, thickeners, drying beds, etc.), if any and a solids flow diagram;
- 10.4.2.7.4. Methods of final disposal of sludge:
- 10.4.2.7.4.1. For any portion of sludge discharged to a sanitary landfill, the Permittee shall provide the volume of sludge transported to the landfill, the names and locations of the facilities receiving sludge, the Regional Water Board's WDRs order number for the regulated landfill, and the landfill classification.
- 10.4.2.7.4.2. For any portion of sludge discharged through land application, the Permittee shall provide the volume of biosolids applied, the date and locations where biosolids were applied, the Regional Water Board's WDRs order number for the regulated discharge, a demonstration that the discharge was conducted in compliance with applicable permits and regulations, and, if applicable, corrective actions taken or planned to bring the discharge into compliance with WDRs.
- 10.4.2.7.4.3. For any portion of sludge further treated through composting, the Permittee shall provide a summary of the composting process, the volume of sludge composted, and a demonstration and signed certification statement that the composting process and final product met all requirements for Class A biosolids.
- 10.4.2.7.5. Results of internal or external third-party audits of the Biosolids Management System, including reported program deficiencies and recommendations, required corrective actions, and a schedule to complete corrective actions.
- 10.4.2.8. **Storm Water Reporting.** The Permittee shall submit, as part of its annual report to the Regional Water Board, an evaluation of the effectiveness of the Permittee's best management practices (BMPs) to control the run-on of storm water to the Facility site, as well as activities to maintain and upgrade these BMPs.
- 10.4.2.9. **Sanitary System Reporting.** The Permittee shall submit as part of the annual report to the Regional Water Board, a description of the Permittee's activities to correct deficiencies and reduce inflow and infiltration (I&I) into the collection system. The report shall include, but not be limited to the following:
- 10.4.2.9.1. A description of any assessment work to characterize the collection system and identify deficiencies;
- 10.4.2.9.2. A description of replacement and rehabilitation of the collection system, including details about replaced/rehabilitated infrastructure, including pipeline, manholes, lift stations, etc.

10.4.2.9.3. A description of any changes in the Permittee's ordinances and programs to address I&I.

10.4.2.9.4. The financial resources spent on collection system assessment, rehabilitation, and repair work during the calendar year, and the amount of financial resources budgeted for the upcoming calendar year.

10.4.3. **Annual Volumetric Reporting.** The Permittee shall electronically certify and submit an annual volumetric report, containing monthly data in electronic format, to State Water Board's GeoTracker system by April 30 of the following year. Required data shall be submitted to the GeoTracker database under a site-specific global identification number. The Permittee shall report in accordance with each of the items in Section 3 of the Recycled Water Policy as described below:

10.4.3.1. **Influent.** Monthly volume of wastewater collected and treated by the Facility.

10.4.3.2. **Production.** Monthly volume of waster treated, specifying level of treatment.

10.4.3.3. **Discharge.** Monthly volume of treated wastewater discharged to each of the following, specifying level of treatment:

10.4.3.3.1. Inland surface waters, specifying volume required to maintain minimum instream flow, if any; and

10.4.3.3.2. Land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture or fields with harvested crops

10.4.4. **Water Recycling System**

10.4.4.1. **Water Recycling Operations Reporting.** The Permittee shall submit reports pertaining to the operation, performance, monitoring, and other activities related to water recycling as follows:

10.4.4.1.1. **Quarterly Recycled Water Report.** The Permittee shall submit a quarterly recycled water report, as required by section 13523.1(b)(4) of the Water Code and other requirements of this Order, containing the following information:

10.4.4.1.1.1. Total volume of recycled water supplied to each recycled water user and the amount of acreage irrigated for each month of the reporting period;

10.4.4.1.1.2. A summary of recycled water use site inspections conducted by the Permittee or recycled water users. The Permittee shall report:

10.4.4.1.1.2.1. Inspection dates;

- 10.4.4.1.1.2.2. All observations of recycled water over-application, such as ponding and irrigation runoff, including the length of time that such conditions existed, and measures taken to correct the cause of over-application;
- 10.4.4.1.1.2.3. A summary of operational problems, irrigation equipment malfunctions and any diversion of recycled water which does not meet the requirements specified in the Order;
- 10.4.4.1.1.2.4. All equipment or process failures initiating an alarm, as well as any corrective and preventative actions taken; and
- 10.4.4.1.1.2.5. Documentation of notifications to users if any recycled water was delivered that did not meet the requirements specified in the Order.
- 10.4.4.1.2. **Annual Recycled Water Report.** The annual report shall include but not be limited to the following:
 - 10.4.4.1.2.1. A compliance summary and discussion of the compliance record for the prior calendar year, including:
 - 10.4.4.1.2.1.1. In the event of noncompliance, the report shall also discuss the corrective actions taken and planned to bring the recycled water program into full compliance with this Order;
 - 10.4.4.1.2.1.2. Certification that all reasonable BMPs and management practices were implemented to ensure efficient and compliant operation of the recycled water system; and
 - 10.4.4.1.2.1.3. Identification of any other problems that occurred in the recycled water system during the prior year, including repeated occurrences of incidental runoff of which the Permittee is aware, and plans to rectify those problems in the coming year.
 - 10.4.4.1.2.2. A summary of major repairs scheduled or completed that affected the recycled water system appurtenances and irrigation areas;
 - 10.4.4.1.2.3. Enforcement and monitoring activities that occurred during the previous year, and identification of any problems and how the problems were addressed;
 - 10.4.4.1.2.4. If applicable, a summary of all cross-connection testing and back-flow prevention activities (inspections, maintenance) and a summary of any problems identified, or certification that no problems occurred; and
 - 10.4.4.1.2.5. A description of agronomic rate compliance, pursuant to section 7.2 of the MRP.

10.5. Spill Notification

10.5.1. **Spills and Unauthorized Discharges.** Information regarding all spills and unauthorized discharges (except SSOs and recycled water) that may endanger health or the environment shall be provided orally to the Regional Water Board¹ within 24 hours from the time the Permittee becomes aware of the circumstances and a written report shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances, in accordance with Section 5.5 of Attachment D.

Information to be provided verbally to the Regional Water Board includes:

10.5.1.1. Name and contact information of caller;

10.5.1.2. Date, time, and location of spill occurrence;

10.5.1.3. Estimates of spill volume, rate of flow, and spill duration, if available and reasonably accurate;

10.5.1.4. Surface water bodies impacted, if any;

10.5.1.5. Cause of spill, if known at the time of the notification;

10.5.1.6. Cleanup actions taken or repairs made at the time of the notification; and

10.5.1.7. Responding agencies.

10.5.2. **Sanitary Sewer Overflows.** Notification and reporting of sanitary sewer overflows is conducted in accordance with the requirements of Order No. 2006-0003-DWQ (Statewide General WDRs for Sanitary Sewer Systems), which is not incorporated herein by reference, and any revisions thereto.

10.5.3. **Recycled Water Spills.** Notification and Reporting of spills and unauthorized discharges of recycled water discharged in or on any waters of the state, as defined in Water Code section 13050, shall be conducted in accordance with the following:

¹ The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to the California Governor's Office of Emergency Services Warning Center (CalOES) will satisfy the 24-hour spill reporting requirement for the Regional Water Board. The contact number for spill reporting for the CalOES is (800) 852-7550.

10.5.3.1. Tertiary Recycled Water²

- 10.5.3.1.1. For unauthorized discharges of 50,000 gallons or more of tertiary recycled water, the Permittee shall immediately notify the Regional Water Board as soon as (a) the Permittee has knowledge of the discharge or probable discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures.
- 10.5.3.1.2. For unauthorized discharges of more than 1,000 gallons, but less than 50,000 gallons of tertiary recycled water, the Permittee shall notify the Regional Water Board as soon as possible, but no longer than three days after becoming aware of the discharge.

² Tertiary Recycled Water means “disinfected tertiary 2.2 recycled water” as defined by DW or wastewater receiving advanced treatment beyond disinfected tertiary 2.2 recycled water.

ATTACHMENT F - FACT SHEET

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ATTACHMENT F - FACT SHEET

As described in section 2.2 of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional 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 Permittee. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Permittee.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

| | |
|---|---|
| WDID | 1B83129OMEN |
| Permittee | Mendocino City Community Services District (CSD) |
| Name of Facility | Mendocino City Wastewater Treatment Plant |
| Facility Address | 10500 Kelly Street Mendocino, CA 95460 Mendocino County |
| Facility Contact, Title and Phone | Michael Kelley, District Superintendent, (707) 937-5790 |
| Authorized Person to Sign and Submit Reports | Michael Kelley, District Superintendent, (707) 937-5790 |
| Mailing Address | P.O. Box 1029, Mendocino, CA 95460 |
| Billing Address | Same as Mailing Address |
| Type of Facility | Publicly Owned Treatment Works (POTW) |
| Major or Minor Facility | Minor |
| Threat to Water Quality | 2 |
| Complexity | B |
| Pretreatment Program | Not Applicable |
| Recycling Requirements | Producer |

| | |
|--------------------------------|---|
| Facility Permitted Flow | 0.3 million gallons per day (mgd) (average dry weather treatment capacity) 1.0 mgd (peak daily wet weather treatment capacity) |
| Facility Design Flow | 0.3 mgd (average dry weather treatment capacity) 1.0 mgd (peak daily wet weather treatment capacity) |
| Watershed | Mendocino Coast Hydrologic Unit |
| Receiving Water | Pacific Ocean |
| Receiving Water Type | Ocean Waters |

1.1. Mendocino City Community Services District (CSD) (hereinafter Permittee) is the owner and operator of the Mendocino City CSD Wastewater Treatment Plant (hereinafter Facility), a Publicly-Owned Treatment Works (POTW).

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

1.2. The Facility discharges tertiary treated wastewater to the Pacific Ocean, a water of the United States. The Permittee was previously regulated by Order R1-2015-0039 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0022870 adopted on August 13, 2015 and expired on September 30, 2020. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

1.3. The Permittee filed a report of waste discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on December 13, 2019. The application was deemed complete on August 14, 2020.

1.5. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Permittee complies with all federal NPDES requirements for continuation of expired permits.

2. FACILITY DESCRIPTION

The Permittee owns and operates the Facility, a wastewater collection, treatment, and disposal facility that serves a population of approximately 4,000, including 1,000 full-time residents and many visitors and tourists to Mendocino City, Russian Gulch State Park, and Headlands State Park. The Facility is located on 10500 Kelly Street in Mendocino, Mendocino County, California.

2.1. Description of Wastewater and Biosolids Treatment and Controls

The Facility treats domestic and commercial wastewater and has an average dry weather design treatment capacity of 0.3 mgd and a peak daily wet weather treatment capacity of 1.0 mgd. The Facility consists of comminution, extended aeration activated sludge, secondary clarification, and tertiary filtration. Effluent is chlorinated, dechlorinated, and flows by gravity to a flow equalization pond. Influent flows in excess of the design flow can be routed to a 300,000 gallon overflow pond for storage until flows diminish, when the excess flow is routed back to the headworks for treatment. Effluent from the equalization pond is controlled at flow control structure A by sliding stop gates, from which flow continues to flow to control structure B, which has two pressure control valves to prevent backflow conditions in the outfall. From flow control structure B, effluent is discharged through a diffuser at Discharge Point 001 to the Pacific Ocean. The outfall structure is an 8-inch diameter pipe, 996 feet in length, which provides a minimum initial dilution of 100:1. Onsite storm water runoff is diverted to the plant headworks for treatment.

Solids are aerobically digested and dewatered to approximately 12 percent solids by a belt filter press, then dehydrated to approximately 90 percent solids using a sludge dryer. Condensate from the dryer is returned to the headworks for treatment. Biosolids are transported to a landfill for final disposal.

During the dry weather season (generally May through October) and other periods, as needed, tertiary treated effluent is distributed to a water recycling system at Discharge Point 002, which consists of a 55,000 gallon storage tank, accompanying appurtenances, and a pop-up sprinkler system located on the Mendocino High School athletic fields. Disinfected tertiary recycled water is pumped to the high school storage tank in a “batch” fashion, and each tank of recycled water transferred to the storage tank must be used for field irrigation before the tank is refilled from the treatment plant. The Permittee may expand recycled water use to other uses allowed by title 22, including landscape irrigation uses and toilet flushing at public facilities in the future.

2.2. Discharge Points and Receiving Waters

Treated wastewater is discharged west of the Facility at Discharge Point 001 at 39° 18' 21" N latitude and 123° 48' 30" W longitude to the Pacific Ocean via a 996 foot outfall.

During dry weather periods, disinfected tertiary effluent is transferred to the 55,000 gallon storage tank at Mendocino High School for recycled water use on the school's athletic fields. The Permittee may expand the recycled water use system in the future.

