



North Coast Regional Water Quality Control Board

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD NORTH COAST REGION

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ORDER No. R1-2026-0054
NPDES NO. CA0022977
WDID NO. 1B840320SON

Waste Discharge Requirements for the City of Cloverdale Wastewater Treatment Facility Sonoma County

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

Permittee	City of Cloverdale
Name of Facility	Wastewater Treatment Facility
Facility Address	700 Asti Road Cloverdale, CA 95425 Sonoma County

Table 1. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North-South)	Discharge Point Longitude (East-West)	Receiving Water
001	Disinfected Tertiary Treated Municipal Wastewater	38° 47' 47"	-123° 00' 18"	Russian River

Discharge Point	Effluent Description	Discharge Point Latitude (North-South)	Discharge Point Longitude (East-West)	Receiving Water
002	Disinfected Secondary Treated Municipal Wastewater	38° 47' 42"	-123° 00' 27"	Percolation Ponds Adjacent to the Russian River

This Order was adopted on:

December 3, 2026

This Order shall become effective on:

February 1, 2027

This Order shall expire on:

January 31, 2032

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: **January 31, 2031**. 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: **Major discharge**.

I, Valerie Quinto, 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 listed above.

Valerie Quinto, Executive Officer

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1. **FACILITY INFORMATION**

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

2. **FINDINGS**

The California Regional Water Quality Control Board, 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 containing requirements for the Permittee to complete before 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 water recycling requirements 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 existing Facility does not currently include advanced wastewater treatment (AWT) and thus, is not currently authorized to discharge directly to the Russian River. Discharge Prohibition 3.9 of this Permit prohibits the discharge of wastewater to the Russian River, unless the Discharger upgrades the Facility to include AWT. The Order includes Effluent Limitations for discharges to the Russian River if the Discharger upgrades its Facility during the term of this Order. If the Permittee plans to discharge to the Russian River at Discharge Point 001, the Permittee shall submit a **Surface Water Discharge Report** as described in section 10.4.1.3. of MRP to be approved by the Executive Officer.

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 and Attachment F are also incorporated into this Order.

2.3. **Provisions and Requirements Implementing State Law**

The provisions/requirements in subsections 3.1, 3.2, 3.5, 3.6, 3.9, 3.10, 3.11, 3.12, 4.2, 4.4, and 5, and section 7 of the MRP 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 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. **Anticipated Water Quality Impacts in Disadvantaged or Tribal Communities**

The Permittee, City of Cloverdale Wastewater Treatment Facility, operates a wastewater treatment facility within a disadvantaged community located along the Russian River in Sonoma County. The discharge is classified as "major" under federal regulations, and during the term of the prior permit, Order No. R1-2018-0034, from October 1 through May 14, the Facility did not discharge treated wastewater to the Russian River. This permit includes a requirement from the Permittee to complete upgrades to its wastewater treatment system to meet advanced treatment standards and submit a **Surface Water Discharge Report** for Executive Officer review if the Facility plans to discharge to the Russian River. Among other updates, this renewed permit contains new requirements to implement effluent limitations for bacteria and provisions for toxicity if the Permittee completes the necessary upgrades to discharge to the Russian River. Expanded monitoring and reporting requirements are included in the renewed Order to ensure waste discharges do not exceed water quality objectives.

This Order does not contain a time schedule in accordance with section 13263, subdivision (c) for achieving applicable water quality objectives, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance. (Wat. Code, § 13149.2, subd. (d).)

The Regional Water Board publicly noticed the permit and provided opportunities for public comment. Public notice was provided to interested persons and public agencies in the region with jurisdiction over natural resources in the affected area, including the Sonoma County Health Department. While the discharge regulated by this Order is not expected to result in a disproportionate impact to tribal or disadvantaged communities, the Regional Water Board has conducted outreach consistent with Water Code section 189.7.

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.

2.6. 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 No. R1-2018-0034 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 6.3.6. 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. 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 California Code of Regulations (CCR).
- 3.6. 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.
- 3.7. The average dry weather flow of waste through the Facility shall not exceed 1.0 mgd measured daily and averaged over a calendar month. The peak daily wet weather flow of waste through the Facility shall not exceed 8.25 mgd, measured daily. Compliance with this prohibition shall be determined as defined in sections 7.10. and 7.11. of this Order.
- 3.8. The discharge of waste to the Russian River and its tributaries is prohibited during the period from May 15 through September 30 of each year.
- 3.9. The direct discharge of wastewater effluent from the Facility to the Russian River is prohibited, unless the Permittee upgrades the Facility to include advanced wastewater treatment, in accordance with a **Surface Water Discharge Report** approved by the Executive Officer. Advanced wastewater treatment requirements for discharges to the Russian River are defined in Effluent Limitations 4.1.
 - 3.9.1. During the period from October 1 through May 14, discharges of treated wastewater to the Russian River and its tributaries shall not exceed one percent of the flow of the Russian River, as measured near Cloverdale at United States Geological Survey (USGS) Gauge No. 11-4630.00. For the purposes of this Order, compliance with this discharge prohibition shall be determined as follows:

- 3.9.1.1. The discharge of advanced treated wastewater shall be adjusted at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow measurement of the Russian River as measured near Cloverdale at USGS Gauge No. 11-4630.00. Daily flow shall be based on flow meter comparisons reasonably read between the hours of 12:01 am and 12:00 midnight; and,
- 3.9.1.2. In no case shall the total volume of advanced treated wastewater discharged in a calendar month exceed one percent of the total volume of the Russian River as measured near Cloverdale at USGS Gauge No. 11-4630.00 in the same calendar month. At the beginning of the discharge season, the monthly flow volume comparisons shall be based on the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the monthly flow volume comparisons shall be based on the first day of the calendar month to the date when the discharge ceased for the season.
- 3.10. The discharge of chemical constituents, in excess of MCLs and secondary MCLs (SMCLs) established for the pollutants in title 22, division 4, chapter 15, articles 5.5, section 64444, and article 16, section 64449 of the CCR, is prohibited.
- 3.11. The discharge shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the discharge or on objects in the discharge.
- 3.12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited under Water Code section 13375.
- 3.13. The acceptance of septage to a location other than an approved septage receiving station is prohibited.

4. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

4.1. Effluent Limitations – Discharge Point 001

- 4.1.1. Discharge Prohibition 3.9 requires that the Permittee upgrade the Facility to meet advanced treatment standards before discharging to the Russian River. When the necessary upgrades are complete, the Permittee shall submit a **Surface Water Discharge Report** for Executive Officer approval **at least 180 days before planned discharge**.
- 4.1.2. The discharge of treated wastewater shall maintain compliance with the following effluent limitations when discharging to Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

Table 2. Effluent Limitations ¹ – Discharge Point 001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	10	15	--	--	--
pH	standard units	--	--	--	6.5	8.5
Total Suspended Solids (TSS)	mg/L	10	15	--	--	--
Chlorine, Total Residual	mg/L	0.01	--	0.02	--	--
Dichlorobromomethane	µg/L	0.56	--	1.2	--	--
Chlorodibromomethane	µg/L	0.41	--	0.82	--	--
Copper, Total Recoverable	µg/L	7	--	15	--	--
Ammonia, Total (as N)	mg/L	0.16	--	0.27	--	--

Table Notes

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

- 4.1.3. **Percent Removal.** The average monthly percent removal of BOD₅ and TSS 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 Location INF-001.
- 4.1.4. **Disinfection.** Disinfected effluent discharged from the Facility through Discharge Point 001 to the Russian River shall not contain coliform bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-001:
- 4.1.4.1.1. The median concentration shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (mL) using the bacteriological results of the last 7 days for which analyses have been completed;
- 4.1.4.1.2. The number of coliform bacteria shall not exceed an MPN of 23 per 100 mL in more than one sample in any 30-day period; and
- 4.1.4.1.3. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.
- 4.1.5. **Chronic Toxicity**
- To determine compliance with the water quality objective for toxicity in the Basin Plan, the discharge of advanced treated wastewater, as measured at Monitoring Location EFF-001, shall meet the following effluent limitations:
- 4.1.5.1.1. **Maximum Daily Effluent Limitation (MDEL)**
- No chronic aquatic toxicity test shall result in a “fail” at the IWC for any sub-lethal endpoint measured in the test and a percent effect for that sub-lethal endpoint greater than or equal to 50 percent.
- 4.1.5.1.2. **Median Monthly Effluent Limitation (MMEL)**
- No more than one chronic aquatic toxicity test initiated in a calendar month shall result in a “fail” at the IWC for any endpoint.

4.2. Land Discharge Specifications and Requirements – Discharge Point 002

4.2.1. The discharge of treated wastewater shall maintain compliance with the following effluent limitations when discharging to Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the MRP (Attachment E).

Table 3. Effluent Limitations¹ – Discharge Point 002

Parameter	Units	Average Monthly	Average Weekly	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	--
pH	standard units	--	--	6.0	9.0
Total Suspended Solids (TSS)	mg/L	45	65	--	--

Table Notes

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

4.2.2. **Percent Removal.** The average monthly percent removal of BOD₅ and TSS 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 Location INF-001.

4.2.3. **Disinfection.** Disinfected effluent discharged from the Facility through Discharge Point 002 to the percolation ponds shall not contain coliform bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-002:

4.2.3.1. The median concentration shall not exceed a Most Probable Number (MPN) of 23 per 100 milliliters (mL) in a calendar month¹; and

4.2.3.2. No sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.

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

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

4.4. **Water Recycling Specifications and Requirements – Not Applicable**

This Order does not authorize discharges of recycled water.

4.5. **Other Requirements**

4.5.1. **Filtration Process Requirements**

4.5.1.1. **Disinfection Process Requirements for Chlorine Disinfection System.** The total residual chlorine concentration shall be maintained at a level that ensures the discharge meets the total coliform effluent limitation at the end of the disinfection process for discharge Points 001 and 002.

4.5.1.2. **Filtration Process Requirements for Tertiary Treatment.** When discharging to the Russian River at Discharge Point 001, the filtered effluent shall not exceed any of the following turbidity specifications prior to discharge to the advanced wastewater treatment disinfection unit.

4.5.1.2.1. 2 NTU, as a daily average;

4.5.1.2.2. 5 NTU, more than 5 percent of the time within a 24-hour period; nor

4.5.1.2.3. 10 NTU, at any time.

5. **GROUNDWATER LIMITATIONS**

5.1. **Groundwater Limitations**

Ground water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Ground water conditions not in conformance

¹ See section 7.8. of this Order regarding compliance with bacteriological limitations.

with the limitations are not necessarily a violation of this Order. Compliance with ground water limitations shall be measured at monitoring locations described in the MRP (Attachment E). The Regional Water Board may require an investigation and/or consider other available information to determine cause and culpability prior to asserting that a violation has occurred.

- 5.1.1. The collection, treatment, storage, and disposal of wastewater shall not cause a statistically significant 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 of the CCR) and reasonable best management practices (BMPs), will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
- 5.1.2. The collection, treatment, storage, and disposal of wastewater shall not cause alterations of groundwater that contain chemical concentrations in excess of MCL limits and SMCL provisions established for these pollutants in title 22, division 4, chapter 15, article 4, section 64431, article 5.5, section 64444, and article 16 section 64449.
- 5.1.3. The collection, treatment, storage, and disposal of wastewater shall not cause groundwater to contain radionuclides 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.
- 5.1.4. The collection, treatment, storage, and disposal of wastewater shall not cause groundwater to contain taste - or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- 5.1.5. In groundwaters used for domestic or municipal supply (MUN), the collection, treatment, storage, and disposal of wastewater 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.
- 5.1.6. Groundwater shall not 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 of this Order.
- 6.1.2. **Regional Water Board Standard Provisions.** The Permittee shall comply with the following Regional Water Board standard 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, other specification, receiving water limitation, or provision of this Order that may result in a significant threat to human health or the environment, such as inundation of treatment infrastructure, breach of pond containment, sanitary sewer overflow, irrigation runoff, etc., that results in a discharge to a drainage channel or a surface water, the Permittee shall notify Regional Water Board staff within 24 hours of having knowledge of such non-compliance. Spill notification and reporting shall be conducted in accordance with section 5.5 of Attachment D and section 10.5 of the Monitoring and Reporting Program.

6.2. Monitoring and Reporting Program Requirements

The Permittee shall comply with the MRP, included as Attachment E of this Order, and future revisions thereto.

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.
- 6.3.1.4. **Acute Aquatic Toxicity.** This Order may be reopened to allow the reevaluation of reasonable potential for the Permittee to cause or contribute to an exceedance of the

acute aquatic toxicity water quality objective, and add the resulting MDEL and MMEL, if warranted, after the evaluation of new data and information.

- 6.3.1.5. **Species Sensitivity Screening.** Upon completion of the species sensitivity screening, this Order may be reopened to specify the most sensitive species. Furthermore, the MDEL and MMEL, as identified in section 4.1.5., may be modified to reflect the identified most sensitive species. Reopening of the permit is not required if the species sensitivity screening indicates that the most sensitive species is *Ceriodaphnia dubia*.
- 6.3.1.6. **Facility Modifications.** This Order may be reopened to allow the reevaluation of reasonable potential for the Permittee to cause or contribute to an exceedance of a water quality objective, and add any resulting effluent limitation(s), if warranted, after the evaluation of new data and information.
- 6.3.1.7. **303(d)-Listed Pollutants.** If an applicable total maximum daily load (TMDL) (see Fact Sheet, section 3.4) program is adopted and becomes effective during the term of this Order, this Order may be reopened and effluent limitations for the pollutant(s) that are the subject of the TMDL may be modified or imposed to conform this Order to the TMDL requirements.
- 6.3.1.8. **Water Effects Ratios (WERs) and Metal Translators.** A default WER of 1.0 has been used in this Order for calculating CTR criteria for applicable priority pollutant inorganic constituents. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total recoverable. If the Permittee performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators and submits a report that demonstrates that WER or translator studies were performed in accordance with U.S. EPA or other approved guidance, this Order may be reopened to modify the effluent limitations for the applicable constituents.
- 6.3.1.9. **Nutrients.** This Order contains effluent limitations for ammonia and effluent monitoring for nutrients (ammonia, nitrate, organic nitrogen, and phosphorus). If new water quality objectives for nutrients are established, if monitoring data indicate the need for new or revised effluent limitations for any of these parameters, or if new or revised methods for compliance with effluent limitations for any of these parameters are developed, this Order may be reopened and modified to include new or modified effluent limitations or other requirements, as necessary.

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

6.3.2.1. **Pollutant Minimization Program (PMP)**

The Permittee shall, as required by the Executive Officer, develop and conduct a PMP as further described below when there is evidence (e.g., 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:

- 6.3.2.1.1.1. The concentration of the pollutant is reported as “Detected, but Not Quantified” (DNQ) and the effluent limitation is less than the reporting limit (RL);
- 6.3.2.1.1.2. A sample result is reported as non-detect (ND) and the effluent limitation is less than the method detection limit (MDL), using definitions described in Attachment A and reporting protocols described in MRP section 10.2.5.
- 6.3.2.1.2. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:
 - 6.3.2.1.2.1. 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;
 - 6.3.2.1.2.2. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
 - 6.3.2.1.2.3. 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;
 - 6.3.2.1.2.4. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
 - 6.3.2.1.2.5. An annual status report that shall be submitted as part of the Annual Facility Report due **March 1** of each year to the Regional Water Board and shall include:
 - 6.3.2.1.2.5.1. All PMP monitoring results for the previous year;
 - 6.3.2.1.2.5.2. A list of potential sources of the reportable pollutant(s);
 - 6.3.2.1.2.5.3. A summary of all actions undertaken pursuant to the control strategy; and
 - 6.3.2.1.2.5.4. A description of actions to be taken in the following year.

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

- 6.3.3.1. 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.
- 6.3.3.2. 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.

- 6.3.3.2.1. Description of the Facility's organizational structure showing the number of employees, duties and qualifications, and facility 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.
- 6.3.3.2.2. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
- 6.3.3.2.3. Description of laboratory and quality assurance procedures.
- 6.3.3.2.4. Process and equipment inspection and maintenance schedules.
- 6.3.3.2.5. 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.
- 6.3.3.2.6. 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. Special Provisions for Municipal Facilities (POTWs Only)

6.3.4.1. Wastewater Collection Systems

6.3.4.1.1. 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. 2022-0103-DWQ, Statewide General WDRs for Sanitary Sewer Systems, and any subsequent revisions. As such, the Permittee provides notification and reporting of SSOs in accordance with the requirements of Order No. 2022-0103-DWQ and any revisions thereto for operation of its wastewater collection system.

6.3.5. Source Control and Pretreatment Provisions

- 6.3.5.1. The Permittee shall perform source control functions and provide a summary of source control activities conducted in the Annual Report (due **March 1** of each year

to the Regional Water Board). Source control functions and requirements shall include the following:

- 6.3.5.1.1. 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.
- 6.3.5.1.2. 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.
- 6.3.5.1.3. 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 facility, at least once per year.
- 6.3.5.1.4. Perform on-going inspections and monitoring, as necessary, to ensure adequate source control.
- 6.3.5.2. The Facility has a design flow of less than 5 mgd and may be threatened by interference or pass through by an industrial user. In the event that the Permittee identifies industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment facility, 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)], [40 C.F.R. §403.8(a)] then:
 - 6.3.5.2.1. 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. 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;
 - 6.3.5.2.3. The Permittee shall enforce the federal categorical pretreatment standards on all categorical industrial users (CIUs);
 - 6.3.5.2.4. 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
 - 6.3.5.2.5. The Permittee shall notify the Regional Water Board if any CIU violates its discharge effluent limits.

- 6.3.5.2.5.1. 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.
- 6.3.5.2.5.2. 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.

6.3.6. Sludge Disposal and Handling Requirements

- 6.3.6.1. 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.
- 6.3.6.2. 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 facility operation and disposed of in accordance with applicable federal and state regulations.
- 6.3.6.3. 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.
- 6.3.6.4. 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.
- 6.3.6.5. 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.
- 6.3.6.6. 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.
- 6.3.6.7. 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.

- 6.3.6.8. 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.

6.3.7. Biosolids Management

For any discharge of biosolids from the Facility, the Permittee shall comply with the following requirements:

- 6.3.7.1. For the land application of biosolids as soil amendment within the North Coast region, the Permittee shall obtain or maintain coverage under the State Water Board Water Quality Order No. 2004-0012-DWQ General Waste Discharge Requirements for the Discharge of Biosolids to Land or Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities, or
- 6.3.7.2. Alternatively, the Permittee may dispose of biosolids at another appropriately permitted facility.
- 6.3.7.3. 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.

6.3.8. Operator Certification

Supervisors and operators of municipal wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with title 23, CCR, 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 DDW where water recycling is involved.