2.3. Summary of Existing Requirements and SMR Data

Effluent limitations contained in Order No. R1-2015-0039 for discharges from Discharge Point 001 (Monitoring Locations EFF-001, EFF-002, and EFF-003) and representative monitoring data from Order No. R1-2015-0039 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data¹

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Highest Average Monthly Discharge | Highest Average Weekly Discharge | Highest Daily Discharge |
|---|------------|-----------------------|----------------|-------------------|-----------------------------------|----------------------------------|-------------------------|
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 30 | 45 | --- | 7.95 | 27 | --- |
| | % Removal | 85 | --- | --- | 97.6 ² | --- | --- |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | --- | 6.9 | 17.2 | --- |
| | % Removal | 85 | --- | --- | 95.7 ² | --- | --- |
| Oil and Grease | mg/L | 25 | 40 | 75 | 41 | 41 | 41 |
| Settleable Solids | ml/L | 1.0 | 1.5 | 3.0 | <0.1 | <0.1 | <0.1 |
| pH | s.u. | --- | --- | 6.0 – 9.0 | --- | --- | 6.0 – 7.9 |
| Total Residual Chlorine | mg/L | --- | --- | 0.81 ³ | --- | --- | 6.9 ⁴ |
| Turbidity | NTU | 75 | 100 | 225 | 3.4 | 8.9 | 188.9 |
| Total Coliform Bacteria | MPN/100 mL | 70 ⁵ | --- | 230 ⁶ | 17 ⁷ | --- | 1,600 |
| TCDD Equivalents | µg/L | 3.94x10 ⁻⁷ | --- | --- | 7.19x10 ⁻¹⁰ | --- | --- |

Table Notes

1. Representative of the discharge period from October 1, 2015 through July 30, 2021.
2. Represents the minimum observed percent removal.

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Highest Average Monthly Discharge | Highest Average Weekly Discharge | Highest Daily Discharge |
|--|-------|-----------------|----------------|---------------|-----------------------------------|----------------------------------|-------------------------|
| 3. Represents the instantaneous maximum effluent limitation. 4. Represents the maximum observed instantaneous concentration. 5. The monthly median concentration shall not exceed 70 MPN/100 mL. 6. No more than 10 percent of samples shall exceed 230 MPN/100 mL. 7. Represents the highest monthly median reported. | | | | | | | |

2.4. Compliance Summary

On June 28, 2017, the Executive Officer issued an Expedited Payment Letter, (EPL) Order No. R1-2017-0035 for two (2) violations of effluent limits for oil and grease in Order No. R1-2015-0039. The EPL assessed a penalty of \$3,000 for these violations and was paid by the Permittee on October 26, 2017.

2.5. Planned Changes

No modifications or operational changes that will cause a material change in the volume or quality of discharges from the Facility have been identified for the term of this Order.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Permittee to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order. This Order also serves as a Master Recycling Permit pursuant to article 4, chapter 7, division 7 of the Water Code (commencing with section 13500).

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.

This action also involves the adoption of a water recycling requirements, which is subject to CEQA. For the portion of the permit that addresses WDRs for discharges to land, the Regional Water Board has prepared a notice of exemption that the project is categorically exempt from CEQA pursuant to section 15301 of title 14 of the CCR. Because the Regional Water Board is issuing the WDRs for discharges from an existing facility for which no expansion of design flow is being permitted, this project meets the requirements of the categorical exemption, including the requirements set forth in section 15300.2 that the project not have any significant effects or result in cumulative impacts. The existing recycled water use at Mendocino High School has been utilized by the Permittee since 1977.

If at any time the Permittee proposes to expand its recycled water system to include other use sites, the Permittee will be the lead agency under CEQA.

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

3.3.1. Water Quality Control Plan

The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. With

high concentrations of total dissolved solids, ocean waters meet an exception to State Water Board Resolution No. 88-63; and therefore, the MUN designation is not applicable to the ocean receiving water for this Permittee.

Beneficial uses applicable to the Pacific Ocean are summarized in Table F-3, below:

Table F-3. Basin Plan Beneficial Uses

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|-----------------|----------------------|--|
| 001 | Pacific Ocean | <p><u>Existing:</u> Navigation (NAV); Water contact recreation (REC-1); Non-contact water recreation (REC-2); Commercial and sport fishing (COMM); Wildlife habitat (WILD); Rare, threatened, or endangered species (RARE); Marine habitat (MAR); Migration of aquatic organisms (MIGR); Spawning, reproduction, and/or early development (SPAWN); Shellfish harvesting (SHELL); and Aquaculture (AQUA).</p> <p><u>Potential:</u> Industrial water supply (IND); Industrial process supply (PRO); and Preservation of Areas of Special Biological Significance (ASBS).</p> |
| 002 | Groundwater | <p><u>Existing:</u> Municipal and domestic supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); and Native American Culture (CUL).</p> <p><u>Potential:</u> Industrial process supply (PRO); and Aquaculture (AQUA).</p> |

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. This plan contains temperature objectives for

coastal waters. The Permittee does not discharge thermal waste; therefore, the Order does not include effluent limitations for temperature in response to the requirements of the Thermal Plan.

3.3.3. Ocean Plan

The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, 2012, 2015, and 2018. The State Water Board adopted the latest amendment on August 7, 2018, and it became effective on February 4, 2019. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the state to be protected as summarized below:

Table F-4. Ocean Plan Beneficial Uses

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|-----------------|----------------------|--|
| 001 | Pacific Ocean | <u>Existing:</u> Industrial water supply; Water contact and non-contact recreation, including aesthetic enjoyment; Navigation; Commercial and sport fishing; Mariculture; Preservation and enhancement of designated Areas of Special Biological Significance (ASBS); Rare and endangered species; Marine habitat; Fish migration; Fish spawning; and Shellfish harvesting. |

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

3.3.4. Compliance Schedules and Interim Requirements

The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits. This Policy became effective on August 27, 2008. Section III.G of the Ocean Plan authorizes compliance schedules in accordance with the provisions of Resolution No. 2008-0025. This Order does not include any compliance schedules or interim effluent limitations.

3.3.5. **Antidegradation Policy**

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

3.3.6. **Anti-Backsliding Requirements**

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

3.3.7. **Endangered Species Act Requirements**

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

3.3.8. **Sewage Sludge and Biosolids**

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

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

Section 303(d) of the federal CWA requires states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses after

implementation of technology-based effluent limitations on point sources. Each state must submit an updated list, the 303(d) List of Impaired Waterbodies, to U.S. EPA by April of each even numbered year. In addition to identifying the waterbodies that are not supporting beneficial uses, the 303(d) list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. The CWA requires development of a total maximum daily load (TMDL) for each 303(d) listed pollutant and water body contaminant. TMDLs establish the maximum quantity of a given pollutant that can be added to a water body from all sources without exceeding the applicable water quality standard for that pollutant and determine wasteload allocations (the portion of a TMDL allocated to existing and future point sources) and load allocations (the portion of a TMDL attributed to existing and future nonpoint sources).

On April 6, 2018, the U.S. EPA provided final approval of the 2014 and 2016 303(d) list of impaired water bodies prepared by the state. The Pacific Ocean, in the vicinity of the discharge, is not listed as an impaired waterbody on the 303(d) list.

3.5. Other Plans, Policies and Regulations

- 3.5.1. On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems and on August 6, 2013 adopted Order No. WQ 2013-0058-EXEC Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs. The deadline for dischargers to apply for coverage was November 2, 2006. The Permittee applied for coverage and is subject to the requirements of Order Nos. 2006-0003-DWQ and WQ 2013-0058-EXEC and any future revisions thereto for operation of its wastewater collection system.
- 3.5.2. Coverage under the State Water Board Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial Storm Water General Permit) is not required based on the size of the Facility (less than 1 mgd).
- 3.5.3. In 1996, the State Water Board and the California Department of Health Services (now State Water Board Division of Drinking Water) set forth principles, procedures, and agreements to which the agencies committed themselves relative to the use of recycled water in California, in a document titled Memorandum of Agreement between the Department of Health Services and the State Water Resources Control Board on the Use of Reclaimed Water (MOA). This Order is consistent with the MOA.

- 3.5.4. On February 3, 2009, the State Water Board adopted the Recycled Water Policy (State Water Board Resolution No. 2009-0011) for the purpose of increasing the use of recycled water from municipal wastewater sources in a manner that implements state and federal water quality laws. The Recycled Water Policy became effective on May 14, 2009. The Recycled Water Policy provides direction to the regional water boards regarding the appropriate criteria to be used in issuing permits for recycled water projects and describes permitting criteria intended to streamline and provide consistency for the permitting of the vast majority of recycled water projects. Pertinent provisions and requirements of the Policy have been incorporated into this Order to address conditions specific to the Permittee's plan to implement water recycling.

The Recycled Water Policy recognizes the fact that some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives in the applicable Basin Plans, and that not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt or nutrients. The Recycled Water Policy further recognizes that these conditions can be caused by natural soils/conditions, discharges of waste, irrigation using surface water, groundwater or recycled water, and water supply augmentation using surface or recycled water, and that regulation of recycled water alone will not address these conditions. It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The Recycled Water Policy finds that the appropriate way to address salt and nutrient issues is through the development of regional or subregional Salt and Nutrient Management Plans (SNMPs) rather than through imposing requirements solely on individual recycled water projects.

This Order is consistent with the requirements of the Recycled Water Policy to implement an SNMP. The Recycled Water Policy currently requires monitoring for priority pollutants annually. This Order implements this requirement through the Ocean Plan Table 3 monitoring requirement in the MRP that is required of the Permittee pursuant to the Ocean Plan.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

4.1. Discharge Prohibitions

- 4.1.1. **Discharge Prohibition 3.1.** The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited. This prohibition has been retained from Order No. R1-2015-0039 and is based on the Basin Plan and State Water Board Order No. WQO 2002-0012 regarding the petition of WDRs Order No. 01-072 for the East Bay Municipal Utility District and Bay Area Clean Water Agencies. In State Water Board Order No. WQO 2002-0012, the State Water Board found that this prohibition is acceptable in orders, but should be interpreted to apply only to constituents that are either not disclosed by the Permittee, or are not reasonably anticipated to be present in the discharge but have not been disclosed by the Permittee. It specifically does not apply to constituents in the discharge that do not have “reasonable potential” to exceed water quality objectives.

The State Water Board has stated that the only pollutants not covered by this prohibition are those which were “disclosed to the permitting authority and...can be reasonably contemplated.” [In re the Petition of East Bay Municipal Utilities District et al., (State Water Board, 2002) Order No. WQO 2002-0012, p. 24]. In that Order, the State Water Board cited a case which held the Permittee is liable for the discharge of pollutants “not within the reasonable contemplation of the permitting authority...whether spills or otherwise...” [Piney Run Preservation Assn. v. County Commissioners of Carroll County, Maryland (4th Cir. 2001) 268 F. 3d 255, 268.] Thus the State Water Board authority provides that, to be permissible, the constituent discharged (1) must have been disclosed by the Permittee and (2) can be reasonably contemplated by the Regional Water Board.

Whether or not the Permittee reasonably contemplates the discharge of a constituent is not relevant. What matters is whether the Permittee disclosed the constituent to the Regional Water Board or whether the presence of the pollutant in the discharge can otherwise be reasonable contemplated by the Regional Water Board at the time of Order adoption.

- 4.1.2. **Discharge Prohibition 3.2.** Creation of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code is prohibited.

This prohibition has been retained from Order No. R1-2015-0039 and is based on section 13050 of the Water Code and section 5411 of the California Health and Safety Code. It is a standard condition/prohibition included in NPDES permits and waste discharge requirements adopted by the Regional Water Board.

- 4.1.3. **Discharge Prohibition 3.3.** The discharge of sludge or digester supernatant is prohibited, except as authorized under section 6.3.5.3 of this Order (Sludge Disposal and Handling Requirements).

This prohibition has been retained from Order No. R1-2015-0039 and is based on restrictions on the disposal of sewage sludge found in federal regulations [40 C.F.R. Part 503 (Biosolids), Part 527, and Part 258] and title 27 of the California Code of Regulations (CCR).

- 4.1.4. **Discharge Prohibition 3.4.** The discharge or recycling use of untreated or partially treated waste (receiving a lower level of treatment than described in section 2.1 of the Fact Sheet) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in section 4.3. (Recycling Specifications and Requirements) and in Attachment D, Standard Provisions section 1.7 (Bypass) and section 1.8 (Upset).

This prohibition has been retained from Order No. R1-2015-0039 and is based on the Basin Plan to protect the beneficial uses of the receiving water from unpermitted discharges, and the intent of the Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the state without filing for and being issued an Order. This prohibition applies to spills not related to sanitary sewer overflows (SSOs) and other unauthorized discharges of wastewater within the collection, treatment, and disposal facilities. The discharge of untreated or partially treated wastewater from the collection, treatment, or disposal facility represents an unauthorized bypass pursuant to 40 C.F.R. section 122.41(m) or an unauthorized discharge which poses a threat to human health and/or aquatic life, and therefore is explicitly prohibited by this Order.

- 4.1.5. **Discharge Prohibition 3.5.** Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the state or (b) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050(m) is prohibited.

This prohibition has been retained from Order No. R1-2015-0039 and applies to spills related to SSOs and is based on state standards, including section 13050 of the Water Code and the Basin Plan. This prohibition is consistent with the state's antidegradation policy as specified in State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Water in California) in that the prohibition imposes conditions to prevent impacts to water quality, the degradation of water quality, negative effects on receiving water beneficial uses, and lessening of water quality beyond that prescribed in State Water Board or Regional Water Board plans and policies.

This prohibition is stricter than the prohibitions stated in State Water Board Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. Order No. 2006-0003-DWQ prohibits SSOs that result in the discharge of untreated or partially treated wastewater to waters of the United States and SSOs that cause a nuisance, compared to Prohibition 3.5 of this Order, which prohibits SSO discharges that create nuisance or pollution to waters of the state and land for a more complete protection of human health.

This prohibition is necessary because of the prevalence of high groundwater in the North Coast Region and this Region's reliance on groundwater as a drinking water source.

- 4.1.6. **Discharge Prohibition 3.6.** The discharge of waste to land that is not owned by the Permittee, governed by District ordinance, or under agreement to use by the Permittee, or for which the Permittee has explicitly permitted such use, is prohibited, except for use for fire suppression as provided in title 22, sections 60307(a) and 60307(b) of the CCR.

This prohibition has been retained from Order No. R1-2015-0039 and is a standard Regional Water Board prohibition that is included in WDRs when there are discharges to land. Land used for the application of wastewater must be owned by the Permittee or be under the control of the Permittee by contract so that the Permittee maintains a means for ultimate disposal of treated wastewater.

- 4.1.7. **Discharge Prohibition 3.7.** The discharge of waste at any point not described in Finding 2.2 of the Fact Sheet or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.

This prohibition has been retained from Order No. R1-2015-0039 and is a standard Regional Water Board prohibition that allows the Permittee to discharge waste only in accordance with WDRs. It is based on sections 301 and 402 of the federal CWA and section 13263 of the Water Code.

- 4.1.8. **Prohibition 3.8.** The discharge of recycled, filtered wastewater to a use area other than those designated for that purpose is prohibited.

This prohibition is retained from Order No. R1-2015-0039. A discharge of recycled wastewater other than that described in the Order as Discharge Point 002 is an unauthorized discharge and is therefore prohibited.

- 4.1.9. **Prohibition 3.9.** The average dry weather flow through the Facility shall not exceed 0.3 mgd. Peak daily wet weather flows through the Facility shall not exceed 1.0 mgd. Compliance with this prohibition shall be determined as defined in sections 7.9 and 7.10 of this Order.

The average dry weather flow prohibition is retained from Order No. R1-2015-0039 and is based on the engineering design and historic reliable treatment capacity of the Facility. The peak daily wet weather flow prohibition is newly established in this Order and is based on the engineering design treatment capacity of the Facility. Flows exceeding the design dry- and wet-weather design capacities may result in a lower achievement of compliance with water quality objectives established in the Order.

- 4.1.10. **Prohibition 3.10.** The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into waters of the state is prohibited.

This prohibition is retained from Order No. R1-2015-0039 and is based on the discharge prohibitions contained in section III.I of the Ocean Plan and section 13375 of the Water Code.

- 4.1.11. **Prohibition 3.11.** The discharge of sludge directly into the ocean or into a waste stream that discharges to the ocean is prohibited.

This prohibition is retained from Order No. R1-2015-0039 and is based on the Ocean Plan.

- 4.1.12. **Prohibition 3.12.** The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Ocean Plan Tables 3 and 4 (2019) is prohibited.

This prohibition is newly established by this Order and is based on the discharge prohibitions contained in section III.I. of the Ocean Plan.

4.2. **Technology-Based Effluent Limitations**

4.2.1. **Scope and Authority**

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 C.F.R. part 133 and/or Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

In addition, 40 C.F.R. section 122.45(d)(2) states that technology-based permit limits shall be stated as average weekly and average monthly discharge limitations, unless impracticable, for POTWs. 40 C.F.R. section 103.102 provides detailed specifications for establishing effluent limitations for the technology-based constituents, BOD₅, TSS, and pH. Effluent limitations for BOD₅, TSS, and pH in section 4.1, Effluent Limitations, of this Order were established as required by 40 C.F.R. section 103.102 and have been retained in this Order.

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

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

Based on this statutory requirement, U.S. EPA developed secondary treatment regulations, which are specified in 40 C.F.R. part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of BOD₅, TSS, and pH, as follows:

4.2.1.1. **BOD₅ and TSS**

4.2.1.1.1. The 30-day average shall not exceed 30 mg/L.

4.2.1.1.2. The 7-day average shall not exceed 45 mg/L.

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

4.2.1.2. **pH**

4.2.1.2.1. The pH shall be maintained within the limits of 6.0 to 9.0.

4.2.1.2.2. The effluent limitation for pH required to meet the water quality objective is contained in the Basin Plan, Table 3-1.

In addition, 40 C.F.R. section 122.45(f) requires the establishment of mass-based effluent limitations for all pollutants limited in Orders, except for 1) pH, temperature, radiation, or other pollutants, which cannot be appropriately expressed by mass, 2) when applicable standards and limitations are expressed in terms of other units of measure.

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

4.2.2.1. **Secondary Treatment Standards (BOD₅, TSS, and pH).** As described above, the secondary treatment standards at 40 C.F.R. part 133 establish the minimum level of effluent quality attainable by secondary treatment in terms of BOD₅, TSS, and pH. Numeric effluent limitations for BOD₅, TSS, and pH, including the percent removal requirements for BOD₅ and TSS, are retained from Order No. R1-2015-0039 and reflect the secondary treatment standards at 40 C.F.R. part 133.

4.2.2.2. **Ocean Plan Table 4 Effluent Limitations (Oil and Grease, TSS, Settleable Solids, Turbidity, and pH).** The State Water Board, in Table 4 of the Ocean Plan, has established technology-based requirements for oil and grease, TSS, settleable solids, turbidity, and pH. Table 4 effluent limitations apply to POTWs, and also to industrial discharges for which Effluent Limitations

Guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the federal CWA. Compliance with Table 2 effluent limitations shall be the minimum level of treatment acceptable under the Ocean Plan, and shall define reasonable treatment and waste control technology. The Facility is a POTW, therefore, technology-based limitations contained in Table 4 of the Ocean Plan are applicable to the Permittee.

Consistent with Order No. R1-2015-0039, this Order includes effluent limitations for oil and grease, settleable solids, turbidity, and pH based on Table 4 of the Ocean Plan. Table 4 of the Ocean Plan includes effluent limitations for oil and grease, settleable solids, and turbidity of 75 mg/L, 3.0 ml/L, and 225 NTU, respectively, not to be exceeded at any time. Order No. R1-2015-0039 included maximum daily effluent limitations (MDELs) based on these requirements. To be consistent with the averaging period specified in Table 4 of the Ocean Plan, this Order revises these effluent limitations to instantaneous maximum effluent limitations. The percent removal requirements for TSS in the secondary treatment requirements (i.e., 85 percent) are more stringent than the percent removal requirements in Table 4 of the Ocean Plan (i.e., 75 percent); therefore, consistent with Order No. R1-2015-0039, this Order includes percent removal requirements for TSS based on the secondary treatment standards at 40 C.F.R. part 133.

- 4.2.2.3. **Mass-Based Effluent Limitations.** Federal regulations at 40 C.F.R. section 122.45(f) require that, except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. Among the conditions exempting the application of mass-based limitations is section 40 C.F.R. section 122.45(f)(1)(i), which states “for pH, temperature, and radiation, or other pollutants which cannot appropriately be expressed by mass” and 40 C.F.R. section 122.45(f)(1)(ii), which states “when applicable standards and limitations are expressed in terms of other units of measure.”

This Order does not include mass-based effluent for the following pollutants pursuant to the exception in 40 C.F.R, section 122.45(f)(1)(i):

- 4.2.2.3.1. BOD₅ and TSS, because these two parameters are expressed in terms of concentration and percent removal;
- 4.2.2.3.2. Settleable solids, turbidity, and pH because these parameters cannot appropriately be expressed by mass; and
- 4.2.2.3.3. Oil and grease, because the applicable standards for oil and grease in Table 4 of the Ocean Plan are expressed in terms of concentration.

Table F-5. Summary of Technology-Based Effluent Limitations

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
|---|-----------|-----------------|----------------|---------------|-----------------------|-----------------------|
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 30 | 45 | --- | --- | --- |
| | % Removal | 85 | --- | --- | --- | --- |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | --- | --- | --- |
| | % Removal | 85 | --- | --- | --- | --- |
| Oil and Grease | mg/L | 25 | 40 | --- | --- | 75 |
| Settleable Solids | ml/L | 1.0 | 1.5 | --- | --- | 3.0 |
| Turbidity | NTU | 75 | 100 | --- | --- | 225 |
| pH | s.u. | --- | --- | --- | 6.0 | 9.0 |

4.3. Water Quality-Based Effluent Limitations (WQBELs)

4.3.1. Scope and Authority

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

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

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

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

4.3.2.1. **Beneficial Uses.** Beneficial use designations for receiving waters for discharges from the Facility are presented in section 3.3.1 of this Fact Sheet.

4.3.2.2. **Ocean Plan Water Quality Objectives.** Water quality criteria applicable to ocean waters of the Region are established by the Ocean Plan, which includes general provisions and water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. These water quality objectives from the Ocean Plan are incorporated as receiving water limitations into the Order. Table 3 of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 C.F.R. section 122.44(d)(1), and in accordance with procedures established by the Ocean Plan, the Regional Water Board has performed an Ocean Plan reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table 3 toxic pollutants.

Attachment F-1 includes a summary of RPA results for all priority toxic pollutants with water quality criteria/objectives that are applicable to the Pacific Ocean.

4.3.3. **Determining the Need for WQBELs**

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

4.3.3.1. **Ocean Plan Reasonable Potential Analysis (RPA).** Procedures for performing an RPA for ocean dischargers are described in Section III.C. and Appendix VI of the Ocean Plan. In general, the procedure is a statistical method that projects an effluent data set while taking into account the averaging period of water quality objectives, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set, and compares the 95th percentile concentration at 95 percent confidence of each Table 3 pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three following endpoints.

Endpoint 1 – There is “reasonable potential,” and a WQBEL and monitoring are required.

Endpoint 2 – There is “no reasonable potential.” WQBELs are not required, and monitoring is required at the discretion of the Regional Water Board.

Endpoint 3 – The Ocean Plan RPA is inconclusive. Existing WQBELs are retained, and monitoring is required.

The State Water Resources Control Board has developed a reasonable potential calculator, which is available at <http://www.waterboards.ca.gov/plnspols/docs/oplans/rpcalc.zip>. The calculator (RPcalc 2.2) was used in conducting the RPA and considers several pathways in the determination of reasonable potential.

4.3.3.1.1. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Regional Water Board may decide that WQBELs are necessary after a review of such information. Such information may include: the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303(d) status of the receiving water, or the presence of threatened or endangered species or their critical habitat, or other information.

4.3.3.1.2. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

4.3.3.1.3. Third Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the ML), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95th percentile concentration is determined at 95 percent confidence for each pollutant and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed log normally. If the 95th percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

4.3.3.1.4. Fourth Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

- 4.3.3.1.4.1. If the number of censored values (those expressed as a “less than” value) account for less than 80 percent of the total number of effluent values,

calculate the ML (the mean of the natural log of transformed data) and SL (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.

- 4.3.3.1.4.2. If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described below for the Fifth Path. (A non-parametric analysis becomes necessary when the effluent data is limited, and no assumptions can be made regarding its possible distribution.)

4.3.3.1.5. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than three detected and quantified values, or when the effluent data set contains three or more detected and quantified values but the number of censored values accounts for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective, and accounting for ties. The sample number is reduced by one for each tie, when the dilution adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limitations in the expiring permit are retained.

4.3.3.2. **Reasonable Potential Determination**

The RPA for the effluent was conducted using effluent monitoring data generated from one monitoring event in June 2019 for all Ocean Plan Table 3 parameters and from routine monitoring events conducted between October 2015 through July 2021 for chlorine residual, TCDD equivalents, ammonia, and chronic toxicity as required by the Monitoring and Reporting Program for Order No. R1-2015-0039. Results from the RPA have been used to determine the need for effluent limitations for Table 3 parameters given in the Ocean Plan.

For the RPA conducted for this permit renewal, pollutant concentrations were adjusted to account for the calculated initial dilution of 100 parts seawater per part wastewater. The adjustment for dilution is consistent with previous orders for this Facility.

The table below identifies the RPA endpoint for each Table 3 parameter detected in the effluent and shows the analysis reached an Endpoint 3 for most of the parameters analyzed. An Endpoint 3 RPA is inconclusive and results when a majority of the effluent data is reported as ND (not detected). In these circumstances, the Regional Water Board views the “inconclusive”

result as an indication of no concern for a particular pollutant; however, additional monitoring will be required for those parameters during the term of the permit.