6.3.9. 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. [Cal. Code Regs., tit. 23, § 2232.].

6.3.10. Other Special Provisions

6.3.10.1. Storm Water

For the control of storm water discharge 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 (or subsequent renewed versions of the NPDES General Permit CAS000001), which is not incorporated by reference in this Order.

BMPs to control the run-on of storm water to the Facility site and to prevent the discharge of storm water that falls within the Facility 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.

6.3.11. 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 section 4 of this Order will be determined as specified below.

7.1. General

Compliance with effluent limitations for priority pollutants, when effluent limitations have been established, shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported minimum level (ML).

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 section 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 section 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 section 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. Bacteriological Limitations (Total Coliform)

- 7.8.1. Median (Total Coliform Bacteria).** The median is the central tendency concentration of the pollutant. The data set shall be ranked from low to high, ranking any 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.

- 7.8.2. **Six-week Rolling Geometric Mean (*E. coli* bacteria).** 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.

A minimum of five samples over a six-week period is necessary to calculate the geometric mean. When less than five samples are taken in a six-week period, compliance with the *E. coli* water quality objective shall be determined using the Statistical Threshold Value (STV). If the Permittee samples less than five times during a six-week period, compliance shall be assessed by comparing the single sample results to the STV.

- 7.8.3. **Statistical Threshold Value (*E. coli* bacteria).** (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, all sample results less than the point described in step 3 must be less than 100 MPN/100 mL.
- 7.8.4. **7-Day Median.** Compliance with the 7-day median will be determined as a rolling median using the bacteriological results of the last 7 days for which analyses have been completed.
- 7.8.5. **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:

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

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

7.9. Chronic Toxicity Requirements

Compliance with the chronic and acute aquatic toxicity limitations shall be determined as follows:

- 7.9.1. If a chronic toxicity test exceeds the applicable MDEL, as identified in sections 4.1.5.1.2. of this Order, the Permittee will be considered out of compliance for that single sample.
- 7.9.2. If chronic toxicity testing exceeds the applicable MMEL, as identified in sections 4.1.5.1.2. of this Order, the Permittee will be considered out of compliance for that month. No more than one chronic toxicity test initiated in a calendar month shall result in a “fail” at the IWC for any endpoint.
- 7.9.3. Compliance with toxicity routine monitoring, compliance monitoring, and TRE provisions shall constitute compliance with the toxicity requirements, as specified in the MRP (Attachment E, sections 5.1 and 5.2).

7.10. Average Dry Weather Flow

Compliance with the average dry weather flow prohibition in section 3.7 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 1.0 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 3.7 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 8.25 mgd, the discharge is not in compliance with section 3.7. of this Order.

ATTACHMENT A - DEFINITIONS

ACUTE AQUATIC TOXICITY TEST

A test to determine an adverse effect (usually lethality) on a group of aquatic test organisms during a short-term exposure (e.g., 24, 48, or 96 hours).

ARITHMETIC MEAN (M)

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.

BASIN PLAN

A Basin Plan is a water quality control plan that is specific to a Regional Water Quality Control Board (Regional Water Board), and serves as regulations that: (1) define and designate beneficial uses of surface and ground waters, (2) establish water quality objectives to protect the beneficial uses, and (3) provide implementation measures.

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.

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS)

CIWQS is the State Water Board, statewide electronic reporting database that provides for electronic reporting of mandatory reports that are requirements of State and Regional Water Board-issued waste discharge requirements.

CARCINOGENIC

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

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.

COEFFICIENT OF VARIATION (CV)

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

DAILY DISCHARGE

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

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

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

DETECTED, BUT NOT QUANTIFIED (DNQ)

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

BASIN PLAN

A Basin Plan is a water quality control plan that is specific to a Regional Water Quality Control Board (Regional Water Board), and serves as regulations that: (1) define and designate beneficial uses of surface and ground waters, (2) establish water quality objectives to protect the beneficial uses, and (3) provide implementation measures.

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.

EFFECTIVE CONCENTRATION (EC)

A point estimate of the toxicant concentration that would cause an adverse effect on a quantal, "all or nothing," response (such as death, immobilization, or serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as

probit, logit, and Spearman-Kärber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

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.

ENDPOINT

A measured response of a receptor to a stressor. An endpoint can be measured in a toxicity test or field survey.

ESTIMATED CHEMICAL CONCENTRATION

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

ESTUARIES AND COASTAL LAGOONS

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

INLAND SURFACE WATERS

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

INSTANTANEOUS MAXIMUM EFFLUENT LIMITATION

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

INSTANTANEOUS MINIMUM EFFLUENT LIMITATION

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

MAXIMUM DAILY EFFLUENT LIMITATION (MDEL)

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

For the purposes of chronic and acute aquatic toxicity, an MDEL is an effluent limitation based on the outcome of the test of significant toxicity (TST) approach and the resulting percent effect at the IWC.

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.

MEDIAN MONTHLY EFFLUENT LIMITATION (MMEL):

For the purposes of chronic and acute aquatic toxicity, an MMEL is an effluent limitation based on a maximum of three independent toxicity tests, analyzed using the TST.

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.

MMEL COMPLIANCE TESTS

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

MOST SENSITIVE SPECIES

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

NOT DETECTED (ND)

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

NO OBSERVED EFFECT CONCENTRATION (NOEC)

The highest tested concentration of an effluent or a test sample at which the effect is no different from the control effect, according to the statistical test used (see LOEC). The NOEC is usually the highest tested concentration of an effluent or toxicant that causes no observable effects on the aquatic test organisms (i.e., the highest concentration of toxicity at which the values for the observed responses do not statistically differ from the controls). It is determined using hypothesis testing.

NULL HYPOTHESIS

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

PERCENT EFFECT

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

PERMITTING AUTHORITY

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

PERSISTENT POLLUTANTS

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

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 Facility. 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.

REASONABLE POTENTIAL

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

RECEIVING WATER

A receiving water is a water of the State that receives a discharge of waste.

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).

REGULATORY MANAGEMENT DECISION (RMD)

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

REPLICATES

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

REPORTING LEVEL (RL)

The RL is the ML (and its associated analytical method) chosen by the 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.

SEPTAGE

Defined as the liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, recreational vehicle's sanitation tank, or similar storage or treatment works that receives domestic waste.

SIX-MONTH MEDIAN EFFLUENT LIMITATION

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

SLUDGE AND BIOSOLIDS

Sludge, as used in this Order, means the solid, semisolid, and liquid residues removed during primary, secondary, or secondary 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.

SOURCE OF DRINKING WATER

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

SPECIES SENSITIVITY SCREENING

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

STANDARD DEVIATION (Σ)

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

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

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

TEST OF SIGNIFICANT TOXICITY (TST)

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 whole effluent toxicity (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 IDENTIFICATION EVALUATION

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

TOXICITY REDUCTION EVALUATION (TRE)

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

TOXICITY PROVISIONS

Refers to Section III.B and Section IV.B of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

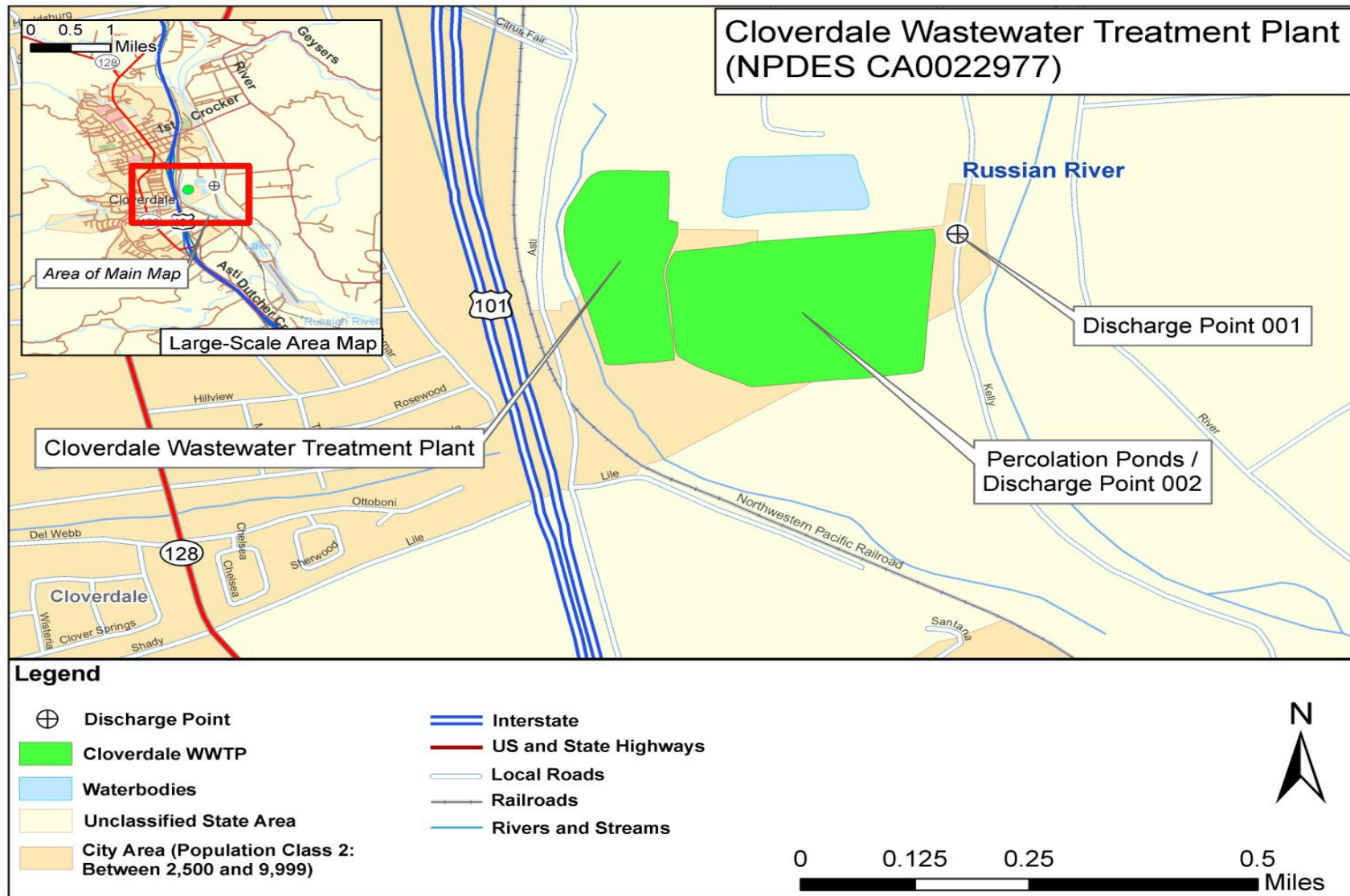
WATER QUALITY OBJECTIVE

A water quality objective is the amount of pollutant or a parameter level which is established for the reasonable protection of beneficial uses of surface waters and groundwater, and the prevention of nuisance.

WATER RECYCLING

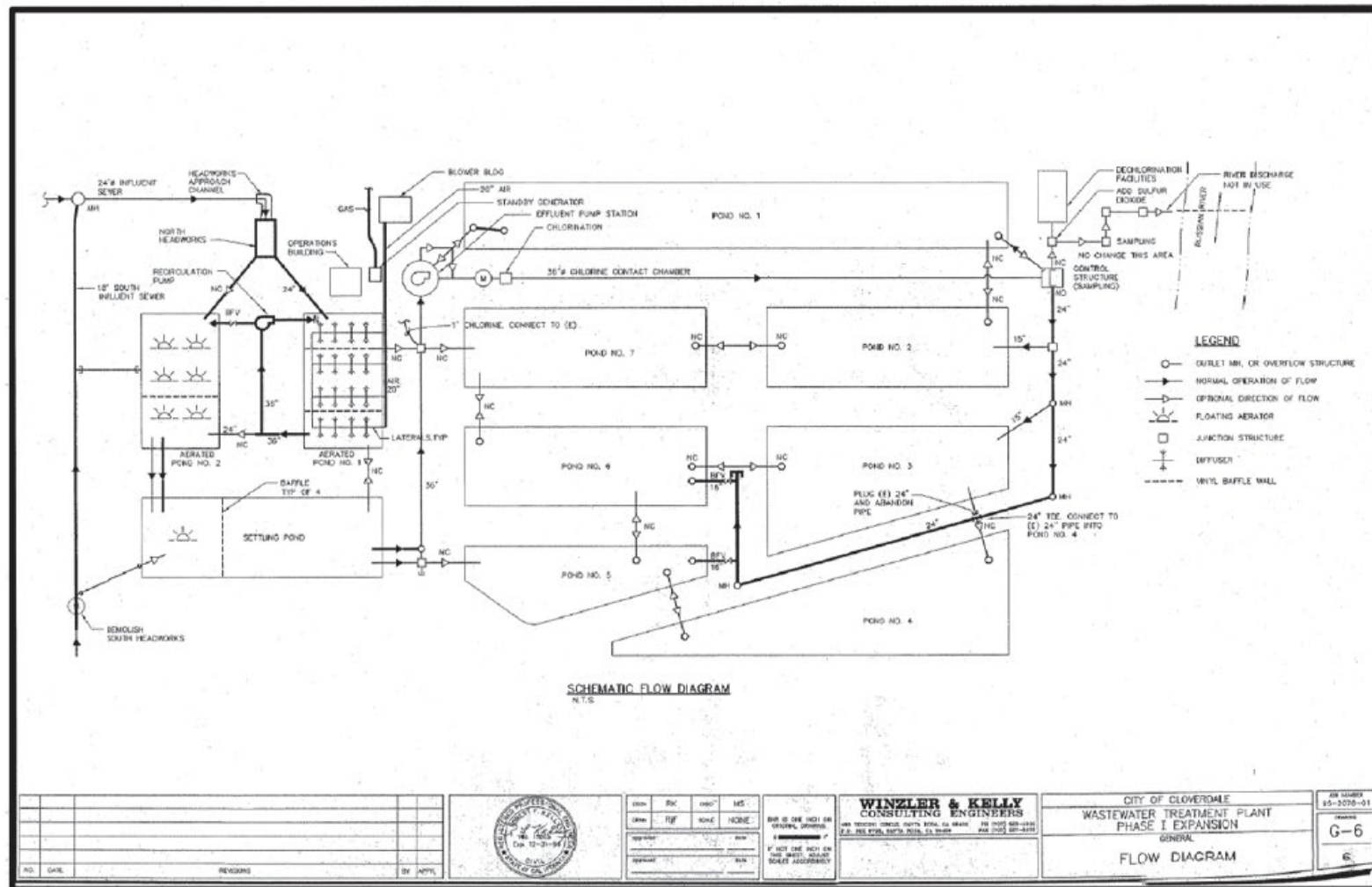
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

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.)

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. § 118(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. § 118(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. § 118(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. § 118(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. § 118(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).)
- 1.7.3.4. 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).)

1.7.4. **Notice**

- 1.7.4.1. **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 21, 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).)
- 1.7.4.2. **Unanticipated bypass.** The Permittee shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 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).)
 - 3.2.3. 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 North Coast Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

4.2. Records of monitoring information shall include:

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

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

- 4.3.1. The name and address of any permit applicant or 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 facility 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).)
- 5.2.3.4. 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).)
- 5.2.3.5. 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).)

- 5.2.3.6. 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, 2016, 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, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted 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. 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. § 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. § 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

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 Permittee 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 (MRP)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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

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.

Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxics listed by the California Toxics Rule (CTR) shall also adhere to guidance and requirements contained in the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2005) (SIP). However, there may be situations when analytical methods are published with MLs that are more sensitive than the MLs for analytical methods listed in the SIP. For instance, U.S. EPA Method 1631E for mercury is not currently listed in SIP Appendix 4, 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.

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 the 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	Untreated influent wastewater collected at the facility headworks at a representative point preceding primary treatment.
--	INT-001	Internal monitoring location for purposes of monitoring chlorine residual in chlorine treated wastewater within the contact chamber.
001	EFF-001	Chlorine contact chamber effluent weir or at a representative point following full treatment and disinfection but prior to discharge to the Russian River.
002	EFF-002	Chlorine contact chamber effluent weir or at a representative point following full treatment and disinfection but prior to discharge to the percolation ponds.
--	PND-001 ¹	Northern most percolation pond.
--	PND-002	Northeastern percolation pond, South of PND-001.
--	PND-003	Percolation pond directly South of PND-002.
--	PND-004	Southern most percolation pond.
--	PND-005	Percolation pond directly south of PND-006.
--	PND-006	Percolation pond directly south of PND-007
--	PND-007	Northwestern percolation pond, South of PND-001.
--	RSW-001	Upstream receiving water monitoring location in the Russian River, upstream of Discharge Point 001 at a location that is not influenced by the discharge.
--	RSW-002	Downstream receiving water monitoring location in the Russian River immediately downstream of Discharge Point 001 in the area influenced by the discharge.
--	RSW-003	Russian River upstream receiving water monitoring location in the Russian River, upstream of Discharge Point 001 at a location that is not influenced by the discharge monitoring location and any potential influence of the percolation ponds.
--	RSW-004	Russian River downstream receiving water monitoring location in the Russian River immediately downstream of Discharge Point 001 in the area influenced by the discharge.
--	RSW-005	Russian River monitoring location in the vicinity of Percolation Pond No. 4, downstream of Monitoring Location RSW-004 and upstream of Monitoring Location RSW-006.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	RSW-006	Russian River monitoring location, immediately downstream of the percolation ponds.
--	GW-001 ¹	Groundwater monitoring well northeast of the percolation ponds.
--	GW-007	Groundwater monitoring well southwest of the percolation ponds.
--	GW-009	Groundwater monitoring well east of the percolation ponds.
--	GW-010	Groundwater monitoring well east of the percolation ponds.
--	GW-011	Groundwater monitoring well southeast of the percolation ponds.
--	GW-012	Groundwater monitoring well southeast of the percolation ponds.
--	GW-013	Groundwater monitoring well southeast of the percolation ponds.
--	GW-014	Groundwater monitoring well southwest of the percolation ponds.
--	GW-015	Groundwater monitoring well northwest of the percolation ponds.
--	GW-016	Groundwater monitoring well northwest of the percolation ponds.
--	BIO-001	A representative sample of the sludge or biosolids generated when removed for disposal.

Table Notes:

1. See map of groundwater monitoring well locations and percolation pond locations in Attachment B.

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 ¹
Influent Flow ²	mgd	Meter	Continuous	--
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	24-hr Composite	Weekly	Standard Methods

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Total Suspended Solids (TSS)	mg/L	24-hr Composite	Weekly	Standard Methods

Table Notes:

1. 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.
2. Each quarter, the Permittee shall report the average daily and average monthly flows.