The RPA conducted for the Facility demonstrated no reasonable potential (Endpoint 2) for discharges from the Facility to cause or contribute to exceedances of applicable water quality criteria for chlorine residual and ammonia. The RPA further determined that reasonable potential (Endpoint 1) was not present for the remaining Table 3 parameters.

Order No. R1-2015-0039 established effluent limitations for TCDD-equivalents based on the numeric water quality criteria from the Ocean Plan. As shown in the table below, the RPA conducted for the Facility was inconclusive (Endpoint 3) for TCDD-equivalents. For RPA results of Endpoint 3, the Ocean Plan specifies that existing effluent limitations for the pollutant shall remain in the permit. Therefore, this Order retains the effluent limitations for TCDD-equivalents from Order No. R1-2015-0039.

The following tables summarize the RPA for each priority pollutant that was reported in detectable concentrations in the effluent. The MECs, most stringent water quality objectives (WQO), and background concentrations (B) used in the RPA are presented, along with the RPA results for each toxic pollutant analyzed. No other pollutants with applicable numeric water quality criteria from the Ocean Plan were measured above detectable concentrations or analyzed for during the monitoring events conducted by the Permittee.

Attachment F-1 to this Order summarizes the RPA for all priority toxic pollutants with water quality criteria/objectives that are applicable to the Pacific Ocean.

Table F-6. Summary of Reasonable Potential Analysis Results – Objectives for Protection of Marine Aquatic Life

| Table 3 Pollutant | Most Stringent WQO (µg/L) | No. of Samples | No. of Non-Detects | Background Conc. (µg/L) Cs¹ | Max Effluent Conc. (µg/L) Ce | Calculated Max Conc. (µg/L)² X-obs | RPA Results, Comment³ |
|--------------------------|----------------------------------|-----------------------|---------------------------|---|-------------------------------------|--|---|
| Arsenic, Total | 8 | 1 | 0 | 3 | 0.57 | 3.0 | Endpoint 3 |
| Copper, Total | 3 | 1 | 0 | 2 | 11 | 2.1 | Endpoint 3 |
| Lead, Total | 2 | 1 | 0 | 0 | 0.087 | 0.0009 | Endpoint 3 |
| Nickel, Total | 5 | 1 | 0 | 0 | 1.6 | 0.0158 | Endpoint 3 |
| Selenium, Total | 15 | 1 | 0 | 0 | 0.6 | 0.0059 | Endpoint 3 |
| Zinc, Total | 20 | 1 | 0 | 8 | 22 | 8.1 | Endpoint 3 |
| Cyanide, Total | 1 | 1 | 0 | 0 | 4.7 | 0.047 | Endpoint 3 |
| Chlorine, Total Residual | 2 | 215 | 131 | 0 | 17 | 0.168 | Endpoint 2 |
| Ammonia, Total | 600 | 70 | 67 | 0 | 180 | 1.8 | Endpoint 2 |
| Endosulfan | 0.009 | 1 | 0 | 0 | 0.0064 | 0.0003 | Endpoint 3 |

| Table 3 Pollutant | Most Stringent WQO (µg/L) | No. of Samples | No. of Non-Detects | Background Conc. (µg/L) Cs ¹ | Max Effluent Conc. (µg/L) Ce | Calculated Max Conc. (µg/L) ² X-obs | RPA Results, Comment ³ |
|---|---------------------------|----------------|--------------------|---|------------------------------|--|-----------------------------------|
| <u>Table Notes</u> | | | | | | | |
| 1. Background (Cs) is zero (0) for all pollutants except those with background concentrations specified in Table 5 of the Ocean Plan. | | | | | | | |
| 2. Represents the maximum concentration after complete mixing, calculated according to Step 4 of Appendix VI of the Ocean Plan using the permitted dilution ratio (Dm) of 35 as follows: $X\text{-obs} = (C_e + D_m * C_s) / (D_m + 1)$, unless otherwise noted. The calculated maximum concentration is compared to the most stringent water quality objective to determine if effluent limitations are required. Effluent limitations are then calculated as described in Fact Sheet section 4.3.4, below. | | | | | | | |
| 3. RPA Results: | | | | | | | |
| Endpoint 1 = An effluent limitation must be developed for the pollutant. Monitoring is required. | | | | | | | |
| Endpoint 2 = An effluent limitation is not required for the pollutant. Monitoring may be required as appropriate. | | | | | | | |
| Endpoint 3 = RPA is inconclusive. Less than 3 detects or greater than 80% ND. | | | | | | | |

Table F-7. Summary of Reasonable Potential Analysis Results – Objectives for Protection of Human Health

| Table 3 Pollutant | Most Stringent WQO (µg/L) | No. of Samples | No. of Non-Detects | Background Conc. (µg/L) Cs ¹ | Max Effluent Conc. (µg/L) Ce | Calculated Max Conc. (µg/L) ² X-obs | RPA Results, Comment ³ |
|-----------------------|---------------------------|----------------|--------------------|---|------------------------------|--|-----------------------------------|
| Dibromo-chloromethane | 8.6 | 1 | 0 | 0 | 2.7 | 0.0267 | Endpoint 3 |
| Chloroform | 130 | 1 | 0 | 0 | 24 | 0.2395 | Endpoint 3 |

| Table 3 Pollutant | Most Stringent WQO (µg/L) | No. of Samples | No. of Non- Detects | Background Conc. (µg/L) Cs¹ | Max Effluent Conc. (µg/L) Ce | Calculated Max Conc. (µg/L)² X-obs | RPA Results, Comment³ |
|----------------------------------|--|---------------------------|------------------------------------|---|---|--|---|
| Dichloro-bromomethane | 6.2 | 1 | 0 | 0 | 10 | 0.1 | Endpoint 3 |
| Halomethanes | 130 | 1 | 0 | 0 | 0.96 | 0.0095 | Endpoint 3 |
| TCDD Equivalents ⁴ | 3.9E-09 | 1 | 0 | 0 | 7.19E-10 | 7.1E-12 | Endpoint 3 |

Table Notes

1. Background (Cs) is zero (0) for all pollutants except those with background concentrations specified in Table 5 of the Ocean Plan.
2. Represents the maximum concentration after complete mixing, calculated according to Step 4 of Appendix VI of the Ocean Plan using the permitted dilution ratio (Dm) of 35 as follows: $X\text{-obs} = (C_e + D_m * C_s) / (D_m + 1)$, unless otherwise noted. The calculated maximum concentration is compared to the most stringent water quality objective to determine if effluent limitations are required. Effluent limitations are then calculated as described in Fact Sheet section 4.3.4, below.
3. RPA Results:
 Endpoint 1 = An effluent limitation must be developed for the pollutant. Monitoring is required.
 Endpoint 2 = An effluent limitation is not required for the pollutant. Monitoring may be required as appropriate.
 Endpoint 3 = RPA is inconclusive. Less than 3 detects or greater than 80% ND.
4. The Effluent Limitation for TCDD Equivalents shall be retained from Order R1-2015-0039, as suggested for an Endpoint 3 result, per the Ocean Plan.

1.1.

4.3.3.3. **Non-Table 3 Water Quality Objectives**

4.3.3.3.1. **Total Residual Chlorine.** Effluent limitations for total residual chlorine at Discharge Point 001 are retained from Order No. R1-2015-0039. The Ocean Plan includes total chlorine residual objectives for ocean waters for protection of marine aquatic life. Table 3 of the Ocean Plan includes 6-month median, daily maximum, and instantaneous maximum effluent limitations of 2 µg/L, 8 µg/L, and 60 µg/L, respectively, for total residual chlorine. Effluent monitoring data submitted by the Permittee between October 2015 and June 2021 demonstrated compliance with these effluent limitations, however, because the Facility uses chlorine for disinfection, the Regional Water Board finds that there is reasonable potential for total residual chlorine based on best professional judgment (2019 Ocean Plan, Appendix VI, Step 13) because the Facility uses chlorine as a disinfectant thus there is reasonable potential for total residual chlorine to remain in the discharge in the event of any failure of the dechlorination system.

Therefore, consistent with Order No. R1-2015-0039, this Order includes effluent limitations for total residual chlorine in effluent discharged to the Pacific Ocean through Discharge Point 001 based on the Ocean Plan objectives.

4.3.3.3.2. **Bacteria (Fecal Coliform Bacteria, Enterococci, and Total Coliform Bacteria)**

The Ocean Plan was amended in 2019 to revise the bacterial objectives for ocean waters used for water contact recreation and shellfish harvesting. Receiving water limitations based on the revised objectives in the Ocean Plan have been established in this Order as further discussed in sections 4.3.3.3.2.1 and 4.3.3.3.2.2, below. Effluent limitations for bacteria are necessary to protect the water contact recreation and shellfish harvesting beneficial uses of the receiving water, as further discussed below.

4.3.3.3.2.1. **Water Contact Standards**

The Ocean Plan includes bacterial standards for fecal coliform bacteria and enterococci for protection of ocean waters used for water contact recreation. The enterococci objectives are based on an estimated illness rate of 32 per 1,000 primary contact recreators in U.S. EPA's 2012 Recreational Water Quality Criteria. The fecal coliform objectives were retained in the Ocean Plan, in addition to the enterococci objectives, based on California-specific epidemiological studies that suggest fecal coliform may be a better indicator of gastrointestinal illness than enterococci during certain types of exposure and environmental conditions. As a result, both objectives for enterococci and fecal coliform are applicable.

The water contact standards must be met within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline. The Facility's outfall structure is a pipe-opening on the cliff face above the ocean surface and public access to offshore areas surrounding the Facility's outfall is open and unrestricted. Therefore, the water contact standards are applicable to the receiving water in the vicinity of the outfall.

Although the Facility provides disinfection, inadequate or incomplete disinfection of municipal wastewater creates the potential for pathogens to be discharged. Therefore, the Regional Water Board finds the discharge has reasonable potential for pathogens and WQBELs are required.

To comply with the Ocean Plan, and instead of requiring receiving water monitoring and direct determination of compliance with water quality objectives for bacteria, the disinfected effluent discharged through Discharge Point 001 shall not contain concentrations of enterococci, as measured at Monitoring Location EFF-001, exceeding the limitations. This Order does not establish effluent limitations for fecal coliform or enterococci because the total coliform limit that has been retained from Order No. R1-2015-0039 is more stringent and will allow for assessment of compliance with the Ocean Plan fecal coliform and enterococcus limitations.

4.3.3.3.2.2. **Shellfish Standards**

The Ocean Plan includes bacterial standards for total coliform bacteria for protection of ocean waters used for water contact recreation. Shellfish harvesting standards for total coliform bacteria must be maintained throughout the water column. The median concentration of total coliform bacteria shall not exceed an MPN of 70 organisms per 100 mL in a calendar month; and no samples shall exceed an MPN of 230 organisms per 100 mL.

Regional Water Board staff has determined that there is a reasonable potential that the discharge can cause or contribute to exceedances of bacterial water quality objectives for shellfish harvesting. This determination is based on the following factors:

- 4.3.3.3.2.2.1. The Ocean Plan specifies that shellfish standards shall be maintained through the water column (i.e., without dilution credit).
- 4.3.3.3.2.2.2. Total coliform bacteria have been shown to be present in the discharge. For the period from October 2015 through July 2021, the maximum reported effluent concentration of total coliform was 1,600 MPN/100 mL at Monitoring Location EFF-002.

- 4.3.3.3.2.2.3. The Permittee collects effluent grab samples once per week, presenting an incomplete representation of the daily effluent quality.
- 4.3.3.3.2.2.4. Receiving water monitoring data are not available for the area in the vicinity of the discharge, and
- 4.3.3.3.2.2.5. Public access to offshore areas surrounding the Facility's outfall is open and unrestricted. Members of the public wishing to harvest shellfish in the area can approach by boat and collect shellfish in accordance with state regulations.

4.3.3.3.2.3. **Total Coliform Bacteria**

Effluent limitations for total coliform bacteria at Discharge Point 001, described below, are retained from Order No. R1-2015-0039. In lieu of receiving water bacterial monitoring, the Permittee has been required to meet the most stringent water quality standards, shellfish harvesting, at the end of the discharge outfall.

These effluent limitations can reasonably be expected to be achieved with the Facility's existing facilities and will ensure that bacterial standards for both shellfish harvesting and water contact recreation are maintained throughout the water column. In accordance with the Ocean Plan, the disinfected effluent discharged through Discharge Point 001 shall not contain concentrations of total coliform bacteria, as measured at Monitoring Location EFF-002, exceeding the following limitations:

- 4.3.3.3.2.4. The median concentration shall not exceed an MPN of 70 organisms per 100 mL in a calendar month.
- 4.3.3.3.2.5. No samples shall exceed an MPN of 230/100 mL. Although the Ocean Plan specifies compliance with this objective using the results of 10 consecutive samples, this Order applies the limitation as a single sample limitation for ease of determining compliance with the limitation.

4.3.4. **WQBEL Calculations**

Based on results of the RPA, performed in accordance with methods of the Ocean Plan for discharges to the Pacific Ocean, the Regional Water Board is retaining WQBELs for chlorine residual and TCDD-equivalents at Discharge Point 001.

As described by Section III.C of the Ocean Plan, effluent limits for Table 3 constituents are calculated according to the following equation.

$$C_e = C_o + D_m (C_o - C_s)$$

Where ...

Ce = the effluent limitation (µg/L)

Co = the concentration (the water quality objective) to be met at the completion of initial dilution (µg/L)

Cs = background seawater concentration (µg/L)

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater (here, Dm = 100)

For the Facility, the Dm of 100 is retained from Order No. R1-2015-0039. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. In accordance with Table 3 implementing procedures, Cs equals zero for all parameters, except the following:

Table F-8. Background Seawater Concentrations – Ocean Plan

| Pollutant | Background Seawater Concentration (µg/L) |
|-----------|--|
| Arsenic | 3 |
| Copper | 2 |
| Mercury | 0.0005 |
| Silver | 0.16 |
| Zinc | 8 |

Applicable water quality objectives from Table 3 of the Ocean Plan are as follows:

Table F-9. Water Quality Objectives – Ocean Plan

| Pollutant | Units | 6-Month Median | Daily Maximum | Instantaneous Maximum |
|-------------------------|-------|----------------|---------------|-----------------------|
| Total Residual Chlorine | µg/L | 2 | 8 | 60 |

Using the equation, $C_e = C_o + D_m (C_o - C_s)$, effluent limitations are calculated as follows. Here, Dm is equal to 100 for each effluent limitation calculation.

Total Residual Chlorine

$$C_e = 2 + 100 (2 - 0) = 202 \text{ } \mu\text{g/L (6-Month Median)}$$

$$C_e = 8 + 100 (8 - 0) = 808 \text{ } \mu\text{g/L (Daily Maximum)}$$

$$C_e = 60 + 100 (60 - 0) = 6,060 \mu\text{g/L (Instantaneous Maximum)}$$

TCDD Equivalents

$$C_e = 3.9\text{E-}09 + 100 (3.9\text{E-}09 - 0) = 3.94 \times 10^{-7} \mu\text{g/L (30-Day Average)}$$

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

Monitoring triggers for chronic toxicity protect the receiving water from the aggregate effect of a mixture of pollutants that may be present in effluent. 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 test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth.

WET requirements are derived from the CWA and the Basin Plan. The Basin Plan establishes a narrative water quality objective for toxicity that states “All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or aquatic life.” Detrimental responses may include, but are not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. For compliance with the Basin Plan’s narrative toxicity objective, this Order requires the Permittee to conduct WET testing for chronic toxicity, as specified in the MRP (Attachment E, section 5).

The Permittee conducted annual chronic toxicity testing using *Macrocystis pyrifera*, *Strongylocentrotus pupuratus*, and *Atherinops affinis*. The following table summarizes the chronic toxicity testing results for 2016 through 2021.

Table F-10. Summary of Chronic Toxicity Results

| Date | <i>Macrocystis pyrifera</i> ¹ | | <i>Strongylocentrotus Purpuratus</i> ¹ | <i>Atherinops affinis</i> ¹ | |
|------------------|--|--------------------------|---|--|---------------------|
| | Germination ² | Tube Length ² | Reproduction ² | Survival | Growth ² |
| August 22, 2016 | Pass 0.65% | Pass 1.25% | Pass -2.37% | Pass 0.00% | Pass -5.56% |
| July 25, 2017 | Pass -0.55% | Pass 1.19% | --- | --- | --- |
| July 9, 2018 | Pass -1.41% | Pass -0.96% | --- | --- | --- |
| July 23, /2019 | Pass -1.10% | Pass -1.78% | --- | --- | --- |
| January 12, 2021 | Pass -1.10% | Pass -0.38% | --- | --- | --- |

Table Notes

1. Results presented as “Pass or Fail” and percent effect, using TST approach.
2. A negative percent effect means that the effluent test performed better than the control sample.

The Ocean Plan contains toxicity testing requirements based on minimum initial dilution (Dm) factors in section III.C.4.c. Following the implementation procedures of the Ocean Plan, dischargers with Dm factors ranging from 100:1 to 350:1 are required to conduct chronic toxicity testing and may be required to conduct acute toxicity testing. This Order allows for a Dm of 100 for the chronic condition. As shown in Table F-6 of this Fact Sheet, the analysis to determine if the discharge has reasonable potential to cause or contribute to an exceedance of the Ocean Plan objective for chronic toxicity was inconclusive due to the fact that the sample set was too small to draw a solid conclusion regarding reasonable potential. This Order does not contain WET limitations; however, in accordance with the Ocean Plan (section III.C, Implementation Provisions for Table 3), this Order establishes annual chronic toxicity monitoring requirements for the discharge at Discharge Point 001.

4.3.5.1. Test of Significant Toxicity

The Ocean Plan establishes a daily maximum chronic toxicity objective of 1.0 TUc = 100/NOEC, using a five-concentration hypothesis test, and a daily maximum acute toxicity objective of 0.3 TUa = 100/LC50, using a point estimate model. In 2010, U.S. EPA endorsed the peer-reviewed Test of Significant Toxicity (TST) two-concentration hypothesis testing approach in

National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) as an improved hypothesis-testing tool to evaluate data from U.S. EPA's toxicity test methods. The TST hypothesis testing approach more reliably identifies toxicity—in relation to the chronic (0.25 or more) and acute (0.20 or more) mean responses of regulatory management concern—than the current NOEC hypothesis-testing approach used in the Ocean Plan.

This Order does not include effluent limitations for toxicity based on the TST approach. However, this Order does require the Permittee to monitor and report results in a manner that will allow the Regional Water Board to conduct an RPA in accordance with the TST approach at the time of the next permit renewal.

On December 1, 2020, the State Water Board adopted a toxicity amendment to the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Toxicity Provisions) that standardizes the regulation of aquatic toxicity for all non-oceanic surface waters. U.S. EPA's TST approach is an essential component of this adopted toxicity amendment as it forms the basis for utilizing numeric water quality objectives and acts as the primary means of determining compliance with the proposed effluent limitations. At the time this permit is being developed, the Toxicity Provisions are awaiting approval from the U.S. EPA.

In a letter dated February 12, 2014, the State Water Board submitted an alternative test process (ATP) request to U.S. EPA Region 9 for the statewide use of a two-concentration toxicity test design when using the TST approach. This two-concentration test design is composed of a single effluent concentration and a control concentration. U.S. EPA approved the ATP request on March 17, 2014. In June 2014, the approval was challenged in court on procedural grounds under the Administrative Procedures Act by the Southern California Alliance of Publicly Owned Treatment Works (SCAP) and the Central Valley Clean Water Association (CVCWA). The U.S. EPA withdrew the approval and notified State Water Board in a memo dated February 11, 2015. In a letter dated November 25, 2020, the State Water Board submitted a new ATP request to U.S. EPA Region 9. At the time this permit is being developed, the State Water Board is awaiting a response from U.S. EPA. The permit may be modified, if necessary, to incorporate new statewide toxicity criteria established by the toxicity amendment.

It is important to note that U.S. EPA's rescission of its approval of the February 12, 2014 ATP is not based on the substantive TST statistical analysis or the scientific validity of a two-concentration test design. The withdrawal letter also states that currently there is a proposed rulemaking to change the language in the ATP regulations at 40 C.F.R. part 136.

The benefits of requiring the TST in new or amended permits include improving the statistical power of the toxicity test and simplifying the analysis as compared to the traditional hypothesis statistical approaches or point estimates. The calculations are straightforward and provide a clear pass/fail result. With the withdrawal of the two-concentration test design approval, an NPDES permit can still require the TST for statistical analyses.

If the two-concentration test design is approved at a future date, the MRP may be modified to remove the need for a five-concentration test. Toxicity tests shall be run using a multi-concentration test design in accordance with 40 C.F.R. section 136.3, and the TST shall be utilized with the biological responses from the permitted in-stream waste concentration (IWC) and the control (effluent concentration of zero). However, even with only two of the five concentration biological responses being used, cost savings in the form of time and effort are still realized for the statistical analysis and data interpretation carried out by the Permittee, lab, and permit manager. This Order requires application of the TST for statistical analysis of whole effluent toxicity data.

Test of Significant Toxicity Design

The TST's null hypothesis for chronic toxicity is:

H_0 : Mean response (In-stream Waste Concentration (IWC) in % effluent) \leq 0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test are analyzed using the TST approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

The chronic IWC (in % effluent) for Discharge Point 001 is 1%. The chronic WET trigger for Discharge Point 001 is expressed as a null hypothesis (H_0) and regulatory management decision (b value) of 0.75 for the chronic toxicity methods in the MRP. The null hypothesis for this discharge is:

H_0 : Mean response (100% effluent) \leq 0.75 mean response (control)

The Permittee conducted chronic toxicity testing at the IWC of 1% during the term of Order No. R1-2015-0039. As shown in Table F-9, all effluent chronic toxicity tests collected on August 22, 2016 resulted in "Pass" at the IWC of 1%, indicating that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives for chronic toxicity using the TST approach. Therefore, this Order does not include an effluent limitation for chronic toxicity.

This Order requires annual monitoring for chronic toxicity at Monitoring Location EFF-001. Results shall be analyzed using the TST hypothesis testing approach in section 5.1.6.1 of the MRP. Compliance with this chronic

toxicity limitation is demonstrated by rejecting the null hypothesis and reporting “Pass” or “P”.

When the chronic toxicity test results in a “Fail” or “F,” the Permittee must initiate accelerated monitoring as specified in the MRP (Attachment E, section 5). After accelerated monitoring, if conditions of chronic toxicity are found to persist, the Permittee will be required to conduct a TRE, as described in section 5.2 of the MRP.

Notification requirements for chronic WET testing include a 72-hour verbal notification requirement and a 14-day written report requirement, if test results indicate toxicity. The 14-day written notification is established in the U.S. EPA WET Guidance documents cited in the MRP. The 72-hour verbal notification requirement is being added to provide the Regional Water Board with knowledge of the toxicity in advance of the written report. The 72-hour requirement is intended to give the Permittee sufficient time to make a telephone call to Regional Water Board staff and accounts for non-working days (e.g., weekends). Verbal notification of WET test exceedances may be left by voice mail if the Regional Water Board staff person is not immediately available by telephone.

This Order retains the requirement for the Permittee to conduct a screening test using at least one vertebrate, invertebrate, and plant species. After the screening test is completed, monitoring can be reduced to the most sensitive species.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R1-2015-0039.

4.4.2. Antidegradation Policies

State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality Waters in California (the Antidegradation Policy) requires that disposal of waste into waters of the state be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state. The quality of some waters is higher than established by adopted policies and that higher quality water shall be maintained to the maximum extent possible consistent with the Antidegradation Policy. The Antidegradation Policy requires that (1) higher quality water will be maintained until it has been demonstrated to the state that any change will be consistent with the maximum

benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than that prescribed in the policies; and (2) any activity that produces a waste or may produce waste or increased volume or concentration of waste and discharges to existing high quality water will be required to meet waste discharge requirements that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.

Discharges from the Facility are required to maintain protection of the beneficial uses of the receiving water and comply with applicable provisions of the Basin Plan.

This Order is consistent with applicable federal and state antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater beyond that which was permitted to discharge in accordance with Order No. R1-2015-0039.

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

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD₅, oil and grease, pH, TSS, settleable solids, and turbidity. Restrictions on these pollutants are discussed in section 4.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELS have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 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.

The Regional Water Board has considered the factors in Water Code section 13263, including the provisions of Water Code 13241, in establishing these requirements.

Table F-11. Summary of Final Effluent Limitations

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum | 6-Month Median | Basis |
|---|------------|-----------------------|----------------|---------------|-----------------------|-----------------------|----------------|---------|
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 30 | 45 | --- | --- | --- | --- | CFR |
| | % Removal | 85 | --- | --- | --- | --- | --- | |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | --- | --- | --- | --- | CFR |
| | % Removal | 85 | --- | --- | --- | --- | --- | |
| pH | s.u. | --- | --- | --- | 6.0 | 9.0 | --- | CFR, OP |
| Oil and Grease | mg/L | 25 | 40 | --- | --- | 75 | --- | OP |
| Settleable Solids | mL/L | 1.0 | 1.5 | --- | --- | 3.0 | --- | OP |
| Turbidity | NTU | 75 | 100 | --- | --- | 225 | --- | OP |
| Total Residual Chlorine | mg/L | --- | --- | 0.81 | --- | 6.06 | 0.20 | OP |
| TCDD Equivalents | µg/l | 3.94x10 ⁻⁷ | --- | --- | --- | --- | --- | OP |
| Total Coliform Bacteria | MPN/100 mL | 70 ² | --- | --- | --- | 230 ³ | --- | OP |

Table Notes

- Definitions of acronyms in Table F-11:
CFR 40 C.F.R. part 133
OP Ocean Plan
- The median value of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 70 per 100 milliliters (mL), in a calendar month.
- No samples shall exceed 230/100 mL.