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

Discharge Prohibition 3.9 requires that the Permittee upgrades the Facility to meet advanced treatment standards before discharging to the Russian River. When the necessary upgrades are complete, the Permittee shall submit a **Surface Water Discharge Report** for Executive Officer approval **at least 180 days before planned discharge**.

The Permittee shall monitor advanced treated wastewater effluent to be discharged to the Russian River at Monitoring Location EFF-001 as follows:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Effluent Flow ²	mgd	Meter	Continuous	--
Dilution Rate	% of stream flow	Calculate	Daily	--
Biochemical Oxygen Demand 5-Day @ 20°C (BOD ₅)	mg/L	24-hr Composite	Weekly ³	Standard Methods
BOD ₅	% removal	Calculate	Weekly	--
pH	standard units	Grab	Weekly ^{3,4}	Standard Methods
Total Coliform Bacteria	MPN/100 mL	Grab	Weekly ³	Standard Methods
Total Suspended Solids (TSS)	mg/L	24-hr Composite	Weekly ³	Standard Methods
TSS	% removal	Calculate	Weekly	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Copper, Total Recoverable	µg/L	Grab	Monthly ^{5,6}	ICPMS (ML 0.5 µg/L) SPGFAA (ML 2 µg/L) ⁷
Settleable Solids	mL/L	Grab	Weekly	Standard Methods
Chlorodibromomethane	µg/L	Grab	Monthly ⁶	GC (ML 0.5 µg/L) ⁸
Dichlorobromomethane	µg/L	Grab	Monthly ⁶	GC (ML 0.5 µg/L) ⁸
Chlorine, Total Residual ⁹	mg/L	Grab	Daily ¹⁰	Standard Methods
Dissolved Oxygen	mg/L	Grab	Weekly	Standard Methods
Hardness, Total (as CaCO ₃)	mg/L	Grab	Monthly ⁵	Standard Methods
Specific Conductance @ 77°F	µmhos/cm	Grab	Monthly	Standard Methods
Temperature	°C or °F	Grab	Weekly ⁴	Standard Methods
Total Dissolved Solids	mg/L	Grab	Monthly ⁶	Standard Methods
Turbidity	NTU	Meter	Continuous	Standard Methods
Ammonia Nitrogen, Total (as N)	mg/L	Grab	Weekly ^{3,4,11}	Standard Methods
Ammonia Nitrogen, Unionized (as N)	mg/L	Calculate	Weekly ⁴	--
Nitrate Nitrogen, Total (as N)	mg/L	Grab	Weekly ³	Standard Methods
Organic Nitrogen	mg/L	Grab	Weekly	Standard Methods
Phosphorus, Total (as P)	mg/L	Grab	Weekly	Standard Methods
Acute Toxicity	% survival	24-hr Composite	Quarterly ¹¹	See Section 5 Below ¹²
Chronic Toxicity	Pass or Fail, and % Effect	24-hr Composite	Semiannually	See Section 5 Below ¹²
CTR Priority Pollutants ¹³	µg/L	24-hr Composite ¹⁴	Once per permit term ¹⁵	Standard Methods ¹⁴
<i>E. coli</i> Bacteria	MPN/100 mL	Grab	Weekly ¹⁶	Standard Methods
Pesticide Characterization ¹⁷	µg/L	24-hr Composite	Once per permit term	Standard Methods

Table Notes:

1. 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.
2. Each quarter, the Permittee shall report the daily average and monthly average flows.

3. Accelerated monitoring (weekly monitoring frequency). If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the 2 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.
4. pH and temperature monitoring must coincide with weekly monitoring for ammonia.
5. Monitoring for effluent and receiving water hardness shall be conducted concurrently with effluent sampling for copper.
6. Accelerated monitoring (monthly monitoring frequency). If a test result exceeds an effluent limitation, the Permittee shall take two more samples, one within 7 days and one within 14 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.
7. ICPMS = Inductively Coupled Plasma / Mass Spectrometry
SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption
8. GC = Gas Chromatography
9. Chlorine residual monitoring at Monitoring Location EFF-001 shall demonstrate that there is no detectable chlorine residual after dechlorination during periods of discharge to the Russian River. Samples collected to demonstrate complete dechlorination shall be collected at a point following disinfection and prior to discharge to the Russian River. All chlorine residual measurements shall be reported as total chlorine residual.
10. Accelerated Monitoring (daily monitoring frequency). If a test result exceeds an effluent limitation, the Permittee shall increase monitoring frequency to a minimum of twice a day for a week to evaluate whether an exceedance is persisting. If two or more samples in a week exceed an effluent limitation, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance.
11. Monitoring for ammonia shall be conducted concurrently with acute whole effluent toxicity monitoring (section 5 of this MRP) Effluent and receiving water temperature and pH shall be recorded at the time the ammonia sample is collected.
12. Whole effluent chronic toxicity shall be monitored in accordance with the requirements of section 5 of this Monitoring and Reporting Program.
13. Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample.
14. CTR priority pollutant samples shall be collected using 24-hour composite sampling, except for pollutants that are volatile. Samples for volatile pollutants may be collected as grab samples.
15. In the event of a discharge to surface waters, the Permittee shall perform sampling for CTR priority pollutants concurrently with the discharge event.
16. A minimum of five samples over a six-week period is necessary to calculate the geometric mean. See also Order section 7.8.2.
17. Pesticide monitoring shall include all pollutants included in Attachment G (Pesticide Characterization) and occur concurrently with CTR pollutant monitoring.

5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

5.1. Acute Aquatic Toxicity Testing

The Permittee shall conduct acute aquatic toxicity testing in accordance with the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Toxicity Provisions), adopted on December 1, 2021. The following acute aquatic toxicity testing requirements have been identified as applicable to this Order:

- 5.1.1. **Toxicity Testing Sample and Location.** The effluent sample shall be collected from Monitoring Location EFF-001. Dilution water and control water shall be prepared and used as specified by the test methods.
- 5.1.2. **In-stream Waste Concentration (IWC) for Chronic Toxicity.** The IWC for this discharge is 100 percent effluent. The acute toxicity test shall be conducted using 100 percent effluent collected at Monitoring Location EFF-001.
- 5.1.3. **Toxicity Test Methods.** Chronic aquatic toxicity tests shall be conducted using one or more of the test species listed below and selected by the Regional Water Board in accordance with the Toxicity Provisions, and shall follow methods identified in the Code of Federal Regulations, title 40, part 136, or other U.S. EPA-approved methods, or included in the Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (U.S. EPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions). Species and test methods shall be selected from the following:
 - 5.1.3.1. A 96-hour static renewal toxicity test with an invertebrate, the water flea, *Ceriodaphnia dubia* (Survival).
 - 5.1.3.2. A 96-hour static renewal toxicity test with a vertebrate, the rainbow trout, *Oncorhynchus mykiss* (Survival)
- 5.1.4. **Species Sensitivity Screening.** The Permittee shall submit a **Surface Water Discharge Report** for Executive Officer approval **at least 180 days before planned discharge**. Species sensitivity screening shall be conducted prior to discharge to surface waters and shall be included in the submittal of the Surface Water Discharge Report. The Permittee shall collect a single effluent sample and concurrently conduct two acute aquatic toxicity tests using an invertebrate and vertebrate species identified in section 5.1.3, above. This sample shall also be analyzed for the parameters required for the discharge. The species that exhibits the highest "Percent (%) Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit term.
- 5.1.5. **Routine Monitoring Requirements.** The Permittee shall conduct at least one acute aquatic toxicity test each calendar quarter during which there is expected to be at least 15 days of discharge. Initiation of the routine monitoring test shall be at a time that would allow any required MMEL compliance tests to be initiated within the same calendar month as the routine monitoring test.

To the extent feasible, routine monitoring tests shall be evenly distributed across the calendar year or period of seasonal or intermittent discharge.

5.1.6. Chronic Toxicity Testing

The Permittee shall conduct chronic toxicity testing in accordance with the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Toxicity Provisions), adopted on December 1, 2021. The following chronic toxicity testing requirements have been identified as applicable to this Order:

- 5.1.6.1. **Toxicity Testing Sample and Location.** The advanced treated wastewater effluent sample shall be collected from Monitoring Location EFF-001. Dilution water and control water shall be prepared and used as specified by the test methods.
- 5.1.6.2. **In-stream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC for this discharge is 100 percent effluent.
- 5.1.6.3. **Toxicity Test Methods.** Chronic aquatic toxicity tests shall be conducted using one or more of the test species listed below and selected by the Regional Water Board in accordance with the Toxicity Provisions, and shall follow methods identified in the Code of Federal Regulations, title 40, part 136, or other U.S. EPA-approved methods, or included in the following U.S. EPA method manuals: Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition (EPA-821-R-02-013).
 - 5.1.6.3.1. A 7-day static renewal toxicity test with a vertebrate, the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).
 - 5.1.6.3.2. A static renewal toxicity test with an invertebrate, the water flea, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).
 - 5.1.6.3.3. A 96-hour static non-renewal toxicity test with a plant, the green algae, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).
 - 5.1.6.3.4. Test results shall be analyzed using the TST as described below. To the extent that U.S. EPA-approved methods require that observations be made of organisms' response in multiple concentrations of effluent or receiving water, the instream waste concentration (IWC) shall be included as one of the selected concentrations, and the TST shall be conducted using the IWC and control as described in Section 5.1.6.8.. below.
- 5.1.6.4. **Test of Significant Toxicity.** Aquatic toxicity test data shall be analyzed using the test of significant toxicity (TST) as described in Steps 1 through 7, within section III.B.3 of the Toxicity Provisions (Steps). For any chronic aquatic toxicity test method with both lethal and sub-lethal endpoints, the sub-lethal endpoint data shall be in these Steps. For any chronic aquatic toxicity test method with more than one sub-lethal endpoint, the data for each sub-lethal endpoint shall be independently

analyzed using these Steps. The TST is applicable for a data analysis of an IWC compared to a control. For assessing whether ambient water meets the water quality objectives, the undiluted ambient water shall be used as the IWC for purposes of the data analysis as described in the Toxicity Provisions.

- 5.1.6.5. **Percent Effect.** The percent effect at the IWC shall be calculated for each endpoint in an aquatic toxicity test, using untransformed data and the following equation:

$$\text{Percent Effect at the IWC} = \frac{\text{Mean Control Response} - \text{Mean IWC Response}}{\text{Mean Control Response}} \cdot 100$$

- 5.1.6.6. **Species Sensitivity Screening.** Species sensitivity screening shall be conducted **within 18 months of Regional Water Board Approval to discharge to the Russian River.** The Permittee shall collect a single effluent sample and concurrently conduct three chronic toxicity tests using the fish, the invertebrate, and the algae species identified in section 5.1.6.3., above. This sample shall also be analyzed for the parameters required for the discharge at EFF-001. The species that exhibits the highest "Percent (%) Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit term.¹
- 5.1.6.7. **Routine Monitoring Requirements.** The Permittee shall conduct at least one chronic aquatic toxicity test each calendar month during which there is expected to be at least 15 days of discharge at Discharge Point 001. Initiation of the routine monitoring test shall be at a time that would allow any required MMEL compliance tests to be initiated within the same calendar month² as the routine monitoring test.
- 5.1.6.8. To the extent feasible, routine monitoring tests shall be evenly distributed across the calendar year or period of seasonal or intermittent advanced treatment wastewater discharge.

¹ If the percent effect is less than or equal to zero percent effect for each species, or all percent effect are the same value, in the species sensitivity screening test, the Permittee shall either use the species that was most sensitive during the previous permit term for routine monitoring or repeat the species sensitivity screening for all species to confirm the results of the first screening before selecting the most sensitive species to use for routine monitoring. If two consecutive species sensitivity screening tests demonstrate that the percent effect for all species exhibit less than or equal to zero percent, the Permittee may select the species to be used for routine monitoring during the permit term.

² For purposes of aquatic toxicity monitoring, a calendar month shall be defined as the period of time from a day of one month to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, or from January 31 to February 28).

5.2. Other Requirements.

5.2.1. **Test of Significant Toxicity.** Aquatic toxicity test data shall be analyzed using the test of significant toxicity (TST) as described in Steps 1 through 7, within section IV.B.1.c of the Toxicity Provisions (Steps). For any chronic aquatic toxicity test method with both lethal and sub-lethal endpoints, the sub-lethal endpoint data shall be in these Steps. For any chronic aquatic toxicity test method with more than one sub-lethal endpoint (giant kelp), the data for each sub-lethal endpoint shall be independently analyzed using these Steps. The TST is applicable for a data analysis of an IWC compared to a control. For assessing whether ambient water meets the water quality objectives, the undiluted ambient water shall be used as the IWC for purposes of the data analysis as described in the Toxicity Provisions.

5.2.2. **Additional Routine Monitoring Requirement.** An additional routine monitoring test shall be required when there is one violation of the MDEL or MMEL, but not two violations in a single calendar month. This additional routine monitoring test is not required if the Permittee is already conducting a TRE, or if the Permittee is required to conduct routine monitoring at or more frequently than a monthly frequency.

This additional routine monitoring test shall be initiated within two weeks after the calendar month in which the MMEL or MDEL violation occurred. The calendar month of the violation and the calendar month of the additional routine monitoring shall be considered "successive calendar months" for purposes of determining whether a TRE is required under section 5.2.8., below. This additional routine monitoring test is used to determine if a TRE is necessary. This additional routine monitoring test is also used for compliance purposes and could result in the need to conduct MMEL compliance tests.

5.2.3. **Compliance Monitoring Requirements.** If a chronic or acute aquatic toxicity routine monitoring test results in a "fail" at the IWC, then the Permittee shall complete a maximum of two MMEL compliance tests. The MMEL compliance tests shall be initiated within the same calendar month that the first routine monitoring test was initiated that resulted in the "fail" at the IWC. If the first MMEL compliance tests results in a "fail" at the IWC, then the second MMEL compliance test is waived because the first chronic MMEL compliance test that results in a "fail" constitutes a violation and so the second MMEL compliance test is not required.

5.2.4. **Replacement Toxicity Tests.** When a required toxicity test for routine monitoring or MMEL compliance tests is not completed, a new toxicity test to replace the toxicity test that was not completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring or MMEL compliance tests, as applicable, for the calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent month. The new toxicity test for routine monitoring or MMEL compliance tests, as applicable, and any MMEL compliance tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent limitations for the calendar month in which the toxicity test that was not completed and was required to be initiated. The new toxicity test and any MMEL compliance tests required to be conducted due to

the results of the new toxicity test shall not be used to substitute for any other required toxicity tests.

When any monitoring test is not initiated in the required time period due to circumstances outside of the Permittee's control that were not preventable with the reasonable exercise of care, and the Permittee promptly initiates, and ultimately completes a replacement test, the Regional Water Board may determine that the replacement monitoring test was not required to be initiated in the required time period.

- 5.2.5. When there is no effluent available to complete a routine monitoring test or MMEL compliance test, the test shall not be required, and routine monitoring continues at the frequency specified in the permit.
- 5.2.6. **WET Reporting.** Results obtained from toxicity tests shall be reported to the Regional Water Board in the Permittee's quarterly Self-Monitoring Report (SMR), as either a "pass" or a "fail," and the percent effect at the IWC for each endpoint. The SMR shall include a full laboratory report for each toxicity test that was performed (WET report).
- 5.2.6.1. 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:
- 5.2.6.1.1. 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);
- 5.2.6.1.2. Any manipulations done to lab control/diluent and effluent such as filtration, nutrient addition, etc.;
- 5.2.6.1.3. Tabular summary of test results for control water and each effluent dilution;
- 5.2.6.1.4. The toxicity test results reported as either a "Pass" or "Fail", and the "Percent Effect" at the IWC for each endpoint;
- 5.2.6.1.5. Identification of any anomalies or nuances in the test procedures or results.
- 5.2.7. **Notification.** All toxicity tests at the IWC shall be used for determining compliance with any toxicity MDEL or MMEL contained in this Order. The Permittee shall notify the Regional Water Board of a violation of a toxicity MDEL or MMEL as soon as the discharger learns of the violation, but **no later than 24 hours** of the discharger receiving the monitoring results.
- 5.2.8. **Toxicity Reduction Evaluation (TRE) Process**
- 5.2.8.1. **Generic TRE Work Plan.** The Permittee submitted a generic TRE Work Plan to the Regional Water Board in January 2011. The Permittee's generic TRE Work Plan

shall be reviewed **no later than 60 days following adoption of a modified or reissued Order permitting discharge to the Russian River** and updated as necessary in order to remain current and applicable to the discharge and discharge facilities.

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:

- 5.2.8.1.1. 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.
- 5.2.8.1.2. 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.
- 5.2.8.1.3. 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).
- 5.2.9. **TRE Work Plan.** A TRE Work Plan is required to be submitted and implemented when a Permittee has any combination of two or more MDEL or MMEL violations within a single calendar month or within two successive calendar months. In addition, if other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, intermittent recurring toxicity), then the Regional Water Board may also require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test or MMEL compliance test. Routine Monitoring shall continue during a TRE.

The TRE Work Plan shall be submitted for Regional Water Board approval **within 30 days** from receipt of the chronic toxicity monitoring result, or other toxicity event, that initiated the TRE requirement. The TRE Work Plan shall follow the generic TRE Work Plan and be revised as appropriate for the initiating toxicity events.

The TRE shall be conducted according to the EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989). The TRE Work Plan shall include the following information, and comply with additional conditions set by the Regional Water Board Executive Officer:

- 5.2.9.1. Further actions by the Permittee to investigate, identify, and correct causes of toxicity.
- 5.2.9.2. Actions the Permittee will take to mitigate effects of the discharge and prevent the recurrence of toxicity.
- 5.2.9.3. A schedule for these actions, progress reports, and the final report.

5.2.10. **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.

5.2.11. 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.

5.2.12. 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.

5.2.13. 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.