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

This Order does not establish interim effluent limitations or schedules for compliance with final limitations.

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

This Order does not authorize land discharge.

4.7. **Recycling Specifications**

This Order authorizes the Permittee to reuse treated municipal wastewater that complies with Water Recycling Specifications and Requirements contained in section 4.3 of the Order for uses that have been addressed in an approved title 22 Engineering Report.

Water recycling at the Mendocino High School athletic fields began in 1977 and was previously regulated under Water Reclamation Requirements Order Nos. 77-100 and 97-66, issued jointly to the Permittee and the Mendocino Unified School District on August 27, 1997. In consultation with the California Department of Health Services (now State Water Board, Division of Drinking Water (DDW)), the Regional Water Board established in WRR Order No. 97-66 prohibitions, limitations, and requirements to comply with regulations for water recycling contained in title 22, division 4, chapter 3 of the CCR. Those limitations and requirements were updated and included in the previous WDR, Order No. R1-2015-0039, while use area requirements were contained in Order No. 97-66. Compliance with effluent limitations in WDR Order No. R1-2015-0039 for BOD₅, TSS, total coliform organisms, nitrate, pH, and turbidity has been achieved through analyses of representative samples of effluent produced by the Facility for use as recycled water. The effluent limitation requiring a minimum CT value has been met by calculation, using the product of chlorine residual and the minimum contact time within the storage tank, prior to irrigating the athletic fields at the Mendocino High School.

This Order retains effluent limitations for water recycling from Order No. R1-2015-0039 and includes expanded use area requirements for water recycling as required by title 22, article 4, section 60310.

4.7.1. **Scope and Authority**

Section 13263 of the Water Code requires the Regional Water Board to prescribe requirements for proposed discharges, existing discharges, or material change in an existing discharge based upon the conditions of the disposal area or receiving waters upon or into which the discharge is made or proposed. The prescribed requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to

be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. In prescribing requirements, the Regional Water Board is not obligated to authorize the full waste assimilation capacities of the receiving water.

Here, the Regional Water Board considered all of these factors when developing the waste discharge requirements for the recycled water discharge. Limitations for BOD₅, TSS, and pH were scientifically derived to implement water quality objectives that protect beneficial uses. Both beneficial uses and the water quality objectives have been approved pursuant to state law. In addition, discharge prohibitions were included to prohibit the recycled water use of untreated or partially treated waste, in order to protect public health and prevent nuisance. In addition, the Regional Water Board considered the factors set forth in Water Code section 13241, including the consideration of past, present, and probable future beneficial uses of the receiving water, which the Regional Water Board anticipates to be the same as set forth in the Basin Plan. The Regional Water Board considered the environmental characteristics, including water quality of the Pacific Ocean, the coordinated control of all factors which affect water quality in the area, and the need to develop and use recycled water, which this Order supports.

Effluent monitoring requirements were retained for nitrate and added for ammonia, nitrite, total organic nitrogen, and salts due to the need to assess nitrogen and salt application rates for recycled water. The monitoring and reporting program allows for a potential reduction of these monitoring requirements if monitoring demonstrates no reasonable potential to exceed water quality objectives for groundwater in the Basin Plan.

4.7.2. **Applicable Beneficial Uses and Water Quality Criteria and Objectives**

4.7.2.1. **Beneficial Uses.** Beneficial use designations for groundwater established in the Basin Plan include municipal and domestic supply (MUN), agricultural supply (AG), industrial service supply (IND), native American culture (CUL), industrial process supply (PRO), and aquaculture (AQUA).

4.7.2.2. **Basin Plan Water Quality Objectives.** The Basin Plan contains narrative objectives for taste and odor, bacteria, radioactivity, and chemical constituents (including those chemicals that adversely affect agricultural water supply) that apply to groundwater.

4.7.3. **Determining the Need for Requirements for Water Recycling**

Section 4.3 of this Order contains Water Recycling Specifications and Requirements to ensure that recycled water is used in a manner that is protective of groundwater and surface water quality. These specifications and requirements are established to conform to requirements contained in title 22,

division 4, chapter 3 of the CCR for recycled water use of disinfected tertiary recycled water. The Permittee is required to comply with applicable state and local requirements regarding the production and use of recycled wastewater, including requirements of Water Code sections 13500 – 13577 (Water Recycling) and DDW regulations at title 22, sections 60301 – 60357 of the CCR (Water Recycling Criteria).

A key to reducing the potential for spills is for the Permittee to establish and implement appropriate BMPs to protect against the possibility of recycled water spills. Section 4.3.2.5 of the Order requires the Permittee to develop BMPs for the management of the recycled water system in order to reduce the potential for recycled water spills and runoff when implemented properly.

The Recycling Specifications and Requirements are established in this Order to conform to requirements contained in the CCR, title 22, division 4, chapter 3 for the recycled water use of disinfected tertiary effluent. Specific water recycling requirements are enumerated in Order section 4.3, Recycling Specifications and Requirements to this Order. The requirement to comply with title 22 requirements is retained from Order No. R1-2015-0039.

- 4.7.3.1. **BOD5, pH, TSS, and Nitrate.** Effluent limitations for BOD₅ and TSS included in this Order are consistent with tertiary standards for oxidized and filtered wastewater and are necessary to meet standards for disinfected tertiary recycled water as defined at , title 22, section 60301.230 of the CCR for the use of recycled water used as irrigation water on parks and playgrounds and schoolyards. Effluent limitations for pH included in this Order are retained from Order R1-2015-0039 and reflect the effluent quality attainable by the Facility. The effluent limitation for nitrate is retained in this Order based on the title 22 primary MCL and is necessary to ensure protection of groundwater.

Table F-12. Summary of Recycling Discharge Specifications

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Basis |
|---|-------|-----------------|----------------|---------------|------------|
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 10 | 15 | 20 | PO and BPJ |
| Total Suspended Solids (TSS) | mg/L | 10 | 15 | 20 | PO and BPJ |
| Nitrate, Total (as N) | mg/L | 10 | --- | --- | PO and MCL |
| pH | s.u. | 6.0 – 9.0 | | | PO and BPJ |

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily | Basis |
|---|-------|-----------------|----------------|---------------|-------|
| <u>Table Notes</u> | | | | | |
| 4. Definitions of acronyms in Table F-11: | | | | | |
| PO Previous Order | | | | | |
| BPJ Best Professional Judgment | | | | | |
| MCL Title 22 Maximum Contaminant Level | | | | | |

4.7.3.2. **Disinfection and Filtration Specifications.** Title 22, section 60304 of the CCR also requires that recycled water used as irrigation water on parks and playgrounds and schoolyards meet disinfection and filtration effluent limitations associated with the disinfected tertiary recycled water standard. The title 22 median concentration effluent limitation for total coliform bacteria is a rolling 7-day median. The water recycling criteria for disinfection and filtration contained, respectively, in section 60301.230 and section 60301.320 are:

4.7.3.2.1. Disinfected tertiary recycled water shall be filtered and subsequently disinfected wastewater that has been disinfected by a chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measure at the same point) value of not less than 450 mg-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; and

The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 mL utilizing the bacteriological results of the last 7 days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 mL in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.

4.7.3.2.2. Filtered wastewater shall be oxidized wastewater that has been coagulated and passed through filter media at a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual, or mixed medial gravity, upflow, or pressure filtration systems; and the turbidity shall not exceed an average of 2 NTU within a 24-hour period; 5 NTU more than 5 percent of the time within a 24-hour period; and 10 NTU at any time.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. Surface Water

CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The State Water Board adopted water quality criteria as water quality objectives in the Ocean Plan.

Receiving water limitations within this Order reflect all applicable, general water quality objectives of the Ocean Plan.

The Ocean Plan includes numeric and narrative water quality objectives for various beneficial uses. This Order contains receiving water limitations for discharges to the Pacific Ocean based on the Ocean Plan numerical and narrative water quality objectives for bacteria, dissolved oxygen, floating particulates, oil and grease, pH, discoloration, natural lighting, deposition of solids, dissolved sulfides, organic materials in sediments, Table 3 parameters, nutrient materials, radioactive wastes, and biological characteristics.

5.2. Groundwater

- 5.2.1. The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater replenishment to surface waters.
- 5.2.2. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.
- 5.2.3. Discharges from the Facility shall not cause exceedance of applicable water quality objectives or create adverse impacts to beneficial uses of groundwater.
- 5.2.4. The Basin Plan requires that waters designated for use as MUN shall not contain concentrations of chemical constituents in excess of the limits specified in CCR, title 22, division 4, chapter 15, article 4.1, section 64435, and article 5.5, section 64444, and listed in Table 3-2 of the Basin Plan.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

6.1.1. Federal Standard Provisions

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

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

authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

6.1.2. **Regional Water Board Standard Provisions**

In addition to the Federal Standard Provisions (Attachment D), the Permittee shall comply with the Regional Water Board Standard Provisions provided in Standard Provisions 6.1.2 of the Order.

- 6.1.2.1. Order Provision 6.1.2.1 identifies the state's enforcement authority under the Water Code, which is more stringent than the enforcement authority specified in the federal regulations (e.g., 40 C.F.R. sections 122.41(j)(5) and (k)(2)).
- 6.1.2.2. Order Provision 6.1.2.2 requires the Permittee to notify Regional Water Board staff, orally and in writing, in the event that the Permittee does not comply or will be unable to comply with any Order requirement. This provision requires the Permittee to make direct contact with a Regional Water Board staff person.

6.2. **Special Provisions**

6.2.1. **Reopener Provisions**

- 6.2.1.1. **Standard Revisions (Special Provision 6.3.1.1).** Conditions that necessitate a major modification of a permit are described in 40 C.F.R. section 122.62, which include the following:
 - 6.2.1.1.1. When standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision. Therefore, if revisions of applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such revised standards.
 - 6.2.1.1.2. When new information that was not available at the time of permit issuance would have justified different permit conditions at the time of issuance.
- 6.2.1.2. **Reasonable Potential (Special Provision 6.3.1.2).** This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or future investigations demonstrate that the Permittee governed by this Permit is causing or contributing to excursions above any applicable priority pollutant criterion or objective, or adversely impacting water quality and/or the beneficial uses of receiving waters.
- 6.2.1.3. **Whole Effluent Toxicity (Special Provision 6.3.1.3).** This Order requires the Permittee to investigate the causes of and identify corrective actions to reduce or eliminate effluent toxicity through a TRE. This Order may be reopened to

include a numeric acute and/or chronic toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.

- 6.2.1.4. **303(d)-Listed Pollutants (Special Provision 6.3.1.4).** This provision allows the Regional Water Board to reopen this Order to modify existing effluent limitations or add effluent limitations for pollutants that are the subject of any future TMDL action.
- 6.2.1.5. **Salt and Nutrient Management Plans (SNMPs) (Special Provision 6.3.1.5).** This provision allows the Regional Water Board to reopen this Order if it adopts a regional or subregional SNMP that is applicable to the Permittee.
- 6.2.1.6. **Title 22 Engineering Report (Special Provision 6.3.1.6).** This provision allows the Regional Water Board to reopen this Order to adequately implement title 22, if future modifications to the Permittee's title 22 engineering report occur.

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

- 6.2.2.1. **Disaster Preparedness Assessment Report and Action Plan (Special Provision 6.3.2.1).** Natural disasters, extreme weather events, sea level rise, and shifting precipitation patterns, some of which are projected to intensify due to climate change, have significant implications for wastewater treatment and operations. Some natural disasters are expected to become more frequent and extreme according to the current science on climate change. In order to ensure that Facility operations are not disrupted, compliance with conditions of this Order are achieved, and receiving waters are not adversely impacted by permitted and unpermitted discharges, this Order requires the Permittee to submit a Disaster Preparedness Assessment Report and Action Plan.
- 6.2.2.2. **Effluent Discharge Evaluation (Special Provisions 6.3.2.3).** This Order includes a new requirement for the Permittee to conduct a special study to evaluate whether the established dilution ratio of 100:1 is still representative or whether a revised study is needed to verify and/or modify the minimum initial dilution. This new requirement is included due to the fact that approximately 45 years have passed since the outfall was installed, an initial dilution ratio calculation could not be located prior to the issuance of this Order, and methods for conducting mixing zone analyses have greatly improved since the 100:1 dilution ratio was first applied.

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

- 6.2.3.1. **Pollutant Minimization Program (Special Provision 6.3.3.1).** This provision is included in this Order pursuant to section III.C.9 of the Ocean Plan. The Regional Water Board includes standard provisions in all NPDES permits requiring development of a Pollutant Minimization Program when there is

evidence that a toxic pollutant is present in the effluent at a concentration greater than an applicable effluent limitation.

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

6.2.4.1. **Operation and Maintenance (Special Provisions 6.3.4).** 40 C.F.R. section 122.41(e) requires proper operation and maintenance of permitted wastewater systems and related facilities to achieve compliance with permit conditions. An up-to-date operation and maintenance manual, as required by Provision 6.3.4.2 of this Order, is an integral part of a well-operated and maintained facility.

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

6.2.5.1. **Wastewater Collection Systems (Special Provision 6.3.5.1)**

6.2.5.1.1. **Statewide General WDRs for Sanitary Sewer Systems.** On May 2, 2006, the State Water Board adopted General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order). The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all SSOs, among other requirements and prohibitions. The Permittee has enrolled under the General Order as required.

On February 20, 2008, the State Water Board adopted Order No. WQ 2008-0002-EXEC Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, to ensure adequate and timely notifications are made to the Regional Water Board and appropriate local, state, and federal authorities in case of sewage spills. On August 6, 2013, the State Water Board adopted Order No. WQ 2013-0058-EXEC Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. Order No. WQ 2013-0058-EXEC addressing compliance and enforceability of the Monitoring and Reporting Program and superseding the amendments in Order No. WQ-2008-0002-EXEC. Notification and reporting of SSOs is conducted in accordance with the requirements of Order Nos. 2006-0003-DWQ and WQ 2013-0058-EXEC, and any revisions thereto for operation of its wastewater collection system.

6.2.5.2. **Source Control and Pretreatment Provisions (Special Provision 6.3.5.2).** Pursuant to Special Provision 6.3.5.2.1, the Permittee shall implement the necessary legal authorities to monitor and enforce source control standards, restrict discharges of toxic materials to the collection system, and inspect facilities connected to the system.

40 C.F.R. section 403.8(a) requires POTWs with a total design flow greater than 5 mgd and receiving pollutants which pass through or interfere with the operation of the POTW to establish a POTW Pretreatment Program. The Regional Water Board may also require that a POTW with a design flow of 5 mgd or less develop a POTW Pretreatment Program if the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent interference or pass through. The Permittee reports that there are no known industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the Facility and the average dry weather design flow of the Facility is less than 5 mgd; therefore, the Order does not require the Permittee to develop a pretreatment program that conforms to federal regulations. However, in order to prevent interference with the POTW or pass through of pollutants to the receiving water, the Order requires the Permittee to implement a source control program. If at any time, an industrial waste survey or monitoring data indicate that a pretreatment program is necessary, pursuant to 40 C.F.R. section 403.8(3), the Regional Water Board may reopen this permit to require the Permittee to develop a pretreatment program.

Water Code section 13263.3(d)(1) allows the Regional Water Board to require a discharger to complete and implement a pollution prevention plan if pollution prevention is necessary to achieve a water quality objective, to include, pursuant to Water Code section 13263.3(d)(3), an analysis of the methods that could be used to prevent the discharge of the pollutants into the POTW. These methods can include application of local limits to industrial or commercial dischargers, pollution prevention techniques, public education and outreach, or other innovative and alternative approaches to reduce discharges of pollutants to the POTW. The analysis also shall identify sources, or potential sources, not within the ability or authority of the POTW to control, such as pollutants in the potable water supply, airborne pollutants, pharmaceuticals, or pesticides, and estimate the magnitude of those sources, to the extent feasible. This Order includes requirements for the Permittee to implement a source identification and reduction program.

A key component of an effective source control program is the identification and location of possible industrial users within the POTW's wastewater collection system. This information is typically obtained by the POTW through industrial waste surveys.

In addition, the Regional Water Board recognizes that some form of source control is prudent to ensure the efficient operation of the Facility, the safety of Facility staff, and to ensure that pollutants do not pass through the treatment Facility to impair the beneficial uses of the receiving water. The proposed Order includes prohibitions for the discharge of pollutants that may interfere, pass through, or be incompatible with treatment operations, interfere with the use of disposal of sludge, or pose a health hazard to personnel.

- 6.2.5.3. **Sludge Disposal and Handling Requirements (Special Provision 6.3.5.3).** The disposal or reuse of wastewater treatment screenings, sludges, or other solids removed from the liquid waste stream is regulated by 40 C.F.R. parts 257, 258, 501, and 503, and the State Water Board promulgated provisions of title 27 of the CCR. Dried sludge generated at the Facility is currently hauled off-site to the Redwood Landfill in Novato.

This provision also requires the Permittee to comply with the state's regulations relating to the discharge of biosolids to the land. The discharge of biosolids through land application is not currently regulated under this Order. The Permittee is required to either submit a report of waste discharge or dispose of biosolids at another permitted facility.

- 6.2.5.4. **Operator Certification (Special Provision 6.3.5.4).** This provision requires the Facility to be operated by supervisors and operators who are certified as required by title 23, section 3680 of the CCR.
- 6.2.5.5. **Adequate Capacity (Special Provision 6.3.5.5).** The goal of this provision is to ensure appropriate and timely planning by the Permittee to ensure adequate capacity for the protection of public health and water quality.

6.2.6. **Other Special Provisions**

- 6.2.6.1. **Storm Water (Special Provision 6.3.6.1).** This provision requires the Permittee, if applicable, to obtain coverage under the State Water Board's Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities (or subsequent renewed versions of the NPDES General Permit CAS000001). Currently, the Facility is exempted from these requirements based on a design flow of less than 1.0 mgd.

The Order requires the Permittee to implement and maintain BMPs to control the run-on of storm water to the Facility and to describe the effectiveness of these storm water BMPs, as well as activities to maintain and upgrade these BMPs during the previous year, in its Annual Facility Report to the Regional Water Board.

6.2.7. **Compliance Schedules – Not Applicable**

This Order does not establish interim effluent limitations or schedules of compliance for final numeric effluent limitations.

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

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements.

The Monitoring and Reporting Program (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 monitoring and reporting requirements contained in the MRP for this facility.

7.1. Influent Monitoring

7.1.1. Influent monitoring requirements for flow, BOD₅ and TSS are retained from Order No. R1-2015-0039 and are necessary to determine compliance with the Order's 85 percent removal requirement for these parameters.

7.1.2. Influent monitoring requirements to measure and report daily average flow and monthly average flow at Monitoring Location INF-001 are retained from Order R1-2015-0039 and are necessary to determine compliance with Discharge Prohibition 3.8.

7.2. Effluent Monitoring

7.2.1. Effluent monitoring requirements are necessary to determine compliance with prohibitions and/or effluent limitations established by the Order. Monitoring at Monitoring Locations EFF-001, EFF-002, and EFF-003 is necessary to demonstrate compliance with effluent limitations and demonstrate whether or not the discharge poses reasonable potential for a pollutant to exceed any numeric or narrative water quality objectives.

7.2.1.1. **Monitoring Location EFF-001.** Effluent monitoring frequencies and sample types for BOD₅, TSS, oil and grease, settleable solids, and turbidity have been retained from Order No. R1-2015-0039.

7.2.1.2. **Monitoring Location EFF-002.** Effluent monitoring frequencies for total coliform bacteria and pH have been retained from Order No. R1-2015-0039.

7.2.1.3. **Monitoring Location EFF-003.** Effluent monitoring frequencies for flow, chlorine residual, ammonia and chronic toxicity have been retained from Order No. R1-2015-0039. The monitoring frequency for TCDD equivalents has been increased to annually, as required by the Ocean Plan to generate adequate data to perform an RPA. Furthermore, the frequency for the Ocean Plan Table 3 pollutants has been increased to annually, as required by the Ocean Plan to generate adequate data to perform an RPA. Effluent monitoring for TCDD equivalents and the Ocean Plan Table 3 pollutants was required once per permit term in Order No. R1-2015-0039.

7.3. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) monitoring requirements are established for discharges to the Pacific Ocean from Discharge Point 001 at Monitoring Location EFF-003 and are included in the Order to protect the receiving water quality from the aggregate 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 time period and may measure mortality, reproduction, and/or growth. The Ocean Plan (section III.C.4.c.(3)) requires chronic testing where the minimum initial dilution of the effluent ranges from 100:1 to 350:1. Because this Order allows for a Dm of 100 for the Facility, WET monitoring shall consist of chronic toxicity testing. This Order includes monitoring requirements for chronic toxicity to assess whether there is reasonable potential to exceed the Ocean Plan's narrative water quality objectives for toxicity. Consistent with Order No. R1-2015-0039, this Order requires annual chronic toxicity testing.

7.4. Recycling Monitoring Requirements

- 7.4.1. This Order requires that the Permittee comply with applicable state and local requirements regarding the production and use of recycled wastewater. Recycled water monitoring requirements for flow, BOD₅, pH, TSS, total coliform bacteria, total chlorine residual, disinfection contact time, disinfection CT value, nitrate, nitrite, ammonia, organic nitrogen, total dissolved solids, chloride, boron, sodium, and visual observations have been retained from Order No. R1-2015-0039.

Section 13523.1(b)(4) of the Water Code requires quarterly recycled water reporting. Section 10.4.4.1.1 of the MRP requires quarterly recycled water reporting.

When discharging recycled water to the recycled water system, the Permittee must monitor its treated effluent for BOD₅, TSS, total coliform organisms, pH, and total residual chlorine to demonstrate compliance with water recycling specifications in section 4.3.1 of the Order.

Monitoring requirements for nitrate, nitrite, ammonia, and organic nitrogen is necessary to determine the total nitrogen concentration of the effluent in order to ensure application of recycled water at nutrient agronomic rates. Monitoring is required two times during the 2023 recycled water irrigation season.

Monitoring requirements for total dissolved solids, chloride, boron, and sodium is necessary to determine whether any of these constituents are present in the effluent at concentrations that may exceed water quality objectives for these constituents to address concerns of the statewide Recycled Water Policy. TDS is a direct measure of salinity, which can affect underlying groundwater quality as it relates to drinking water and agricultural supply beneficial uses. Secondary MCLs for taste and odor in drinking water have been established by DDW for TDS (500 mg/L), chloride (250 mg/L) and sodium (60 mg/L). Agricultural water quality thresholds for TDS (450 mg/L) and boron (0.7 mg/L) have been established by the Food and Agriculture Organization of the United Nations. Monitoring is required two times during the 2023 recycled water irrigation season.

- 7.4.2. Visual monitoring of recycled water use sites. The purpose of visual monitoring is to identify any indicators, such as surface runoff, ponding, broken sprinkler heads, or sprinklers operating when the ground is saturated, that could result in a violation of permit conditions and to implement any needed corrective measures.

7.5. **Receiving Water Monitoring – Not Applicable**

This Order does not require surface water or groundwater monitoring at this time.

7.6. **Other Monitoring Requirements**

- 7.6.1. **Monitoring Locations INT-001 and EFF-002.** Monitoring of the surface loading rate and effluent turbidity of the tertiary filters is required to demonstrate compliance with sections 60301.230 and 60301.320 of title 22 CCR requirements for filtered and disinfected tertiary recycled water.
- 7.6.2. **Outfall Inspection.** Consistent with Order No. R1-2015-0039, this Order requires the Permittee to inspect the outfall location to determine the structural integrity and operational status of the outfall structure at least once during the term of the permit. This requirement is required to demonstrate proper operation and maintenance of the POTW as required by 40 C.F.R. section 122.4, and to ensure that the calculated minimum probable initial dilution is not compromised as a result of unanticipated structural or operational changes in the outfall structure.
- 7.6.3. **Biological Survey.** Consistent with Order No. R1-2015-0039, this Order requires the Permittee to perform a biological survey of the outfall location once every 5 years.

7.7. **Reporting Requirements.**

- 7.7.1. **Volumetric Reporting.** Section 10.4.3 of the MRP requires reporting of influent volumes, discharge volumes and reuse volumes from the Facility as part of an annual report submitted to GeoTracker. These reporting requirements are in accordance with Order No. WQ 2019-0037-EXEC and any future revisions. Volumetric reporting requirements have been limited to discharge locations and uses that the Permittee currently utilizes. If additional discharge locations or use types (i.e., water recycling) are added in the future, the volumetric reporting language should be updated accordingly.
- 7.7.2. Reporting requirements for routine influent, effluent, and recycled water monitoring have been retained from Order No. R1-2015-0039.

8. **PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of WDRs that will serve as an NPDES

permit for Mendocino City Community Services District Wastewater Treatment Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

8.1. Notification of Interested Parties

The Regional Water Board notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following posting on the Regional Water Board's Internet site at:

http://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs.shtml on **February 18, 2022**.

8.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Regional Water Board Executive Office via e-mail to NorthCoast@waterboards.ca.gov or on disk (CD or DCD) in Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on **March 21, 2022**.

8.3. Public Hearing

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

Date: **June 9/10, 2022**
Time: 8:30 a.m. or as announced in the Regional Water Board's agenda
Location: Regional Water Board Hearing Room
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

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

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/northcoast> where you can access the current agenda for changes in dates and locations.