6. LAND DISCHARGE MONITORING REQUIREMENTS

6.1. Monitoring Location EFF-002

The Permittee shall monitor treated wastewater to be discharged to the percolation ponds at Monitoring Location EFF-002, as follows:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Effluent Flow ^{2,3}	MGD	Meter	Continuous	--
Biochemical Oxygen Demand 5-Day @ 20°C (BOD ₅)	mg/L	24-hr Composite	Weekly ⁴	Standard Methods
pH	standard units	Grab	Weekly ^{4,5}	Standard Methods
Total Coliform Bacteria	MPN/100 mL	Grab	Weekly ⁴	Standard Methods

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method¹
Total Suspended Solids (TSS)	mg/L	24-hr Composite	Weekly ⁴	Standard Methods
Copper, Total Recoverable	µg/L	Grab	Quarterly ^{6,7}	ICPMS (ML 0.5 µg/L) SPGFAA (ML 2 µg/L) ⁸
Chlorodibromomethane	µg/L	Grab	Quarterly	GC (ML 0.5 µg/L) ⁹
Dichlorobromomethane	µg/L	Grab	Quarterly	GC (ML 0.5 µg/L) ⁹
Chlorine, Total Residual	mg/L	Grab	Daily ¹⁰	Standard Methods
Hardness, Total (as CaCO ₃)	mg/L	Grab	Quarterly ^{7,11}	Standard Methods
Specific Conductance @ 77°F	µmhos/cm	Grab	Quarterly ⁶	Standard Methods
Temperature	°C or °F	Grab	Quarterly ⁵	Standard Methods
CTR Priority Pollutants	µg/L	24-hr Composite ¹³	Once per permit term ^{11,12,13,14}	Standard Methods ¹⁶
Ammonia Nitrogen, Total (as N)	mg/L	Grab	Quarterly	Standard Methods
Ammonia Nitrogen, Unionized (as N)	mg/L	Calculate	Quarterly	--
Chloride	mg/L	Grab	Quarterly ⁶	Standard Methods
Nitrate Nitrogen, Total (as N)	mg/L	Grab	Quarterly ^{6,15}	Standard Methods
Nitrite Nitrogen, Total (as N)	mg/L	Grab	Quarterly ⁶	Standard Methods
Organic Nitrogen	mg/L	Grab	Quarterly	Standard Methods
Phosphorus, Total (as P)	mg/L	Grab	Quarterly	Standard Methods

Table Notes:

1. 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.
2. Each quarter, the Permittee shall report the daily average and monthly average flows.
3. Each quarter, the Permittee shall report the volume discharged to each percolation pond (Ponds 1-7).
4. Accelerated monitoring (weekly monitoring frequency). If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the 2 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.
5. pH and temperature monitoring must coincide with quarterly monitoring for ammonia.
6. Monitoring for copper, nitrate, specific conductance, and chloride must coincide with quarterly groundwater and receiving water monitoring.
7. Monitoring for effluent and receiving water hardness shall be conducted concurrently with effluent sampling for copper.
8. ICPMS = Inductively Coupled Plasma / Mass Spectrometry
SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption
9. GC = Gas Chromatography
10. Chlorine residual monitoring at Monitoring Location EFF-002 shall demonstrate that a chlorine residual is present after chlorination. This monitoring shall occur continuously when transferring from the point of chlorine introduction to the percolation ponds.
11. Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample.
12. CTR priority pollutant samples shall be collected using 24-hour composite sampling, except for pollutants that are volatile. Samples for volatile pollutants may be collected as grab samples.
13. CTR priority pollutant sampling shall be completed no later than **December 31, 2029**. Effluent and receiving water monitoring shall occur concurrently.
14. Analytical methods must achieve the lowest minimum level (ML) specified in Appendix 4 of the SIP and, in accordance with section 2.4 of the SIP, the Permittee shall report the ML and MDL for each sample result.
15. Nitrate monitoring must coincide with quarterly groundwater and receiving water monitoring, as well as effluent monitoring for nitrogen compounds.
16. If no discharge occurs at Discharge Point 001 during the permit term, the Permittee shall monitor the effluent at Monitoring Location EFF-002 during the discharge season (i.e., October 1 through May 14) in the fourth year of the permit term.

6.2. Monitoring Locations PND-001 through PND-007

The Permittee shall monitor treated wastewater to be discharged to the percolation ponds at Monitoring Location PND-001, PND-002, PND-003, PND-004, PND-005, PND-006, and PND-007, as follows:

Table E-5. Effluent Monitoring – Monitoring Locations PND-001 through PND-007

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Effluent Flow ¹	-- ²	Observation	Daily	--

Table Notes:

1. Each quarter, the Permittee shall report the daily observed ponds in use (PND-001 through PND-007).
2. For each day of discharge the Permittee shall indicate 1 = discharge at monitoring locations PND-001 through PND-007."

7. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

This Order does not authorize discharges of recycled water.

8. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

8.1. Monitoring Locations RSW-003 and RSW-004

The Permittee shall monitor the Russian River at Monitoring Locations RSW-003 and RSW-004 during periods of advanced treated wastewater discharge to the Russian River as follows:

Table E-6. Receiving Water Monitoring - Monitoring Locations RSW-003 and RSW-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Flow	mgd	Gauge ²	Daily	--
Biochemical Oxygen Demand 5-Day @ 20°C (BOD ₅)	mg/L	Grab	Monthly	Standard Methods
pH	standard units	Grab	Monthly ³	Standard Methods
Total Suspended Solids (TSS)	mg/L	Grab	Monthly	Standard Methods
Copper, Total Recoverable	µg/L	Grab	Monthly	ICPMS (ML 0.5 µg/L) SPGFAA (ML 2 µg/L) ⁴

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Dissolved Oxygen	mg/L	Grab	Monthly	Standard Methods
Hardness, Total (as CaCO ₃)	mg/L	Grab	Monthly	Standard Methods
Temperature	°C or °F	Grab	Monthly ³	Standard Methods
Total Dissolved Solids	mg/L	Grab	Monthly	Standard Methods
Turbidity	NTU	Grab	Monthly	Standard Methods
Ammonia, Total (as N)	mg/L	Grab	Monthly ³	Standard Methods
Ammonia, Unionized (as N)	mg/L	Calculate	Monthly	--
Nitrate, Total (as N)	mg/L	Grab	Monthly	Standard Methods
Phosphorus, Total (as P)	mg/L	Grab	Monthly	Standard Methods
<i>E. coli</i> Bacteria ⁹	MPN/100 mL	Grab	Monthly	Standard Methods ⁹
CTR Priority Pollutants ^{5,6}	µg/L	Grab	Once per permit term ⁷	Standard Methods ⁸
Pesticide Characterization ¹⁰	µg/L	24-hr Composite	Once per permit term	Standard Methods

Table Notes:

1. 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.
2. The flow rate shall be determined using the flow at United States Geological Survey (USGS) Gauge No. 11-4630.00 in the Russian River near Cloverdale.
3. pH and temperature monitoring must coincide with monthly monitoring for ammonia.
4. ICPMS = Inductively Coupled Plasma / Mass Spectrometry
SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption
5. Monitoring shall occur only at Monitoring Location RSW-003.
6. Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample. Monitoring shall occur simultaneously with effluent monitoring for CTR priority pollutants required by section 4.1 of this MRP.
7. In the event of a discharge to surface waters, the Permittee shall perform sampling for CTR priority pollutants in the receiving water concurrently with the discharge event.
8. Analytical methods must achieve the lowest minimum level (ML) specified in Appendix 4 of the SIP and, in accordance with section 2.4 of the SIP, the Permittee shall report the ML and MDL for each sample result.
9. The Permittee may use any *E. coli* method specified in 40 CFR 136 for compliance monitoring.

10. Pesticide monitoring shall include all pollutants included in Attachment G (Pesticide Characterization) and occur concurrently with CTR pollutant monitoring.

8.2. Monitoring Locations RSW-005 and RSW-006

The Permittee shall monitor the Russian River at Monitoring Locations RSW-003, RSW-004, RSW-005, and RSW-006 as follows:

Table E-7. Receiving Water Monitoring - Monitoring Locations RSW-005 and RSW-006

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
pH	standard units	Grab	Quarterly	Standard Methods
Copper, Total Recoverable	µg/L	Grab	Quarterly ²	ICPMS (ML 0.5 µg/L) SPGFAA (ML 2 µg/L) ³
Hardness, Total (as CaCO ₃)	mg/L	Grab	Quarterly ²	Standard Methods
Specific Conductance @ 77°F	µmhos/cm	Meter	Quarterly	Standard Methods
Temperature	°C or °F	Grab	Quarterly	Standard Methods
Chloride	mg/L	Grab	Quarterly	Standard Methods
Nitrate Nitrogen, Total (as N)	mg/L	Grab	Quarterly	Standard Methods ⁴

Table Notes:

1. 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.
2. Monitoring for effluent and receiving water hardness shall be conducted concurrently with effluent monitoring for copper at Monitoring Location EFF-002 and receiving water sampling for copper.
3. ICPMS = Inductively Coupled Plasma / Mass Spectrometry
SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption
4. The Permittee shall propose an analytical method with the lowest practicable MDL in order to obtain sufficient data to make a determination on connectivity of the groundwater underlying the percolation ponds and the Russian River. As part of the decision, the Permittee may consider the availability of laboratories and associated costs.

8.3. Groundwater Monitoring Locations

8.3.1. The Permittee shall monitor groundwater at Monitoring Locations GW-001, GW-007, GW-009, GW-010, GW-011, GW-012, GW-013, GW-014, GW-015, and GW-016 as follows:

Table E-8. Groundwater Monitoring Locations

Parameter	Units	Sample Type	Minimum Sampling Frequency ^{1,7}	Required Analytical Test Method ²
Depth to Groundwater ^{1,6}	feet	--	Quarterly	--
pH	standard units	Grab	Quarterly	Standard Methods
Copper, Total Recoverable	µg/L	Grab	Quarterly	ICPMS (ML 0.5 µg/L) SPGFAA (ML 2 µg/L) ³
Total Coliform Bacteria ⁴	MPN/100 mL	Grab	Quarterly	Standard Methods
Specific Conductance @ 77°F	µmhos/cm	Meter	Quarterly	Standard Methods
Chloride	mg/L	Grab	Quarterly	Standard Methods
Nitrate Nitrogen, Total (as N)	mg/L	Grab	Quarterly	Standard Methods ⁵

Table Notes:

- Groundwater sampling shall be conducted to adequately capture seasonal variations in groundwater levels.
- 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.
- ICPMS = Inductively Coupled Plasma / Mass Spectrometry
SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption
- For coliform samples that exceed a value of 1.1 MPN/100ml, additional sampling should be taken and analyzed to eliminate the possibility of sampling error. The Permittee shall propose an analytical method with the lowest practicable MDL. As part of the decision, the Permittee may consider the availability of laboratories and associated costs.
- The Permittee shall propose an analytical method with the lowest practicable MDL. As part of the decision, the Permittee may consider the availability of laboratories and associated costs.
- At GW-015, Permittee is only required to monitor "depth to groundwater".
- Monitoring requirements at GW-007 are exempt during wet weather conditions, if the well is flooded or inaccessible.

8.3.1.1. Within 60 days of the permit adoption date, the Permittee shall submit a Quality Assurance/Quality Control Plan for its groundwater monitoring program that addresses specific procedures to be followed to ensure that groundwater sampling data is reliable and defensible. The QA/QC plan shall be developed in accordance with acceptable QA/QC standards. The plan shall include a procedure for testing an additional sample anytime there are detections of monitored pollutants above a specific threshold.

8.3.1.1.1. **Groundwater Monitoring Reports.** Groundwater monitoring data, including monitoring location (latitude/longitude), groundwater elevation (as compared to mean sea level), boring logs, and well construction details shall be uploaded to Geotracker. In addition, the information below shall be included with the Annual Report due by **March 1 of each year**:

8.3.1.1.1.1. Groundwater elevation and gradient contour maps developed on a quarterly basis;

8.3.1.1.1.2. Tables and graphs of groundwater analytical data collected over the previous year;

8.3.1.1.1.3. Iso-concentration contour maps for the constituents being monitored for in table E-8 above.

9. OTHER MONITORING REQUIREMENTS

9.1. Monitoring Location INT-001

9.1.1. The Permittee shall monitor the discharge from the chlorine contact chamber at Monitoring Location INT-001 as follows:

Table E-9. Internal Effluent Monitoring – Monitoring Location INT-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Chlorine, Total Residual	mg/L	Continuous ²	Daily/Continuous ³	Part 136

Table Notes:

1. 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.
2. Grab samples are a permissible alternative when equipment may be unavailable prior to installation, or during maintenance and/or troubleshooting.
3. The Permittee shall monitor continuously to demonstrate that the appropriate chlorine residual concentration is maintained in the effluent at INT-001 at all times. At a minimum, the Permittee shall record readings of the continuous monitoring every hour on the hour and report the average daily chlorine residual. The Permittee shall

calibrate chlorine residual analyzers against grab samples as frequently as necessary to maintain accurate and reliable operation.

9.2. Visual Monitoring (Monitoring Locations EFF-001, RSW-003, and RSW-004)

- 9.2.1. Visual observations of the discharge and receiving water shall be recorded monthly and on the first day of each intermittent discharge. Visual monitoring shall include, but not be limited to, observations for floating materials, coloration, objectionable aquatic growths, oil and grease films, and odors. Visual observations shall be recorded and included in the Permittee's quarterly SMRs.

9.3. Sludge Monitoring (Monitoring Location BIO-001)

- 9.3.1. Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken.
- 9.3.2. Sampling records shall be retained for a minimum of 5 years. A log shall be maintained for sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log must be complete enough to serve as a basis for developing the Sludge Handling and Disposal report that is required as part of the Annual Report.

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 submit electronic Self-Monitoring Reports (eSMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site ([CIWQS\) Program Web site](http://www.waterboards.ca.gov/ciwqs/index.html) (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal. The Permittee shall maintain sufficient staffing and resources to ensure it submits eSMRs that are complete and timely. This includes provision of training and supervision of individuals (e.g., Permittee personnel or consultant) on how to prepare and submit eSMRs.
- 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-10. Monitoring Periods and Reporting Schedule¹

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	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 ¹ (February 1, May 1, August 1, November 1)
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 (February 1, May 1, August 1, November 1)
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 (February 1, May 1, August 1, November 1)
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 (February 1, May 1, August 1, November 1)
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 (February 1, May 1, August 1, November 1)
Annually	January 1 following (or on) permit effective date	January 1 through December 31	March 1, each year (with annual report)

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Once per permit term	Permit effective date	All	March 1 following the year that monitoring is completed (with annual report) and at least 180 days prior to permit expiration

10.2.5. **Reporting Protocols.** The Permittee shall report with each sample result the applicable ML, the 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 reported ML 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 reported ML, 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. The Permittee is 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 reported data shall include calculation of all effluent limitations that require averaging, taking of a median, or other computation. 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.

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) (<http://www.waterboards.ca.gov/ciwqs/index.html>). In the event 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](https://www.waterboards.ca.gov/northcoast/) (<https://www.waterboards.ca.gov/northcoast/>).

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. DMRs shall be submitted quarterly on the first day of the second calendar month following the end of each quarter (February 1, May 1, August 1, and November 1). Electronic DMR submittal shall be in addition to electronic SMR submittal. Information regarding electronic DMR submittal is available at the DMR website at [DMR website](https://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/) (https://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.

10.4.1.1. **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 **March 1, 2029**.

The Permittee shall:

- 10.4.1.1.1. Conduct an assessment of the Facility, operations, collection, and discharge systems (including the discharge outfall) 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 facility 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 facility operations and water quality;
 - 10.4.1.1.2. 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;
 - 10.4.1.1.3. 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
 - 10.4.1.1.4. Implement the necessary control measures per the approved schedule of implementation.
- 10.4.1.2. **Groundwater Characterization.** The Permittee shall conduct effluent and groundwater monitoring for each monitoring parameter/constituent identified in the MRP, Attachment E of this Order, and shall conduct monitoring necessary to perform a complete characterization of all constituents present in the groundwater. All groundwater monitoring wells upgradient and downgradient of the Facility shall be constructed and maintained to adequately capture seasonal variations in groundwater levels. By **March 1, 2030**, along with the annual report, the Permittee shall include a groundwater quality characterization technical report presenting, at a minimum, a summary of monitoring data, calculation of the concentration of each monitored parameter/constituent in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the Facility for each monitored parameter/constituent. The technical report shall identify any wastewater-specific constituents, in addition to those provided in the MRP, Attachment E of this Order, that are present in the groundwater.

In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. The technical report shall be prepared by or under the direction of appropriately qualified professional(s) and shall bear the professional's signature and stamp.

10.4.1.3. **Surface Water Discharge Report.** Discharge Prohibition 3.9 requires that the permittee upgrades the Facility to meet advanced treatment standards before beginning discharge to the Russian River. If the Discharger intends to make alterations or additions to the Facility during the term of this Order to meet advanced wastewater treatment requirements, the Discharger shall submit a complete permit application to apply for coverage under a modified or reissued NPDES permit. The application forms must be submitted to the Regional Water Board **at least 180 days before the expected commencement of the AWT discharge.** (C.F.R. §122.62(a))

10.4.1.3.1. Complete application will include:

10.4.1.3.2. Updated USEPA Application Forms 2A and 2S

10.4.1.3.3. Updated State Board Form 200

10.4.1.3.4. Characterization of the AWT discharge, which shall include:

10.4.1.3.5. Narrative description of the waste discharge

10.4.1.3.6. Process flow diagram

10.4.1.3.7. Effluent monitoring data for all priority pollutants (CTR), ammonia, and *E. coli*.

10.4.1.3.8. Concurrent receiving water monitoring data for priority pollutants, hardness, pH

10.4.1.3.9. Monitoring for acute and chronic toxicity

10.4.1.4. **Russian River Dissolved Oxygen and Temperature Study Workplan.** The Russian River has a designated beneficial use of warm, cold, and spawn freshwater habitat. The Permittee shall submit a workplan **at least 180 days before the expected commencement of the AWT discharge. This study shall be submitted with the Surface Water Discharge Report,** for Executive Officer review and approval to evaluate the temperature and dissolved oxygen levels within the Russian River near Discharge Point 001. The work plan shall propose methodology and provide a schedule for completion to quantify and evaluate the following:

10.4.1.4.1. The temperature and dissolved oxygen levels within effluent discharged to the Russian River as measured at Monitoring Location EFF-001,

10.4.1.4.2. The annual average temperature and dissolved oxygen levels within the Russian River, as measured at Monitoring Location RSW-002, increased compared to the

annual average background temperature, as measured at Monitoring Location RSW-003;

- 10.4.1.4.3. Proposed conditions to maintain less than 5°F temperature increase compared to the ambient background temperature, as a monthly average; and
- 10.4.1.4.4. Proposed daily minimum DO necessary to maintain 85% DO saturation during the dry season and 90% DO saturation during the wet season under site salinity, site atmospheric pressure, natural receiving water temperatures, mixing conditions, and any proposed dilution factor.
- 10.4.1.5. **Pesticide Characterization Study.** The purpose of this study is to collect effluent monitoring data necessary to determine that the discharge does not contain pesticides at levels that will have the reasonable potential to cause, or contribute to adverse effects on beneficial uses in the Russian River. Therefore, the permittee will complete monitoring for pesticides listed in Attachment G, Pesticide Characterization. Pesticide monitoring shall be conducted concurrently with CTR pollutant monitoring.

Table E-11. Reporting Requirements for Special Provisions Reports

Order Section	Special Provision Requirement	Reporting Requirements
Special Provision 6.3.2.1	Pollutant Minimization Program	If required by the Regional Water Board Executive Officer
Special Provision 6.3.2.1.2.5.	Pollutant Minimization Program, Annual Facility Report	March 1 , annually, following development of Pollutant Minimization Program
Special Provision 6.3.5.	Source Control Provisions, Annual Report	March 1 , annually
Special Provision 6.3.9.	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 Whole Effluent Toxicity Testing Requirements 5.1.6.6.	Species Sensitivity Screening	Within 18 months of Regional Water Board Approval to discharge to the Russian River
MRP Effluent Monitoring Requirement 5.2.7.	Verbal and written notification of chronic toxicity fail result	Within 24 hours after receipt of a fail result.
MRP Effluent Monitoring Requirement 5.2.8.1	Generic TRE Work Plan review and update	Review within 60 days of Regional Water Board Approval to discharge to the Russian River. Update as necessary

Order Section	Special Provision Requirement	Reporting Requirements
MRP Effluent Monitoring Requirement 5.2.9	TRE Workplan	No later than 30 days receipt of the chronic toxicity monitoring result, or other toxicity event, that initiated the TRE requirement.
MRP Reporting Requirement 6.1	CTR Priority Pollutant Monitoring	December 31, 2029
MRP Reporting Requirement 10.4.1.1.	Disaster Preparedness Assessment Report and Action Plan	March 1, 2029
MRP Reporting Requirement 10.4.1.2.	Groundwater Characterization.	March 1, 2030
MRP Reporting Requirement 10.4.1.3.	Surface Water Discharge Report.	At least 180 days before the expected commencement of the AWT discharge
MRP Reporting Requirement 10.4.1.4.	Russian River Dissolved Oxygen and Temperature Study Workplan	At least 180 days before the expected commencement of the AWT discharge
MRP Reporting Requirement 10.4.1.5.	Pesticide Characterization Study	December 31, 2029. Conducted concurrently with CTR monitoring
MRP Reporting Requirement 10.4.2	Annual Report	March 1, annually

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 a paper copy of the annual report is required, the Permittee shall submit the report to the email 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., during the past year. This annual report is due on **March 1 of each year**, 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 industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes 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 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 treatment facility site, as well as activities to maintain and upgrade these BMPs.
- 10.4.2.9. **Annual Biosolids Reporting.** The Permittee shall electronically certify and submit an annual biosolids report to U.S. EPA by February 19 each year using [U.S. EPA's Central Data Exchange \(CDX\) Web Site](https://cdx.epa.gov/) (<https://cdx.epa.gov/>). Information regarding registration and use of U.S. EPA's CDX system is also available at the Web Site.

10.5. Spill Notification

- 10.5.1. **Spills and Unauthorized Discharges.** Information regarding all spills and unauthorized discharges (except SSOs) that may endanger health, or the environment shall be provided orally to the Regional Water Board³ 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;

³ 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.

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

10.5.1.7. Responding agencies.

10.5.1. **Sanitary Sewer Overflows.** Notification and reporting of sanitary sewer overflows are conducted in accordance with the requirements of Order No. 2022-0103-DWQ (Statewide General WDRs for Sanitary Sewer Systems), which is not incorporated herein by reference, and any revisions thereto.

ATTACHMENT F - FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section 2.2, 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	1B84032OSON
Permittee	City of Cloverdale
Name of Facility	Wastewater Treatment Facility
Facility Address	700 Asti Road Cloverdale, CA 95425 Sonoma County
Facility Contact Person	Jay Robinson
Facility Contact Title	Senior Wastewater Treatment Facility Operator
Facility Contact Phone	(707) 894-1719
Authorized Person to Sign and Submit Reports	Kevin Thompson, City Manager (707) 894-1710 Jay Robinson, Senior Wastewater Treatment Facility Operator, (707) 894-1719
Mailing Address	124 North Cloverdale Boulevard, Cloverdale, CA 95425
Billing Address	Same as Mailing Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Not Applicable
Water Recycling Requirements	Not Applicable
Facility Permitted Flow	1.0 million gallons per day (mgd) (average dry weather design flow) 8.25 mgd (peak daily wet weather design flow)
Facility Design Flow	1.0 mgd (average dry weather design flow) 8.25 mgd (peak daily wet weather design flow)
Watershed	Russian River Hydrologic Unit, Geyserville Hydrologic Subarea
Receiving Water	Russian River
Receiving Water Type	Inland surface water

- 1.1.1. The City of Cloverdale (hereinafter Permittee) is the owner and operator of the Cloverdale Wastewater Treatment Facility (hereinafter Facility), a 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.

The Permittee is authorized to discharge subject to waste discharge requirements (WDRs) in this Order at the discharge locations described in Table 2 on the cover page of this Order. The Code of Federal Regulations at 40 C.F.R. section 122.46 limits the duration of National Pollutant Discharge Elimination System (NPDES) permits to be effective for a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the effective period for the discharge authorized by this Order. Pursuant to California Code of Regulations (CCR), title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with.

- 1.1.2. The Facility discharges disinfected secondary treated wastewater to seven percolation ponds located adjacent to the Russian River, a water of the United States, at Discharge Point 002. The Permittee also has the ability to discharge directly to the Russian River at Discharge Point 001. The Facility has sufficient percolation capacity for disposal of its treated wastewater year-round and there has been no need to utilize the discharge outfall to the Russian River. In addition, since the Facility does not meet the Basin Plan’s advanced wastewater treatment requirement for discharges of municipal waste to the Russian River. Direct discharges to the Russian River at Discharge Point 001 are currently prohibited. The Permittee was previously regulated by Order No. R1-2018-0034 and NPDES Permit No. CA0022977 adopted on September 6, 2018, and expired on October 31, 2023. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.
- 1.1.3. The Permittee filed a report of waste discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit on October 31, 2022. The application was deemed complete on **March 20, 2023**.

2. FACILITY DESCRIPTION

The Permittee owns and operates a municipal wastewater treatment plant (WWTP) and associated wastewater collection, and disposal facilities that serve a population of 8,800, including residential, commercial and industrial users in the City of Cloverdale. The Facility has a wastewater control ordinance and has issued industrial wastewater discharge permits to each of its industrial users.

The Facility is located in the Geyserville Hydrologic Subarea of the Middle Russian River Hydrologic Area. The Facility is designed to treat an average dry weather flow of 1.0 mgd and a peak wet weather flow of 8.25 mgd.

2.1. Description of Wastewater and Biosolids Treatment and Controls

2.1.1. Collection System

The collection system consists of a lift station in a low section of the City at Shahan Drive and North Cloverdale Boulevard, which serves approximately 50 homes. The lift station uses two alternating, 3-horsepower pumps on a float system to pump approximately 10,000 gallons per day (gpd) under peak conditions. Otherwise, flow is by gravity to the Facility. Water is received from approximately 3,000 connections. Influent flows from two sewer lines join at a manhole at the northwestern corner of the Facility.

Inflow and infiltration (I/I) were historically a problem for the Facility, resulting in significantly greater influent flows during storm events. It is estimated that 128,500 gpd flow into the treatment system from I&I. The City completed a smoke and video testing study for I&I in 1997 and developed a program to correct the I&I problem. The Permittee cleans its sewer system every 5 years and preventively cleans sewers with a history of problems on an as needed basis. The Northern portion of the city was inspected using closed-circuit television (CCTV) in 1998 and the northern portion in 2021-2022. The Permittee inspects the condition of its gravity sewers on an 8-year cycle. The Permittee made significant upgrades to the older parts of the collection system to reduce I/I by sealing and grouting 101 manholes in 2005 and 2006 and by replacing 8,900 feet of sewer main, over 2,000 feet of sewer laterals, and 47 aging manholes between 2007 and 2009. Slip lining of sewer mains has been ongoing since 2000, with approximately 2,000 feet planned for 2025. Approximately 25 manholes were grouted/epoxy coated sealed in 2022-2023. The peak daily flow through the Facility during the term of Order No. R1-2018-0034 was 7.1 mgd in February 2023, which is below the 8.25 mgd peak wet weather hydraulic capacity of the Facility. The Permittee has made significant effort to inspect, repair, and line the collection system to reduce I/I. The Permittee currently only has one lift station. Additional lift stations are anticipated to be integrated into the collection system with the development of new properties around the city.

2.1.2. Wastewater Treatment Facility

Influent flow is measured at the headworks with a Parshall Flume equipped with an ultrasonic flow meter. The ultrasonic flow meter is connected to a computer for continuous recording of inflows. The headworks has bar screens on both influent channels and Spiral Kleen units that keep fecal matter in suspension so that it does not get deposited into the screenings dumpster.

Raw influent entering the Facility passes through the mechanical screens to remove solids and debris and is then treated in a series of three ponds. Pond No. 1 is a 2.8-million-gallon primary aeration pond, equipped with a Parkson Biolac extended aeration system, including air infusion through bubble diffusers and baffles. Pond No. 2 is a secondary aeration pond, equipped with six mechanical surface floating aerators which can be adjusted according to the biological oxygen demand of the wastewater. Pond No. 3 is a settling/polishing pond which allows the suspended solids to settle to the

bottom of the pond. Concrete edges extend approximately 3 feet down the ponds, and the bottoms are composed of clay and bentonite. Retention time in primary aeration is from 3 to 6 days. Each pond contains baffles to improve flow and minimize the potential for short-circuiting.

From the settling pond, the wastewater is conveyed by gravity to the chlorination system and into a 1,200-foot-long, 36-inch diameter underground pipeline, which allows for adequate contact time for the chlorine to disinfect the wastewater. From the pipe, the wastewater is distributed into one of seven evaporation/percolation ponds. The evaporation ponds are unlined and are intentionally scarified each year to promote percolation. The Permittee uses the percolation ponds on a year-round basis.

2.1.3. Biosolids Management

Biosolids generated during the treatment process accumulate in the settling/polishing pond (Pond No. 3), and are periodically dredged and dewatered, and may be land applied or sent to a municipal landfill for disposal. Biosolids were most recently removed in 2022 and disposed of at a properly licensed disposal facility.

2.2. Discharge Points and Receiving Waters

2.2.1. The Facility is located within the Geyserville Hydrologic Subarea of the Middle Russian River Hydrologic Area.

2.2.2. The Facility does not currently include advanced wastewater treatment and thus, is not currently authorized to discharge directly to the Russian River. Discharge Prohibition 3.9 of this Order prohibits the discharge of wastewater to the Russian River, unless the permittee upgrades the Facility to provide advanced wastewater treatment. This Order includes effluent limitations for discharges to the Russian River at Discharge Point 001 in the event that the Permittee upgrades its Facility during the term of this Order. If advanced wastewater treatment capabilities are developed at the Facility, wastewater may be discharged via an outfall pipe at Discharge Point 001 to the Russian River, a water of the United States, at a point latitude 38° 47' 47" N and longitude 123° 00' 18" W during the allowed discharge period from October 1 to May 14. The rate of discharge is governed by flow conditions in the Russian River monitored near Cloverdale at United States Geological Survey (USGS) Gauge No. 11-4630.00 and is limited to one percent of the flow of the Russian River.

2.2.3. The primary means of wastewater disposal is via Discharge Point 002 to seven percolation ponds, with a combined capacity of 35 million gallons, located on the west bank of the Russian River. The Facility discharges to the percolation ponds year-round and typically utilizes one or two of these percolation ponds at any time.

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

Effluent limitations contained in Order No. R1-2018-0034 for discharges from Discharge Point 002 (Monitoring Location EFF-002) and representative monitoring data from Discharge Point 002 are as follows. No discharges occurred at Discharge Point 001 during the term of Order No. R1-2018-0034.

Table F-2. Historic Effluent Limitations and Monitoring Data – Discharge Point 002

Parameter	Units	Average Monthly	Average Weekly	Instantaneous Maximum	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	13	36	--
pH	standard units	--	--	6.0-9.0 ¹	--	--	6.5/7.6
Total Suspended Solids (TSS)	mg/L	45	65	--	12	32	--
Total Coliform	MPN/100 mL	--	--	23 ² /240 ³	--	--	<1600

Table Notes:

1. Represents instantaneous minimum and instantaneous maximum effluent limits.
2. The number of coliform bacteria must not exceed an MPN of 23 per 100 mL in more than one sample in any 30-day period.

3. No sample shall exceed an MPN of 240 coliform bacteria per 100 mL.

2.4. **Compliance Summary**

The Permittee was not assessed any administrative civil liability during the term of Order No. R1-2018-0034.

2.5. **Planned Changes – Not Applicable**

The Permittee has no planned changes for the Facility.

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 is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit authorizing the Permittee to discharge into waters of the U.S. at the discharge location described in Table 2 subject to the WDRs in this Order. This Order also serves as WDRs pursuant to article 4, chapter 4, and division 7 of the Water Code (commencing with section 13260).

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

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code. Accordingly, this exemption from CEQA applies to the Regional Water Board's action to adopt those portions of the Order that regulate NPDES discharges.

This action also involves the re-issuance of waste discharge requirements for an existing facility that discharges treated wastewater to land through the use of percolation ponds for disposal, and as such, is also exempt from CEQA as an existing Facility for which no expansion of design flow is being permitted pursuant to title 14 CCR, section 15301.

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 No. 88-63, which establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plan, at page 2-18.00, establishes beneficial uses for groundwater as municipal and domestic supply (MUN), industrial supply (IND), industrial process supply (PRO), agricultural supply (AGR) and freshwater supply (FRSH). Thus, beneficial uses applicable to the Russian River and area groundwater within the Geyserville Hydrologic Subarea of the Middle Russian River Hydrologic Area are summarized in Table F-3, below:

Table F-3 Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Russian River within the Geyserville Hydrologic Subarea of the Middle Russian River Hydrologic Area	Existing: Municipal and domestic supply (MUN); Agricultural supply (AGR); Industrial service supply (IND); Groundwater recharge (GWR); Freshwater replenishment (FRSH); Navigation (NAV); Water contact recreation (REC-1); Non-contact water recreation (REC-2); Commercial and sport fishing (COMM); Warm Freshwater Habitat (WARM); Cold freshwater habitat (COLD); Wildlife habitat (WILD); Rare, threatened, or endangered species (RARE); Migration of aquatic organisms (MIGR); and Spawning, reproduction, and/or early development (SPWN). Potential: Industrial process supply (PRO); Hydropower generation (POW); Shellfish Harvesting (SHELL), and Aquaculture (AQUA).
002	Groundwater	Existing: Municipal and domestic supply (MUN); Agricultural supply (AGR); Industrial service supply (IND); and Native American culture (CUL). Potential: Industrial process supply (PRO); and Aquaculture (AQUA).

In addition to the beneficial uses set out in the Basin Plan, there are several implementation plans that include actions intended to meet water quality objectives and protect beneficial uses of the North Coast Basin. For the Russian River and its tributaries, no point source waste discharges are allowed during the period of May 15 through September 30 and for all other periods, the receiving stream's flow must be at least 100 times greater than the waste flow unless an exception to the requirements is granted by the Regional Water Board. Additionally, the discharge of municipal waste during October

1 through May 14 shall be of advanced treated wastewater and shall meet a median coliform level of 2.2 MPN/100 mL.

Requirements of this Order implement the Basin Plan.

- 3.3.2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.
- 3.3.3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 3.3.4. **Domestic Water Quality.** In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels (MCLs) implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.
- 3.3.5. **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*, which includes compliance schedule policies for pollutants that are not addressed by the SIP. This Policy became effective on August 27, 2008.
- 3.3.6. **Anti-Backsliding Requirements.** Sections 402(o)(2) 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. Some effluent limitations from the previous Order, R1-2018-0034, have been removed or are less stringent than those in the previous Order. As discussed in detail in section 4.4.1 of this Fact Sheet, removal or relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- 3.3.7. As discussed in Finding 5.1, this order removes generalized receiving water limitations contained in the Permittee's prior waste discharge requirements. The removal of this requirement is consistent with the U.S. Supreme Court's holding in *City and County of San Francisco, California v. Environmental Protection Agency* (2025) 145 S.Ct. 704. However, as discussed in Finding 5.1, the Regional Water Board has included additional requirements to ensure the discharge complies with Clean Water Act section 301(b)(1)(C) (33 U.S.C. § 1311(b)(1)(C)). As a result, the discharge does not authorize violations of water quality standards, and the removal of the generalized receiving water limitation does not authorize the additional discharge of pollutants or authorize the violation of water quality standards. The order does not, therefore, authorize either backsliding or further degradation of water quality.
- 3.3.8. **Antidegradation Policy.** 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 No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 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 No. 68-16. As discussed in detail in section 4.4.2 of this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.
- 3.3.9. **Endangered Species Act Requirements.** This Order does not authorize an act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). This Order requires compliance with effluent 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.

3.4. **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 every two years. 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) or alternate program of implementation for each 303(d)-listed pollutant and water body to remedy the impairment. 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 June 9, 2021, the U.S. EPA provided final approval of the 2018 303(d) List of Impaired Water Bodies prepared by the state. The list identifies the entire Russian River watershed (including the Geyserville Hydrologic Subarea) as impaired by sedimentation/siltation and temperature, and the Russian River Hydrologic Area, Geyserville Hydrologic Subarea as impaired by aluminum and specific conductivity. Pursuant to CWA section 303(d), the Regional Water Board will develop TMDLs or alternate programs of implementation to address the impairment for sediment, temperature, specific conductivity, and aluminum, which will be implemented through various programs, including through provisions of NPDES permits.

On August 7, 2018, the State Water Board adopted Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy (Statewide Bacteria Provisions), which establishes water quality objectives for reasonable protection of people that recreate within all surface waters, enclosed bays, and estuaries of the state that have the water contact recreation beneficial use (REC-1).

On August 15, 2025, the Regional Water Board adopted the Action Plan for the Russian River Watershed Pathogen TMDL (TMDL Action Plan or Action Plan) and Prohibition of the Discharge of Fecal Waste Materials as an amendment to the Basin Plan. The Action Plan describes the Program of Implementation designed to control fecal waste pollution, achieve bacterial water quality objectives, and restore the water contact recreation (REC-1) beneficial use to protect public health within the Russian River watershed. The Action Plan establishes waste load allocations (WLAs) for point source discharges and load allocations (LAs) for nonpoint source discharges. Both WLAs and LAs are expressed as receiving water concentrations of *E. coli* bacteria in freshwater and enterococci in saline waters identical to the statewide bacteria objective for the protection of REC-1 for those sources that are permitted to discharge. For municipal wastewater discharges to freshwater surface waters within the Russian River Watershed, the *E. coli* bacteria WLAs are less than or equal to 100 colony forming units (CFU) per 100 milliliters (mL) as a six-week rolling geometric mean, calculated weekly, and a statistical threshold value (STV) of 320 cfu/mL not to be exceeded more than ten percent of the time, calculated monthly. This Order requires the Permittee to monitor *E. coli* bacteria in effluent and receiving water before discharging to surface waters.