8.4. **Reconsideration of Waste Discharge Requirements**

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For [instructions on how to file a petition for review](#), see the Water Quality Petitions Website at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

8.5. **Information and Copying**

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (707) 576-2220

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 Regional 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 Matthew Herman at matthew.herman@waterboards.ca.gov or (707) 576-2683.

Attachment F-1. Wastewater Treatment Facility RPA Summary

| Pollutant | Units | Qualifier | MEC ¹ | No. Samples | No. ND ² | Co ³ | Cs ⁴ | X-obs ⁵ | Endpoint |
|--------------------------------------|-------|-----------|------------------|-------------|---------------------|-----------------|-----------------|--------------------|----------|
| Arsenic | µg/L | = | 0.57 | 1 | 0 | 8 | 3 | 3.0 | 3 |
| Cadmium | µg/L | < | 0.06 | 1 | 1 | 1 | 0 | <0.0006 | 3 |
| Chromium VI | µg/L | < | 0.3 | 1 | 1 | 2 | 0 | <0.0030 | 3 |
| Copper | µg/L | = | 11 | 1 | 0 | 3 | 2 | 2.1 | 3 |
| Lead | µg/L | = | 0.087 | 1 | 0 | 2 | 0 | 0.001 | 3 |
| Mercury | µg/L | < | 0.02 | 1 | 1 | 0.04 | 0.0005 | <0.0007 | 3 |
| Nickel | µg/L | = | 1.6 | 1 | 0 | 5 | 0 | 0.016 | 3 |
| Selenium | µg/L | = | 0.6 | 1 | 0 | 15 | 0 | 0.006 | 3 |
| Silver | µg/L | < | 0.05 | 1 | 1 | 0.7 | 0.16 | <0.16 | 3 |
| Zinc | µg/L | = | 22 | 1 | 0 | 20 | 8 | 8.1 | 3 |
| Cyanide | µg/L | = | 4.7 | 1 | 0 | 1 | 0 | 0.047 | 3 |
| Ammonia (as N) | µg/L | = | 180 | 70 | 67 | 600 | 0 | 1.8 | 2 |
| Total Chlorine Residual | µg/L | = | 17 | 215 | 131 | 2 | 0 | 0.0019 | 2 |
| Phenolic Compounds (non-chlorinated) | µg/L | < | 7.0 | 1 | 1 | 30 | 0 | <0.069 | 3 |
| Chlorinated Phenolics | µg/L | < | 5.0 | 1 | 1 | 1 | 0 | <0.050 | 3 |
| Endosulfan | µg/L | = | 0.0064 | 1 | 0 | 0.009 | 0 | 0.0001 | 3 |
| Endrin | µg/L | < | 0.0090 | 1 | 1 | 0.002 | 0 | <0.0001 | 3 |
| HCH | µg/L | < | 0.035 | 1 | 1 | 0.004 | 0 | <0.0003 | 3 |
| Acrolein | µg/L | < | 2.0 | 1 | 1 | 220 | 0 | <0.0198 | 3 |

| Pollutant | Units | Qualifier | MEC ¹ | No. Samples | No. ND ² | Co ³ | Cs ⁴ | X-obs ⁵ | Endpoint |
|------------------------------|-------|-----------|------------------|-------------|---------------------|-----------------|-----------------|--------------------|----------|
| Antimony | µg/L | < | 0.2 | 1 | 1 | 1,200 | 0 | <0.0020 | 3 |
| Bis(2-chloroethoxy) methane | µg/L | < | 0.9 | 1 | 1 | 4.4 | 0 | <0.0089 | 3 |
| Bis(2-chloroisopropyl) ether | µg/L | < | 1 | 1 | 1 | 1,200 | 0 | <0.0099 | 3 |
| Chlorobenzene | µg/L | < | 0.3 | 1 | 1 | 570 | 0 | <0.0030 | 3 |
| Chromium (III) | µg/L | < | 0.5 | 1 | 1 | 190,000 | 0 | <0.0050 | 3 |
| Di-n-butyl Phthalate | µg/L | < | 0.9 | 1 | 1 | 3,500 | 0 | <0.0089 | 3 |
| Dichlorobenzenes | µg/L | < | 0.8 | 1 | 1 | 5,100 | 0 | <0.0079 | 3 |
| Diethyl Phthalate | µg/L | < | 0.3 | 1 | 1 | 33,000 | 0 | <0.0030 | 3 |
| Dimethyl Phthalate | µg/L | < | 0.8 | 1 | 1 | 820,000 | 0 | <0.0079 | 3 |
| 4,6-dinitro-2-methylphenol | µg/L | < | 3.0 | 1 | 1 | 220 | 0 | <0.0297 | 3 |
| 2,4-dinitrophenol | µg/L | < | 5.0 | 1 | 1 | 4 | 0 | <0.0495 | 3 |
| Ethylbenzene | µg/L | < | 0.4 | 1 | 1 | 4,100 | 0 | <0.0040 | 3 |
| Fluoranthene | µg/L | < | 0.8 | 1 | 1 | 15 | 0 | <0.0079 | 3 |
| Hexachlorocyclopentadiene | µg/L | < | 4.0 | 1 | 1 | 58 | 0 | <0.0396 | 3 |
| Nitrobenzene | µg/L | < | 0.9 | 1 | 1 | 4.9 | 0 | <0.0089 | 3 |
| Thallium | µg/L | < | 0.05 | 1 | 1 | 2 | 0 | <0.0005 | 3 |
| Toluene | µg/L | < | 0.3 | 1 | 1 | 85,000 | 0 | <0.0030 | 3 |
| Tributyltin | µg/L | < | 0.014 | 1 | 1 | 0.0014 | 0 | <0.0001 | 3 |
| 1,1,1-trichloroethane | µg/L | < | 0.4 | 1 | 1 | 540,000 | 0 | <0.0040 | 3 |
| Acrylonitrile | µg/L | < | 0.4 | 1 | 1 | 0.1 | 0 | <0.0040 | 3 |

| Pollutant | Units | Qualifier | MEC ¹ | No. Samples | No. ND ² | Co ³ | Cs ⁴ | X-obs ⁵ | Endpoint |
|-----------------------------|-------|-----------|------------------|-------------|---------------------|-----------------|-----------------|--------------------|----------|
| Aldrin | µg/L | < | 0.014 | 1 | 1 | 0.000022 | 0 | <0.000139 | 3 |
| Benzene | µg/L | < | 0.3 | 1 | 1 | 5.9 | 0 | <0.0030 | 3 |
| Benzidine | µg/L | < | 3.0 | 1 | 1 | 0.000069 | 0 | <0.029703 | 3 |
| Beryllium | µg/L | < | 0.05 | 1 | 1 | 0.033 | 0 | <0.0001 | 3 |
| Bis(2-chloroethyl) Ether | µg/L | < | 0.9 | 1 | 1 | 0.045 | 0 | <0.0089 | 3 |
| Bis(2-ethylhexyl) Phthalate | µg/L | < | 12 | 1 | 1 | 3.5 | 0 | <0.1188 | 3 |
| Carbon Tetrachloride | µg/L | < | 0.4 | 1 | 1 | 0.9 | 0 | <0.0040 | 3 |
| Chlordane | µg/L | < | 0.12 | 1 | 1 | 0.000023 | 0 | <0.001188 | 3 |
| Chlorodibromomethane | µg/L | = | 2.7 | 1 | 0 | 8.6 | 0 | 0.03 | 3 |
| Chloroform | µg/L | = | 24 | 1 | 0 | 130 | 0 | 0.24 | 3 |
| DDT | µg/L | < | 0.0090 | 1 | 1 | 0.00017 | 0 | <0.00009 | 3 |
| 1,4-Dichlorobenzene | µg/L | < | 0.1 | 1 | 1 | 18 | 0 | <0.0010 | 3 |
| 3,3'-Dichlorobenzidine | µg/L | < | 2.0 | 1 | 1 | 0.0081 | 0 | <0.0198 | 3 |
| 1,2-Dichloroethane | µg/L | < | 0.4 | 1 | 1 | 28 | 0 | <0.0040 | 3 |
| 1,1-Dichloroethylene | µg/L | < | 0.3 | 1 | 1 | 0.9 | 0 | <0.0030 | 3 |
| Dichlorobromomethane | µg/L | = | 10 | 1 | 0 | 6.2 | 0 | 0.10 | 3 |
| Dichloromethane | µg/L | < | 0.5 | 1 | 1 | 450 | 0 | <0.0050 | 3 |
| 1,3-Dichloropropene | µg/L | < | 0.4 | 1 | 1 | 8.9 | 0 | <0.0040 | 3 |
| Dieldrin | µg/L | < | 0.007 | 1 | 1 | 0.00004 | 0 | <0.00007 | 3 |
| 2,4-Dinitrotoluene | µg/L | < | 0.8 | 1 | 1 | 2.6 | 0 | <0.0079 | 3 |
| 1,2-Diphenylhydrazine | µg/L | < | 0.6 | 1 | 1 | 0.16 | 0 | <0.0059 | 3 |

| Pollutant | Units | Qualifier | MEC ¹ | No. Samples | No. ND ² | Co ³ | Cs ⁴ | X-obs ⁵ | Endpoint |
|---------------------------|-------|-----------|------------------|-------------|---------------------|-----------------|-----------------|--------------------|----------|
| Halomethanes | µg/L | = | 0.96 | 1 | 0 | 130 | 0 | 0.0095 | 3 |
| Heptachlor | µg/L | < | 0.020 | 1 | 1 | 0.00005 | 0 | <0.00020 | 3 |
| Heptachlor Epoxide | µg/L | < | 0.012 | 1 | 1 | 0.00002 | 0 | <0.00012 | 3 |
| Hexachlorobenzene | µg/L | < | 0.9 | 1 | 1 | 0.00021 | 0 | <0.00891 | 3 |
| Hexachlorobutadiene | µg/L | < | 0.8 | 1 | 1 | 14 | 0 | <0.0079 | 3 |
| Hexachloroethane | µg/L | < | 0.6 | 1 | 1 | 2.5 | 0 | <0.0059 | 3 |
| Isophorone | µg/L | < | 0.3 | 1 | 1 | 730 | 0 | <0.0030 | 3 |
| N-Nitrosodimethylamine | µg/L | < | 0.3 | 1 | 1 | 7.3 | 0 | <0.0079 | 3 |
| N-Nitrosodi-N-Propylamine | µg/L | < | 0.8 | 1 | 1 | 0.38 | 0 | <0.0099 | 3 |
| N-Nitrosodiphenylamine | µg/L | < | 1.0 | 1 | 1 | 2.5 | 0 | <0.0264 | 3 |
| PAHs | µg/L | < | 1.5 | 1 | 1 | 0.0088 | 0 | <0.0149 | 3 |
| PCBs | µg/L | < | 0.19 | 1 | 1 | 0.000019 | 0 | <0.001881 | 3 |
| TCDD equivalents | µg/L | = | 7.19e-10 | 1 | 0 | 3.9e-9 | 0 | 7.1e-12 | 3 |
| 1,1,2,2-Tetrachloroethane | µg/L | < | 0.3 | 1 | 1 | 2.3 | 0 | <0.0030 | 3 |
| Tetrachloroethylene | µg/L | < | 0.4 | 1 | 1 | 2 | 0 | <0.0040 | 3 |
| Toxaphene | µg/L | < | 0.10 | 1 | 1 | 0.00021 | 0 | <0.00099 | 3 |
| Trichloroethylene | µg/L | < | 0.4 | 1 | 1 | 27 | 0 | <0.0040 | 3 |
| 1,1,2-Trichloroethane | µg/L | < | 0.4 | 1 | 1 | 9.4 | 0 | <0.0040 | 3 |
| 2,4,6-Trichlorophenol | µg/L | < | 0.7 | 1 | 1 | 0.29 | 0 | <0.0069 | 3 |
| Vinyl Chloride | µg/L | < | 0.4 | 1 | 1 | 36 | 0 | <0.0040 | 3 |

| Pollutant | Units | Qualifier | MEC ¹ | No. Samples | No. ND ² | Co ³ | Cs ⁴ | X-obs ⁵ | Endpoint |
|---|-------|-----------|------------------|-------------|---------------------|-----------------|-----------------|--------------------|----------|
| <p><u>Table Notes</u></p> <ol style="list-style-type: none"> 1. MEC = Maximum Effluent Concentration 2. ND = Non-Detects 3. Co = The concentration (water quality objective) to be met at the completion of initial dilution (from Table 3 of the 2019 Ocean Plan). 4. Cs = The background seawater concentrations (from Table 5 of the 2019 Ocean Plan). 5. X-obs = The maximum concentration after complete mixing, calculated according to Step 4 of Appendix VI of the Ocean Plan using the permitted dilution ratio (Dm) of 50 as follows: $X\text{-obs} = (C_e + D_m * C_s) / (D_m + 1)$, unless otherwise noted. | | | | | | | | | |