Aspects of the sediment impairing the Russian River include settleable solids, suspended solids, and turbidity. The impact of settleable solids results when they collect on the bottom of a waterbody over time, making them a persistent or accumulative constituent. The impact of suspended solids and turbidity, by contrast, results from their concentration in the water column. An analysis of the Permittee's effluent monitoring data determined that the discharge does not contain sediment (e.g., settleable solids, suspended solids, and turbidity) at levels which will cause, have the reasonable potential to cause, or contribute to increases in sediment levels in the Russian River. This finding is based, in

part, on the facts that the Permittee does not currently discharge directly to the Russian River, and if, and when the Permittee does discharge directly to the Russian River, the Permittee would need to implement advanced wastewater treatment, which removes settleable solids and reduces TSS and turbidity to negligible levels. This finding is also supported by the summer discharge prohibition and the one percent flow limitation for the winter discharge.

Regarding temperature, the TMDL concludes that most sources of heat in the Middle Russian River are from flow regulation/modification, habitat modifications, nonpoint sources and removal of riparian vegetation. As the critical time period for temperature is in the summer, the TMDL was established for that critical time period, which is also the time period when point source discharges from the Facility are prohibited. The TMDL concludes that, because of the summer discharge prohibition, area facilities such as the Facility do not contribute to temperature loadings to the Russian River during critical periods, and therefore, the TMDL establishes a “zero” waste load allocation (WLA) to mean that, as long as the Permittee adheres to the summer discharge prohibition, it will be in compliance with the approved TMDL for temperature.

3.5. Other Plans, Policies and Regulations

- 3.5.1. On December 6, 2022, the State Water Board adopted State Water Board Order No. 2022-0103 DWQ, Statewide General WDRs for Sanitary Sewer Systems. Order No. 2022-0103-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs. The Permittee applied for coverage and is subject to the requirements of Order No. 2022-0103-DWQ 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 fact that storm water flow in the process area is captured, treated, and disposed of within the Facility’s percolation/evaporation ponds.
- 3.5.3. On July 22, 2004, the State Water Board adopted State Water Board Order No. 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities. The Order requires the Permittee to obtain coverage under Order No. 2004-0012-DWQ prior to any removal of biosolids from the Facility that will be land disposed on property owned or controlled by the Permittee.
- 3.5.4. When applicable, state law requires dischargers to file a petition with the State Water Board, Division of Water Rights, and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of the watercourse. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under Water Code section 1211. This is not an NPDES permit requirement.

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 WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water where a reasonable potential to exceed those criteria exists.

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. R1-2018-0034 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 Permittees or are not reasonably anticipated to be present in the discharge but have not been disclosed by the Permittees. 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.

- 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. R1-2018-0034. As discussed in Section 5.1 of this fact sheet, this order removes generalized receiving water limitations contained in the Permittee’s prior waste discharge requirements from the Clean Water Act NPDES provisions and requirements of this order. Discharge Prohibition 3.2

maintains, as a matter of state law, the requirements that neither the treatment nor discharge shall create nuisance as defined by Water Code section 13050. The Regional Water Board has maintained this requirement as a state law requirement to implement Water Code section 13263, which identifies the need to prevent nuisance as a basis for issuing waste discharge requirements. The U.S. Supreme Court's decision in *City and County of San Francisco v. U.S. EPA* did not interpret the Water Code. Further, there is no provision of the Water Code analogous to the NPDES permit shield that was the basis of the U.S. Supreme Court's decision. Likewise, the Porter-Cologne Water Quality Control Act has consistently recognized the ability of the Water Boards to regulate to prevent nuisance and the Porter-Cologne Act does not share the legislative history of the federal Clean Water Act. This order therefore maintains the existing nuisance language to continue nuisance protections as a matter of state law.

- 4.1.3. **Discharge Prohibition 3.3.** The discharge of sludge or digester supernatant is prohibited, except as authorized under section 6.3.6. of this Order (Sludge Disposal and Handling Requirements).

This prohibition has been retained from Order No. R1-2018-0034 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 CCR.

- 4.1.4. **Discharge Prohibition 3.4.** The discharge 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 G (Bypass) and H (Upset).

This prohibition has been retained from Order No. R1-2018-0034 with a minor modification. Reference to Standard Provision H (Upset), from Attachment D, has been added. This prohibition 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.** The discharge of waste to land that is not owned by the Permittee, governed by City 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, section 60307(b) of the CCR.

This prohibition is retained from Order No. R1-2018-0034, with minor modifications. 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.

- 4.1.6. **Discharge Prohibition 3.6.** 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. R1-2018-0034. This prohibition is a general 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.

- 4.1.7. **Discharge Prohibition 3.7.** The average dry weather flow of waste through the Facility shall not exceed 1.0 mgd measured daily and averaged over a calendar month. The peak daily wet weather flow of waste through the Facility shall not exceed 8.25 mgd, measured daily. Compliance with this prohibition shall be determined as defined in sections 7.10. and 7.11. of this Order.

This prohibition is retained from Order No. R1-2018-0034 and is based on the average dry weather and peak daily wet weather design treatment capacity of the Facility. Exceedance of these flow limitations on a daily basis may result in effluent violations and/or the need to by-pass untreated effluent blended with treated effluent, which is prohibited.

- 4.1.8. **Discharge Prohibition 3.8.** The discharge of waste to the Russian River and its tributaries is prohibited during the period from May 15 through September 30 of each year.

This prohibition is retained from Order No. R1-2018-0034 and is required by the Basin Plan. The Basin Plan prohibits discharges to the Russian River and its tributaries during the period May 15 through September 30 (Chapter 4, Waste Discharge Prohibitions for the North Coastal Basin). The original intent of this prohibition was to prevent the contribution of wastewater to the baseline flow of the Russian River during the period of the year when the Russian River and its tributaries experience the heaviest water-contact recreation use.

- 4.1.9. **Discharge Prohibition 3.9.** The direct discharge of wastewater effluent from the Facility to the Russian River is prohibited, unless the Permittee upgrades the Facility to include advanced wastewater treatment, in accordance **Surface Water Discharge Report** approved by the Executive Officer.

This prohibition is retained from the previous Order and implements the Basin Plan waste discharge prohibition that requires the discharge of municipal waste to surface waters to be advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger and shall meet a median coliform level of 2.2 MPN/100 mL during the period of October 1 through May 14.

- 4.1.9.1. During the period from October 1 through May 14, discharges of treated wastewater to the Russian River and its tributaries shall not exceed one percent of the flow of the Russian River, as measured near Cloverdale at USGS Gauge No. 11-4630.00. For the purposes of this Order, compliance with this discharge prohibition shall be determined as follows:
- 4.1.9.2. The discharge of advanced treated wastewater shall be adjusted at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow measurement of the Russian River as measured near Cloverdale at USGS Gauge No. 11-4630.00. Daily flow shall be based on flow meter comparisons reasonably read between the hours of 12:01 am and 12:00 midnight; and,
- 4.1.9.3. In no case shall the total volume of advanced treated wastewater discharged in a calendar month exceed one percent of the total volume of the Russian River as measured near Cloverdale at USGS Gauge No. 11-4630.00 in the same calendar month. At the beginning of the discharge season, the monthly flow volume comparisons shall be based on the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the monthly flow volume comparisons shall be based on the first day of the calendar month to the date when the discharge ceased for the season.

This prohibition has been retained from Order No. R1-2018-0034 and is required by the Basin Plan (Chapter 4, North Coastal Basin Discharge Prohibition No. 4). The Basin Plan prohibits discharges to the Russian River and its tributaries when the waste discharge flow is greater than one percent of the receiving water's flow. Basin Plan Prohibition No. 4 does not specify how compliance to the one-percent flow requirement will be determined. This prohibition, set forth in Provision 3.9 of this Order, specifies that the discharge may comply with the one percent requirement as a monthly average for the surface water discharge season, provided the Permittee makes a reasonable effort to adjust the discharge of treated wastewater to one percent of the most recent daily flow measurement of the Russian River as measured near Cloverdale at USGS Gauge No. 11-4630.00. However, Prohibition 3.9. recognizes that there may be conditions when a comparison to the daily flow in the Russian River gives a closer approximation of the flow conditions in the Russian River at the time of discharge. This modification provides day-to-day operational flexibility for the Permittee while retaining the intent of the prohibition.

- 4.1.10. **Discharge Prohibition 3.10.** The discharge of chemical constituents, in excess of MCLs and secondary MCLs (SMCLs) established for these pollutants in title 22, division 4, chapter 15, articles 5.5, section 64444, and article 16, section 64449 of the CCR, is prohibited.

This prohibition is newly established by this Order and is necessary to ensure that chemical constituents are not discharged in concentrations that exceed MCLs and secondary MCLs. This prohibition was previously included as a generalized receiving water limitation contained in the Permittee's prior waste discharge requirements. Generalized receiving water limitations were removed from this Order based on the U.S. Supreme Court's decision in *City and County of San Francisco v. U.S. EPA*.

- 4.1.11. **Discharge Prohibition 3.11.** The discharge shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the discharge or on objects in the discharge.

This prohibition is newly established by this Order and is necessary to ensure that materials in concentrations that result in a visible film or coating on the surface are not discharged in concentrations that affect the beneficial use (MUN). This prohibition was previously included as a generalized receiving water limitations contained in the Permittee's prior waste discharge requirements. Generalized receiving water limitations were removed from this Order based on the U.S. Supreme Court's decision in *City and County of San Francisco v. U.S. EPA*.

- 4.1.12. **Discharge Prohibition 3.12.** The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited under Water Code section 13375.

This prohibition is retained from Order R1-2018-0034 and is based on the discharge prohibitions contained in section 13375 of the Water Code.

- 4.1.13. **Discharge Prohibition 3.13.** The acceptance of septage to a location other than an approved septage receiving station is prohibited.

This prohibition is retained from Order R1-2018-0034 in this Order and is necessary to ensure that septage is not accepted in the absence of a septage management program to ensure that pollutants associated with domestic septage do not pass through or interfere with the operation or performance of the Facility.

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 Best Professional Judgement (BPJ) in accordance with 40 C.F.R. section 125.3.

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

The effluent limitations in this Order for BOD₅, TSS, and pH not only meet the technology-based requirements for secondary treatment set forth in section 133.102, but they also are required to meet the water quality-based requirements set forth in the Basin Plan.

In addition to the minimum federal technology-based requirements, the Basin Plan requires that discharges of municipal waste “shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger and shall meet a median coliform level of 2.2 MPN/100 mL” for discharges to the Russian River and its tributaries during October 1 through May 14. This requirement leaves discretion to the Regional Water Board to define advanced wastewater treatment by the implementation of effluent limitations in individual permits.

4.2.3. Discharge Point 001 (Discharge to the Russian River)

4.2.3.1. **BOD₅ and TSS.** For the purpose of regulating municipal waste discharges from the Facility to the Russian River, advanced wastewater treatment is defined as achieving a monthly average concentration for BOD₅ and TSS of 10 mg/L and a weekly average concentration of 15 mg/L, which are technically achievable based on the capability of a tertiary treatment system. In addition, 40 C.F.R. 133.102, in describing

the minimum level of effluent quality attainable by secondary treatment, states that the 30-day average percent removal shall not be less than 85 percent. These effluent limitations are retained from Order No. R1-2018-0034.

4.2.3.2. **pH.** The secondary treatment regulations at 40 C.F.R. part 133 require that pH be maintained between 6.0 and 9.0 standard units. Note that a more stringent effluent limitation range of 6.5 – 8.5 for pH is required to meet the water quality objective for hydrogen ion concentration (pH) in the Russian River contained in Basin Plan, Table 3-1.

4.2.3.3. **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 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 measurement.”*

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

4.2.3.3.1. BOD₅ and TSS, because these two parameters are expressed in terms of concentration and percent removal; and

4.2.3.3.2. pH, because this parameter cannot appropriately be expressed by mass.

4.2.3.4. **Coliform Bacteria.** Even though effluent limits for coliform bacteria are not set out in the federal regulations for secondary treatment, they are included here in the section on technology-based effluent limitations because they reflect technology standards for tertiary treatment. Coliform bacteria are a pollutant of concern in all wastewaters of domestic origin, and therefore this Order retains the effluent limitations for total coliform bacteria from Order No. R1-2018-0034. These effluent limitations reflect standards for tertiary treated effluent in the Basin Plan (Section 4, Implementation Plans) and as adopted by the Division of Drinking Water (DDW) in title 22 of the CCR.

4.2.4. **Discharge Point 002 (Discharge to Percolation Ponds)**

4.2.4.1. **BOD₅ and TSS.** 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 and TSS. Section 133.102 establishes the minimum level of effluent quality that must be attained by secondary treatment for BOD₅ and TSS. , but allows for some exceptions as provided for in sections 133.103 and 133.105. The secondary treatment effluent limitations are up to 30 mg/L (30-day average) and 45 mg/L (7-day average). Section 133.105 allows alternative limitations for facilities using trickling filters and waste stabilization ponds that meet the requirements for “equivalent to secondary treatment.” These “equivalent to secondary treatment” limitations are up to

45 mg/L (30-day average) and up to 65 mg/L (7-day average) for BOD₅ and TSS. Section 133.103(c) allows for less stringent TSS limitations for POTWs that use waste stabilization ponds as the principal process for secondary treatment and whose operation and maintenance data indicate that the TSS values specified in the equivalent-to-secondary regulations cannot be achieved.

Section 133.101(g) prescribes the conditions under which a POTW is eligible for consideration for equivalent-to-secondary limitations as follows:

- 4.2.4.1.1. The principal treatment process must be either a trickling filter or waste stabilization pond;
- 4.2.4.1.2. The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of 30 mg/L BOD₅ and TSS; and
- 4.2.4.1.3. Water quality is not adversely affected by the discharge.

The Permittee uses waste stabilization ponds and can consistently comply with the equivalent to secondary 30-day average and 7-day average requirements for TSS. Therefore, effluent limitations for TSS consistent with equivalent to secondary treatment requirements established in section 133.103 are retained from Order No. R1-2018-0034.

Numeric effluent limitations for BOD₅, and the percent removal requirements for BOD₅ and TSS, are retained from Order No. R1-2018-0034 and reflect the secondary treatment standards at 40 C.F.R. part 133.

- 4.2.4.2. **pH.** The secondary treatment regulations at 40 C.F.R. part 133 require that pH be maintained between 6.0 and 9.0 standard units. This Order includes effluent limitations for pH consistent with the secondary treatment requirements established in 40 C.F.R. part 133.
- 4.2.4.3. **Coliform Bacteria.** Even though effluent limits for coliform bacteria are not set out in the federal regulations for secondary treatment, they are included here in the section on technology-based effluent limitations because they reflect technology standards for secondary treatment. Coliform bacteria are a pollutant of concern in all wastewaters of domestic origin, and therefore this Order retains the effluent limitations for total coliform bacteria from Order No. R1-2018-0034. These effluent limitations reflect standards for secondary treated wastewater in the Basin Plan (section 4, Implementation Plans) and as adopted by DDW in title 22 of the CCR.

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. This Order contains

requirements, expressed as technology equivalence requirements, that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of advanced wastewater treatment, is discussed in section 4.2.2. of this Fact Sheet. In addition, this Order contains additional requirements to meet applicable water quality standards. The rationale for these requirements is discussed in section 4.3.3 of this Fact Sheet.

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

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

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

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. **Basin Plan Water Quality Objectives.** In addition to the specific water quality objectives indicated above, the Basin Plan contains narrative objectives for color, tastes and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, bacteria, temperature, toxicity, pesticides, chemical constituents, and radioactivity that apply to inland surface waters, enclosed bays, and estuaries, including the Russian River and its tributaries. For waters designated for use as MUN, the Basin Plan establishes, as applicable water quality criteria, the MCLs established by the DDW for the protection of public water supplies at title 22 of the CCR section 64431 (Inorganic Chemicals) and section 64444 (Organic Chemicals).

4.3.2.3. **SIP, CTR, and NTR.** Water quality criteria and objectives applicable to this receiving water are established by the CTR, established by the U.S. EPA at 40 C.F.R. section 131.38; and the NTR, established by the U.S. EPA at 40 C.F.R. section 131.36. Criteria for most of the 126 priority pollutants are contained within the CTR and the NTR.

The SIP, which is described in section 3.3.3 of this Fact Sheet, includes procedures for determining the need for, and the calculation of, WQBELs and requires permittees to submit data sufficient to do so.

At title 22, division 4, chapter 15 of the CCR, DDW has established MCLs for certain pollutants for the protection of drinking water. Chapter 3 of the Basin Plan establishes these MCLs as water quality objectives applicable to receiving waters with the beneficial use designation of municipal and domestic supply.

Aquatic life freshwater and saltwater criteria are identified as criterion maximum concentrations (CMC) and criterion continuous concentrations (CCC). The CTR defines the CMC as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects and the CCC as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. The CMC is used to calculate an acute or 1-hour average numeric effluent limitation and the CCC is used to calculate a chronic or 4-day average numeric effluent limitation. Aquatic life freshwater criteria were used for the RPA.

Human health criteria are further identified as “water and organisms” and “organisms only”. “Water and organism” criteria are designed to address risks to human health from multiple exposure pathways. The criteria from the “water and organisms” column of the CTR were used for the RPA because the Basin Plan identifies that the receiving water, the Russian River, has the beneficial use designation of municipal and domestic supply.

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 that will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard.

For WQBELs for toxic pollutants, Section 5.2.3 of the EPA Technical Support Document for Water Quality-based Toxic Controls states “in lieu of an Average Weekly Limit (AWL) for POTWs, EPA recommends establishing a Maximum Daily Limit (MDL) (or a maximum test result for chronic toxicity) for toxic pollutants and pollutant parameters in water quality permitting. This is appropriate for at least two reasons. First, the basis for the 7-day average for POTWs derives from the secondary treatment requirements. This basis is not related to the need for assuring achievement of water quality standards. Second, a 7-day average, which could comprise up to seven or more daily samples, could average out peak toxic concentrations and therefore the discharge’s potential for causing acute toxic effects would be missed. AMDL, which is measured by a grab sample, would be toxicologically protective of potential acute toxicity impacts.”

Section 1.4 of the SIP states that maximum daily effluent limitations (MDEL) shall be used for POTWs in place of average weekly effluent limitations (AWEL) for WQBELs.

The SIP procedure of calculating an AMEL and an MDEL applies to all CTR pollutants, both those that are for protection of aquatic life and those that are for the protection of human health.

The RPA for discharges to the Russian River at Discharge Point 001 was conducted as follows.

4.3.3.1. **Non-Priority Pollutants**

- 4.3.3.1.1. **pH.** The effluent limitation for pH of 6.5 to 8.5 is retained from Order No. R1-2018-0034 and applies to advanced treated wastewater discharges to the Russian River. This limitation is based on the water quality objective for all surface waters established in Chapter 3, Table 3-1 of the Basin Plan. Federal technology-based requirements prescribed in 40 C.F.R. part 133 are not sufficient to meet these Basin Plan water quality standards.
- 4.3.3.1.2. **Chlorine Residual.** The Basin Plan establishes a narrative water quality objective for toxicity which states “[a]ll waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.” The Regional Water Board considers any chlorinated discharge as having the reasonable potential to cause or contribute to exceedances of this water quality objective for toxicity, and therefore this Order includes effluent limitations for chlorine. U.S. EPA has established the following criteria for chlorine-produced oxidants for protection of freshwater aquatic life in Quality Criteria for Water 1986 (The Gold Book, 1986, EPA 440/5-86-001). The chronic and acute criterion established for residual chlorine are 0.011 mg/L and 0.019 mg/L, respectively.
- 4.3.3.1.3. **Nitrogen Compounds.** Untreated domestic wastewater contains ammonia nitrogen. Nitrification is a biological process that converts ammonia to nitrite and nitrate. Denitrification is a process that converts nitrate to nitrogen gas, which is then released to the atmosphere. Inadequate or incomplete nitrification may result in the discharge of ammonia to the receiving stream and inadequate or incomplete denitrification may result in the discharge of nitrate to the receiving water.
- 4.3.3.1.3.1. **Nitrate.** Nitrate is known to cause adverse health effects in humans. For waters designated as domestic or municipal supply, the Basin Plan (Chapter 3) adopts the MCLs, established by DDW for the protection of public water supplies at title 22 of the CCR, sections 64431 (Inorganic Chemicals) and 64444 (Organic Chemicals), as applicable water quality criteria. The MCL for nitrate (10 mg/L as N) is therefore applicable as a water quality criterion. The Permittee sampled its discharge at Monitoring Location EFF-002 20 times January 2018 and October 2021. Monitoring results ranged from < 0.2 mg/L to 2.8 mg/L. Because nitrate levels in the effluent have been measured at concentrations below 10 mg/L, as N, the Regional Water Board concludes that discharges from the Facility do not have a reasonable potential to cause or contribute to exceedances of applicable water quality criteria for the receiving water.

4.3.3.1.3.2. **Ammonia.** Ammonia is known to cause toxicity to aquatic organisms in surface waters. The Basin Plan establishes a narrative water quality objective for toxicity, stating that “[a]ll waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.” Due to concerns regarding ammonia toxicity, the Regional Water Board relies on U.S. EPA’s recommended water quality criteria for ammonia to interpret the Basin Plan’s narrative objective for toxicity. For freshwater, the recommended criteria are from the April 2013 *Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater*, EPA 822-R-13-001 (2013 Freshwater Criteria). The 2013 Freshwater Criteria is an update to the December 1999 *Update of Ambient Water Quality Criteria for Ammonia* (1999 Freshwater Criteria).

The 2013 Freshwater Criteria recommends acute and chronic water quality criteria for the protection of aquatic life, including salmonids and sensitive freshwater mussel species in the Family Unionidae that are more sensitive to ammonia than salmonids. Like the 1999 Freshwater Criteria document, the 2013 Freshwater Criteria document recommends acute (1-hour average) criteria based on pH and the presence/absence of salmonids and chronic (30-day average) criteria based on pH and temperature and that no 4-day average concentration should exceed 2.5 times the 30-day chronic criterion. In addition, the 2013 Freshwater Criteria document recommends these same criteria for sensitive mussel species.

Adequate information is not available to determine if these freshwater mussels are present in the receiving water. The 2013 Freshwater Criteria document states, “*In the case of ammonia, where a state demonstrates that mussels are not present on a site-specific basis, the recalculation procedure may be used to remove the mussel species from the national criteria dataset to better represent the species present at the site.*”

For this Order, the Regional Water Board has considered the actual conditions documented in the receiving water for discharges from the Facility (paired receiving water pH of 8.20 and temperature of 19.40°C at Monitoring Location RSW-003, the assumed presence of salmonids, and the assumed presence of mussels) to calculate U.S. EPA’s 2013 Freshwater Criteria, which result in acute and chronic criteria of 3.83 mg/L and 0.76 mg/L, respectively.

Effluent monitoring results ranged from 0.96 to 3.9 mg/L based on 15 samples collected at Monitoring Location EFF-002 between January 2018 and October 2021.

Because ammonia levels in the effluent have been measured at concentrations greater than EPA’s 2013 Freshwater chronic Criteria of 0.76 mg/L, the Regional Water Board concludes that discharges from the Facility have a reasonable potential to cause or contribute to exceedances of applicable water quality criteria for toxicity. Effluent limitations, consisting of an AMEL of 0.16 mg/L and

an MDEL of 0.27 mg/L, have been updated to reflect receiving water conditions for ammonia.

- 4.3.3.1.4. **Biostimulatory Substances (Phosphorus and Nitrogen).** The Basin Plan contains a narrative water quality objective for biostimulatory substances that states “[w]aters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.” The Regional Water Board is increasingly concerned about the biostimulatory properties of discharges to surface waters in the North Coast Region. Nutrients, such as phosphorus and nitrogen containing compounds, in treated wastewater stimulate biological growth, thereby depleting dissolved oxygen and advancing eutrophication of receiving waters. At present, for interpretation of the Basin Plan’s narrative water quality objective for biostimulatory substances, U.S. EPA has established recommended water quality criteria for nutrients in *Nutrient Criteria Documents for Lakes and Rivers* and *Nutrient Criteria Documents for Rivers and Streams*. U.S. EPA has defined 14 “ecoregions” and further categorized surface waters as lakes and reservoirs or rivers and streams for purposes of defining applicable numeric water quality criteria for nutrients. The State and Regional Water Boards continue to examine other methods of interpreting the Basin Plan’s narrative water quality objective for biostimulatory substances. When the Boards determine that U.S. EPA’s recommended criteria are appropriate for implementing the Basin Plan objectives, or when a more appropriate and meaningful method is established, the need for limiting nutrients in relation to biostimulatory properties, including phosphorus and nitrogen-containing compounds, in all discharges in the Region will be reassessed. In the meantime, the RPA for nutrients in relation to biostimulatory properties, performed for development of this Order, is inconclusive. The Order retains monitoring requirements for phosphorus and nitrogen containing compounds in discharges from the Facility to allow a determination of reasonable potential at such time as the State and Regional Water Boards select an appropriate method for interpretation of the Basin Plan’s narrative objective.
- 4.3.3.1.5. **Pathogens (*E. coli* bacteria).** On August 7, 2018, the State Water Board adopted Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy (Statewide Bacteria Provisions), which establishes water quality objectives for reasonable protection of people that recreate within all surface waters, enclosed bays, and estuaries of the state that have the water contact recreation beneficial use (REC-1). In accordance with the water quality objectives outlined in the Statewide Bacteria Provisions for the protection of freshwaters used for water contact recreation, disinfected effluent shall not result in the exceedance of the following objectives:
- 4.3.3.1.5.1. The concentration of *E. coli* bacteria shall not exceed 100 colony forming units (cfu) per 100 milliliters (mL) as a six-week rolling geometric mean, calculated weekly.

- 4.3.3.1.5.2. A statistical threshold value (STV) of 320 cfu/100 mL shall not be exceeded by more than 10 percent of the samples collected in a calendar month and calculated in a static manner.

This Order requires the Permittee to submit a Surface Water Discharge Report to assess the Facility's ability to comply with water quality objectives and advanced treatment standards. This Order requires the Permittee to submit the report at least 180 days before planned discharge for Executive Officer review and approval. The Regional Water Board will use the results of the report to determine reasonable potential to exceed water quality objectives and establish effluent limitations as needed to protect the beneficial use for contact recreation. This Order requires the Permittee to monitor *E. coli* bacteria in effluent and receiving water before discharging to surface waters. So, the effluent limitations from the Statewide Bacteria Provisions have not been included in this Order.

4.3.3.2. **Priority Pollutants**

The SIP establishes procedures to implement water quality criteria from the NTR and CTR and for priority, toxic pollutant objectives established in the Basin Plan. The implementation procedures of the SIP include methods to determine reasonable potential (for pollutants to cause or contribute to excursions above state water quality standards) and to establish numeric effluent limitations, if necessary, for those pollutants showing reasonable potential.

Section 1.3 of the SIP requires the Regional Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct an RPA. The Permittee did not discharge to the Russian River at Discharge Point 001 during the term of Order No. R1-2018-0034. Therefore, the RPA is based on data for effluent discharged to the percolation ponds at Discharge Point 002. During the term of Order No. R1-2018-0034, priority pollutant sampling was conducted at Monitoring Location EFF-002 on January 1, 2019. This data was used to complete the RPA. Receiving water data for priority pollutants is not available.

Hardness: The CTR and the NTR contain water quality criteria for seven metals that vary as a function of hardness; the lower the hardness, the lower the water quality criteria. The SIP requires water quality criteria be properly adjusted for hardness, using the hardness of the receiving water. The hardness-dependent metal criteria include cadmium, copper, chromium (III), lead, nickel, silver, and zinc. The minimum observed receiving water hardness of 79 mg/L was used to calculate the criteria.

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

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

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

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

4.3.3.3. Reasonable Potential Determination

The RPA demonstrated reasonable potential for discharges of copper, chlorodibromomethane, and dichlorobromomethane from the Facility to cause or contribute to exceedances of applicable water quality criteria. Reasonable potential could not be determined for all pollutants, as there are not applicable water quality criteria for all pollutants. The RPA determined that there is either no reasonable potential or there was insufficient information to conclude affirmative reasonable potential for 123 of the 126 priority pollutants.

Table F-4 summarizes the RPA for each pollutant that was reported in detectable concentrations in the effluent or the receiving water. The MECs, most stringent water quality objectives/water quality criteria (WQO/WQCs), and background concentrations (B) used in the RPA are presented, along with the RPA results (Yes or No and which trigger) for each toxic pollutant analyzed. No other pollutants with applicable, numeric water quality criteria from the NTR, CTR, and the Basin Plan were measured above detectable concentrations during the monitoring events conducted by the Permittee. Attachment F-1 to this Order summarizes the RPA for all 126 priority pollutants.

Table F-4 Summary of Reasonable Potential Analysis Results

CTR #	Pollutant	Unit	C or Most Stringent WQO/WQC	MEC or Minimum DL ¹	B or Minimum DL ^{1,2}	RPA Results ³
6	Copper, Total Recoverable ⁴	ug/L	9.7	100	--	Yes
7	Lead, Total Recoverable ⁴	ug/L	15	0.48	--	No
9	Nickel, Total Recoverable ⁴	ug/L	54	2	--	No
13	Zinc, Total Recoverable ⁴	ug/L	120	16	--	No

CTR #	Pollutant	Unit	C or Most Stringent WQO/WQC	MEC or Minimum DL ¹	B or Minimum DL ^{1,2}	RPA Results ³
20	Bromoform	ug/L	4.3	0.91	--	No
23	Chlorodibromomethane	ug/L	0.41	4.75	--	Yes
26	Chloroform	ug/L	80	7.8	--	No
27	Dichlorobromomethane	ug/L	0.56	4.75	--	Yes
40	trans-1,2-Dichloroethylene	ug/L	10	0.52	--	No

Table Notes:

1. The Maximum Effluent Concentration (MEC) or maximum background concentration (B) is the actual detected concentration unless it is preceded by "<", in which case the value shown is the minimum detection level as the analytical result was reported as not detected (ND).
2. The MEC or B is "Not Available" when there are no monitoring data for a constituent.
3. RPA Results:
= Yes, if MEC > WQO/WQC, or B > WQO/WQC and MEC is detected.
= No, if MEC and B or < WQO/WQC or all effluent data are undetected.
= Undetermined (UD).
4. WQO calculated using the lowest receiving water hardness of 105 mg/L.

Additional details regarding priority pollutant constituents for which reasonable potential was found are included in the following paragraphs:

- 4.3.3.3.1. **Copper.** The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for copper. The criteria for copper are in dissolved concentrations. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. The U.S. EPA default conversion factors for copper in freshwater are 0.96 for both the acute and the chronic criteria. The default WER used for calculating criteria for copper is 1.0. Using the worst-case measured hardness from the receiving water (105 mg/L), the U.S. EPA recommended dissolved-total translator of 0.96, and the default WER, the applicable chronic criterion (maximum 4-day average concentration) is adjusted to 10.1 µg/L and the applicable acute criterion (maximum 1-hour average concentration) is adjusted to 14.6 µg/L. The most stringent water quality objective for copper is, therefore 10.1 µg/L.

The Permittee sampled the effluent for copper 20 times during the term of Order No. R1-2018-0034. Copper was detected in the effluent in with a result of 100 µg/L. Copper was not sampled in the receiving water. A determination of reasonable potential has been made based on the MEC of 100 µg/L exceeding the most stringent water quality objective of 10.1 µg/L.

4.3.3.3.2. **Chlorodibromomethane.** The CTR establishes a water quality objective for the protection of human health for chlorodibromomethane of 0.401 µg/L. The Permittee sampled the effluent for chlorodibromomethane 20 times during the term of Order No. R1-2018-0034. Chlorodibromomethane was detected in the effluent in with a results ranging from <0.5 to 4.75 µg/L. Chlorodibromomethane was not sampled in the receiving water. A determination of reasonable potential has been made based on the MEC of 4.75 µg/L exceeding the most stringent water quality objective of 0.401 µg/L.

4.3.3.3.3. **Dichlorobromomethane.** The CTR establishes a water quality objective for the protection of human health for dichlorobromomethane of 0.56 µg/L. The Permittee sampled the effluent for dichlorobromomethane 20 times during the term of Order No. R1-2018-0034. Dichlorobromomethane was detected in the effluent with results ranging from <0.5 to 4.75 µg/L. Dichlorobromomethane was not sampled in the receiving water. A determination of reasonable potential has been made based on the MEC of 4.75 µg/L exceeding the most stringent water quality objective of 0.56 µg/L.

4.3.4. **WQBEL Calculations**

Final WQBELs have been determined using the methods described in Section 1.4 of the SIP.

Step 1: To calculate the effluent limits, an effluent concentration allowance (ECA) is calculated for each pollutant found to have reasonable potential using the following equation, which takes into account dilution and background concentrations:

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

Where:

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

D = dilution credit (here D= 0, as the discharge does not qualify for a dilution credit)

B = background concentration

Here, no credit for dilution is allowed, which results in the ECA being equal to the applicable criterion (ECA = C).

Step 2: For each ECA based on an aquatic life criterion/objective (copper and ammonia), the long term average discharge condition (LTA) is determined by multiplying the ECA by a factor (multiplier), which adjusts the ECA to account for effluent variability. The multiplier depends on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the values of the CV.

When the data set contains less than 10 sample results, or when 80 percent or more of the data set is reported as ND, the CV is set equal to 0.6. Derivation of the multipliers is presented in Section 1.4 of the SIP.

The SIP procedure assumes a 4-day averaging period for calculating the LTA. However, U.S. EPA recommends modifying the procedure for calculating permit limits for ammonia using a 30-day averaging period for the calculation of the LTA corresponding to the 30-day CCC. Therefore, while the LTAs corresponding to the acute and 4-day chronic criteria were calculated according to SIP procedures, the LTA for ammonia corresponding to the 30-day CCC was calculated assuming a 30-day averaging period.

From Table 1 in the SIP, the ECA multipliers for calculating LTAs at the 99th percentile occurrence probability for copper is 0.32 (acute multiplier) and 0.53 (chronic multiplier). The ECA multipliers for ammonia are 0.45 (acute multiplier), 0.65 (chronic 4-day multiplier). The LTAs are determined as follows in Table F-5.

Table F-5 Determination of Long-Term Averages

Pollutant	Units	CV	Acute ECA	Chronic ECA	Acute ECA Multiplier	Chronic ECA Multiplier	Acute LTA	Chronic LTA
Ammonia	mg/L	0.39	0.37	0.19	0.45	0.65	0.17	0.12
Copper, Total Recoverable	µg/L	0.60	15	9.70	0.32	0.53	4.8	5.12

Step 3: WQBELs, including an AMEL and MDEL, are calculated using the most limiting (lowest) LTA. The LTA is multiplied by a factor that accounts for averaging periods and exceedance frequencies of the effluent limitations, and for the AMEL, the effluent monitoring frequency. Here, the CV is set equal to 0.6, and the sampling frequency is set equal to 4 (n = 4) for the acute criterion and chronic 4-day criterion, and 30 (n = 30) for the chronic 30-day criterion. The 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. From Table 2 of the SIP, the MDEL multiplier for ammonia is 1.35, and the AMEL multiplier is 2.22. From Table 2 of the SIP, the MDEL multiplier for copper is 3.11, and the AMEL multiplier is 1.55. Final WQBELs for ammonia and copper are determined as follows.

Table F-6 Determination of Final WQBELs Based on Aquatic Life Criteria

Pollutant	Unit	LTA	MDEL Multiplier	AMEL Multiplier	MDEL	AMEL
Ammonia (as N)	mg/L	0.12	1.35	2.22	0.16	0.27
Copper, Total Recoverable	µg/L	4.8	3.11	1.55	7	15

Step 4: When the most stringent water quality criterion/objective is a human health criterion/objective (as for chlorodibromomethane and dichlorobromomethane), the AMEL is set equal to the ECA. From Table 2 of the SIP, when CV = 0.60 and n = 4, the MDEL multiplier at the 99th percentile occurrence probability equals 3.11, and the AMEL multiplier at the 95th percentile occurrence probability equals 1.55. The MDEL for protection of human health is calculated by multiplying the ECA by the ratio of the MDEL multiplier to the AMEL multiplier. Final WQBELs chlorodibromomethane and dichlorobromomethane are determined as follows.

Table F-7 Determination of Final WQBELs Based on Human Health Criteria

Pollutant	ECA (µg/L)	MDEL/AMEL	MDEL (µg/L)	AMEL (µg/L)
Chlorodibromomethane	0.40	2.3	0.90	0.40
Dichlorobromomethane	0.56	2.1	1.12	0.56

4.3.5. Whole Effluent Toxicity (WET)

Effluent limitations for whole effluent 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 Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Plan). The Plan establishes objectives for water quality and sediment quality that apply to all inland surface waters, enclosed bays, and estuaries and coastal lagoons of the state, including both waters of the United States and surface waters of the state. For compliance with the Plan's water quality objective, this Order requires the Permittee to conduct WET testing for chronic and acute toxicity, as specified in the MRP, section 5. Additionally, 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.

- 4.3.5.1. **Test of Significant Toxicity (TST).** 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 previously.

On December 1, 2020, the State Water Board adopted resolution No. 2020-0044, establishing the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries* (ISWEBE Plan) and adopting statewide numeric water quality objectives for both acute and chronic toxicity and a program of implementation to control toxicity, which are collectively known as the Toxicity Provisions. The Toxicity Provisions will standardize the regulation of aquatic toxicity for all non-oceanic surface waters. U.S. EPA's TST approach is an essential component of Toxicity Provisions 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.

- 4.3.5.2. **Test of Significant Toxicity Design.** The TST's null hypothesis for chronic toxicity is:

H0: Mean response (In-stream Waste Concentration (IWC) in % effluent) $\leq$ 0.75 mean response (control)

Results 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 100%. The chronic toxicity trigger for Discharge Point 001 is expressed as a null hypothesis (H0) and regulatory management decision (b value) of 0.75 for the chronic toxicity methods in the MRP. The null hypothesis for this discharge is:

H0: Mean response (100% effluent) $\leq$ 0.75 mean response (control)

Results shall be analyzed using the TST hypothesis testing approach in section 5.1.6.4. of the MRP. Compliance with this chronic toxicity limitation is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

When there is one violation of the MDEL or MMEL, but not two violations in a calendar month, the Permittee must perform an Additional Routine Monitoring Test as specified in the MRP, section 5. If any combination of two or more MDEL or MMEL violations occur within a single calendar month or within two successive calendar months, the Permittee will be required to conduct a TRE, as described by the MRP.

Notification requirements for aquatic toxicity testing include a 24-hour notification requirement if test results do not meet an applicable MDEL or MMEL, per the Toxicity

Provisions. Verbal notification of aquatic toxicity test exceedances may be left by voice mail if the Regional Water Board staff person is not immediately available by telephone.

4.3.5.3. Acute Aquatic Toxicity

Consistent with Order No. R1-2018-0034, this Order includes monitoring requirements for acute toxicity. The Order implements the Toxicity Provision by requiring the Permittee to conduct acute toxicity tests on a fish species and on an invertebrate species to determine the most sensitive species. After the screening test is completed, monitoring can be reduced to the most sensitive species. Attachment E of this Order requires monthly acute WET monitoring.

In addition to routine toxicity monitoring, this Order requires the Permittee to update their generic TRE Work Plan, in accordance with appropriate U.S. EPA guidance, to ensure that the Permittee has a plan to immediately move forward with the initial tiers of a TRE in the event effluent toxicity is encountered in the future. The TRE is initiated by evidence of a pattern of toxicity demonstrated through the additional effluent monitoring provided as a result of an accelerated monitoring program.

4.3.5.4. Chronic Aquatic Toxicity

The Permittee did not discharge to surface waters during the previous permit term and thus did not conduct chronic toxicity testing. In addition, the Toxicity Provisions state, “a reasonable potential analysis for chronic aquatic toxicity is not required for POTW dischargers that are authorized to discharge at a rate equal to or greater than 5.0 MGD and are required to have a pretreatment program by the terms of 40 C.F.R. Section 403.8(a) (effective January 1, 2020)”, because the Regional Water Board shall include an effluent limitation for these dischargers. Therefore, this Order establishes a new numeric effluent limitation for chronic toxicity.

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 the previous Order. The updated effluent data constitutes new information, which permits the removal of effluent limitations consistent with CWA section 402(o)(2)(B). Additionally, as discussed in section 4.4.2 below, removal of these effluent limitations complies with applicable antidegradation requirements and thus meets the anti-backsliding exception within CWA 303(d)(4).

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. R1-2018-0034.

Table F-8. Summary of Effluent Limitations – Discharge Point 001 (Monitoring Location EFF-001)

Parameter	Unit	Average Monthly Effluent Limitation	Average Weekly Effluent Limitation	Maximum Daily Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation	Basis ¹
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	--	--	TT
BOD ₅	% Removal	85	--	--	--	--	CFR
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--	TT
TSS	% Removal	85	--	--	--	--	CFR
pH	Standard Units	--	--	--	6.5	8.5	BP
Ammonia, Total (as N)	Ratio	1	--	1	--	--	NAWQC
Total Coliform Bacteria	MPN/100 mL	--	23 ²	240	--	--	Title 22
Discharge Rate ³	%	--	--	--	--	1	BP
Chlorine, Total Residual	mg/L	0.01	--	0.02	--	--	BP
Dichlorobromomethane	µg/L	0.56	--	1.2	--	--	BP
Chlorodibromomethane	µg/L	0.40	--	0.90	--	--	BP
Copper, Total Recoverable	µg/L	7	--	15	--	--	CTR

Table Notes:

1. Definitions of acronyms in Table F-8:
BP - Basin Plan
CFR – 40 C.F.R. part 133
CTR – California Toxics Rule
NAWQC – National Ambient Water Quality Criteria
TP - Toxicity Provisions
TT - Based on the treatment capability of the Facility.
Title 22 - Based on DDW Reclamation Criteria, CCR, Division 4, Chapter 3 (title 22).
2. The number of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 23 per 100 milliliters (mL), in more than one sample in any 30-day period.
3. During the period from October 1 through May 14, discharge of treated wastewater shall not exceed 1 percent (1:100) of the upstream receiving water flow. For purposes of this Order, the flow in the Russian River shall be measured at USGS Gage No. 11-4810.00.

4.4.3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD₅, TSS, and total coliform bacteria. 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. In addition, this Order contains effluent limitations for pH, chlorine residual, ammonia, copper, chlorodibromomethane, and dichlorobromomethane that are more stringent than the minimum, federal technology-based requirements but are necessary to meet water quality standards. These requirements are discussed in section 4.3.3 of the Fact Sheet.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 11.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA on May 18, 2000. 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 11.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order were approved by U.S. EPA and are applicable water quality standards pursuant to section 11.21(c)(2). 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 section 13241, in establishing these requirements.

4.4.4. Interim Effluent Limitations – Not Applicable

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

4.4.5. Land Discharge Specifications and Requirements

4.4.5.1. Scope and Authority

Section 13263 of the Water Code requires the Regional Water Board to prescribe requirements for proposed discharges, existing discharges, or material changes 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 WDRs for the land 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 land discharge 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 being the same as set forth in the Basin Plan. The Regional Water Board considered the environmental characteristics, including water quality of the Middle Russian River Hydrologic Area, the water bearing capacity of groundwater basins in the vicinity of the discharge, and the need to maintain a land discharge.

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

4.4.6.1. **Beneficial Uses.** Beneficial use designations for groundwater established in the Basin Plan include MUN, AGR, IND, and PRO.

4.4.6.2. **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.

4.4.7. **Determining the Need for Requirements for Discharges to Land.**

The following land discharge specifications apply to land discharges to the percolation ponds.

4.4.7.1. **BOD, TSS, pH, and coliform bacteria.** This Order includes technology-based effluent limitations for BOD₅, TSS, pH, and coliform bacteria as described in Section 4.2.4. of the Fact Sheet.

4.4.8. **Water Recycling Specifications and Requirements – Not Applicable**

This Order does not authorize discharges of recycled water.

4.4.9. **Other Requirements**

This Order contains additional specifications that apply to the Facility regardless of the disposal method (discharge to percolation ponds or surface water discharge), including:

4.4.9.1. **Residual Chlorine.** This Order requires the Permittee to maintain a chlorine residual concentration that ensures the discharge meets the total coliform effluent limitations at the end of the disinfection process so that adequate pathogen reduction is continuously achieved at Discharge Point 002.

4.4.9.2. **Filtration Process Requirements for Tertiary Treatment.** Consistent with Order No. R1-2018-0034, this Order specifies that the turbidity of the filtered wastewater not exceed an average of 2 NTU during any 24-hour period; 5 NTU more than 5 percent of the time within a 24-hour period, and 10 NTU at any time, and is based on the definition of filtered wastewater found in title 22 section 60301.320 of the CCR. The title 22 definition is used as a reasonable performance standard to ensure adequate

removal of turbidity upstream of the disinfection facilities. Properly designed and operated effluent filters will meet this standard. The point of compliance for the turbidity requirements is a point following filtration and before discharge to the chlorine disinfection system. This requirement shall apply if and when the Permittee determines the need to discharge to the Russian River or to develop a reclamation system.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. Surface Water

This Order removes generalized receiving water limitations contained in the Permittee's prior waste discharge requirements that made the Permittee responsible for the quality of the water in the body of water into which the Permittee discharges pollutants, without specifying specific requirements (e.g., effluent limitations) or other actions the Permittee must take that apply at or before the discharge point. The Regional Water Board took this action to address the U.S. Supreme Court's decision in *City and County of San Francisco, California v. Environmental Protection Agency* (2025) 145 S.Ct. 704, holding that NPDES permits issued by the U.S. EPA may not include end-result requirements—provisions that do not spell out what a permittee must do or refrain from doing; rather, they make a permittee responsible for the quality of the water in the body of water into which the permittee discharges pollutants.¹

The Regional Water Board reviewed the remaining permit requirements and concluded that additional requirements were necessary to ensure the discharge satisfies the requirements of Clean Water Act section 301(b)(1)(C) (33 U.S.C. § 1311(b)(1)(C)) that the permit include any more stringent limitation, including those necessary to meet water quality standards. Specifically, the board added Discharge Prohibition 3.11 to ensure that the discharge of chemical constituents above MCLs and secondary MCLs remains prohibited. In addition, this Order includes additional monitoring for settleable solids at monitoring location EFF-001 during the term of the order to support a future reasonable potential analysis.

5.2. Groundwater

- 5.2.1. The beneficial uses of the underlying groundwater are municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater replenishment to surface waters.

¹ While the Regional Water Board removed generalized receiving water limitations in furtherance of the U.S. Supreme Court's decision interpreting the Clean Water Act's NPDES requirements, the board may decide in the future to include similar requirements as a matter of state authority.

- 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 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.
- 5.2.5. The Basin Plan requires groundwaters used for domestic or municipal supply (MUN), the median of the most probable number of coliform organisms over any 7-day period shall be less than 1.1 MPN/100 ml, less than 1 colony/100 ml, or absent.

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 to the Order. The Permittee must comply with all standard provisions and with those additional conditions that are applicable under 40 C.F.R. section 122.42. The rationale for the special conditions contained in the Order is provided in section 6.2., below.

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) 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 chronic toxicity limitation, new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.
- 6.2.1.4. **Acute Aquatic Toxicity (Special Provision 6.3.1.4).** This provision allows the Regional Water Board to reopen this Order to include a MDEL and MMEL for acute aquatic toxicity, based on the reevaluation of the reasonable potential for the Permittee to cause or contribute to an exceedance of the acute aquatic toxicity water quality objective.
- 6.2.1.5. **Species Sensitivity Screening (Special Provision 6.3.1.5).** This provision allows the Regional Water Board to modify this Order if the species sensitivity screening identifies a most sensitive species that is different than the most sensitive species already identified in the Order.

- 6.2.1.6. **Facility Modifications (Special Provision 6.3.1.6.).** This provision allows the Regional Water Board to modify this Order if the Facility is upgraded to advanced water treatment standard. If discharge quality is changed the Regional Water Boards will reassess the reasonable potential of discharge to impact receiving water.
- 6.2.1.7. **303(d)-Listed Pollutants (Special Provision 6.3.1.7.).** 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.
- 6.2.1.8. **Water Effects Ratios (WERs) and Metal Translators (Special Provision 6.3.1.8.).** This provision allows the Regional Water Board to reopen this Order if future studies undertaken by the Permittee provide new information and justification for applying a WER or metal translator to a water quality objective for one or more priority pollutants.
- 6.2.1.9. **Nutrients (Special Provision 6.3.1.9.).** This Order contains effluent limitations for ammonia and effluent monitoring for nutrients (ammonia, nitrate, organic nitrogen, and phosphorus). This provision allows the Regional Water Board to reopen this Order if future monitoring data indicates the need for new or revised effluent limitations for any of these parameters.
- 6.2.2. **Best Management Practices and Pollution Prevention**
- 6.2.2.1. **Pollutant Minimization Program (Special Provision 6.3.2.1.).** This provision is included in this Order pursuant to section 2.4.5 of the SIP. 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.
- 6.2.3. **Construction, Operation, and Maintenance Specifications**
- 6.2.3.1. **Operation and Maintenance (Special Provisions 6.3.3.).** 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.
- 6.2.4. **Special Provisions for Municipal Facilities (POTWs Only)**
- 6.2.4.1. **Wastewater Collection Systems (Special Provision 6.3.4.1.)**
- 6.2.4.1.1. **Statewide General WDRs for Sanitary Sewer Systems.** On December 6, 2022, the State Water Board adopted General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2022-0103-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.

6.2.4.1.2. Source Control and Pretreatment Provisions (Special Provision 6.3.5.).

Pursuant to Special Provision 6.3.5.1.1, 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 did not report any known industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the Facility in Part F of EPA Application Form 2A and the permitted 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

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. The following types of resources can be consulted in compiling a master list of industrial users:

6.2.4.1.2.1. Water and sewer billing records

6.2.4.1.2.2. Applications for sewer service

6.2.4.1.2.3. Local telephone directories

6.2.4.1.2.4. Chamber of Commerce and local business directories

6.2.4.1.2.5. Business license records

6.2.4.1.2.6. POTW and wastewater collection personnel and field observations

6.2.4.1.2.7. Business associations

6.2.4.1.2.8. The internet

6.2.4.1.2.9. Industrial and non-residential sewer use permit records

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.

6.2.4.1.3. **Sludge Disposal and Handling Requirements (Special Provision 6.3.6.).** 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.

6.2.4.1.4. **Biosolids Management (Special Provision 6.3.7.).** This provision 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 regulated under this Order. The Permittee is required to obtain coverage under the State Water Board Order No. 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities (General Order). Coverage under the General Order, as opposed to coverage under this NPDES permit or individual WDRs, implements a consistent statewide approach to regulating this waste discharge.

6.2.4.1.5. **Operator Certification (Special Provision 6.3.8.).** 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.

6.2.4.1.6. **Adequate Capacity (Special Provision 6.3.9.).** 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.

6.2.4.2. **Other Special Provisions**

6.2.4.3. **Storm Water (Special Provision 6.3.10.1.).** 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, for Discharges of Storm Water Discharges Associated with Industrial Activities (or subsequent renewed versions of the NPDES General Permit CAS000001). Currently, the Facility is exempt from these requirements based on the fact that all storm water within the Facility's NPDES permitted process areas is captured by the aeration and percolation ponds and only storm water from the operations building and parking lot discharges to a surface drainage that is tributary to the Russian River.

6.2.4.4. **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

Section 122.48 of 40 C.F.R. requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code section 13383 authorizes the Regional Water Board to require technical and monitoring reports. The MRP, Attachment E, establishes monitoring and reporting 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 at Monitoring Location INF-001 for BOD₅, and TSS are retained from Order No. R1-2018-0034 and are necessary to determine compliance with the Order's 85 percent removal requirement for these parameters.
- 7.1.2. Influent monitoring requirements for flow at Monitoring Location INF-001 are retained from Order No. R1-2018-0034 and are necessary to determine compliance with Discharge Prohibition 3.7.

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 and EFF-002 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.

7.3. Monitoring Location EFF-001

- 7.3.1. Effluent monitoring frequencies and sample types for flow, dilution rate, BOD₅, pH, total coliform bacteria, TSS, copper, chlorodibromomethane, dichlorobromomethane, total residual chlorine, dissolved oxygen, hardness, specific conductance, temperature, total

dissolved solids, turbidity, ammonia (total and unionized), nitrate, organic nitrogen, phosphorus, acute toxicity and chronic toxicity have been retained from Order No. R1-2018-0034.

- 7.3.2. Weekly effluent monitoring for settleable solids is newly established by this Order and it is necessary to ensure solids do not exhibit reasonable potential to cause or contribute to bottom deposits. This was previously included as a generalized receiving water limitations contained in the Permittee's prior waste discharge requirements. Generalized receiving water limitations were removed from this Order based on the U.S. Supreme Court's decision in *City and County of San Francisco v. U.S. EPA*.
- 7.3.3. In addition to CTR priority pollutant monitoring, once per permit term monitoring for pesticides listed in Attachment G (Pesticide Characterization Study) is newly established by this Order at monitoring location EFF-001 to generate adequate data to perform an RPA. Pesticide monitoring shall be sampled concurrently with CTR pollutant monitoring.

7.4. Monitoring Location EFF-002

- 7.4.1. Effluent monitoring frequencies and sample types for flow, BOD₅, pH, total coliform bacteria, and TSS have been retained from Order No. R1-2018-0034. Effluent monitoring frequencies for specific conductance, chloride, copper, chlorodibromomethane, dichlorobromomethane, hardness, temperature, ammonia (total and unionized), nitrite, nitrate, organic nitrogen, and phosphorus have also been retained from Order No. R1-2018-0034.

7.5. Whole Effluent Toxicity Testing Requirements

Effluent monitoring data collected during the term of Order No. R1-2018-0034 indicates that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives for acute aquatic toxicity. Therefore, this Order discontinues quarterly effluent monitoring requirements for acute aquatic toxicity. Furthermore, effluent data indicates that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives for chronic aquatic toxicity. This Order includes semi-annual effluent monitoring requirements for chronic aquatic toxicity to demonstrate compliance with the water quality objective for toxicity and as required by the Toxicity Provisions.

In addition to routine chronic toxicity monitoring, this Order requires the Permittee to maintain and update its TRE Work Plan, in accordance with appropriate U.S. EPA guidance to ensure that the Permittee has a plan to immediately move forward with the initial tiers of a TRE in the event effluent toxicity is encountered in the future. The TRE is initiated by evidence of a pattern of toxicity demonstrated through routine and MMET testing for chronic aquatic toxicity.

The Toxicity Provisions allow the Regional Water Board to use a species sensitivity screening generated within ten years prior to the renewal of this Permit when the data are representative of the effluent, the Regional Water Board accepts use of the data, the data

are analyzed using the TST, and the data are from chronic aquatic testing of, at minimum, one vertebrate, one invertebrate, and one plant/algae from Table 1 of Section III.B.2. of the Toxicity Provisions.

- 7.5.1. If the data from the samples are to be acceptable for use in the NPDES Program, holding time from sample must not exceed 36 hours. The 36-hour holding time is adequate time to deliver the samples to the laboratories performing the tests in most cases. In the isolated cases, where the permittee can document that this delivery time cannot be met, the permitting authority can allow an option for on-site testing or a variance for an extension of shipped sample holding time. The request for a variance in sample holding time, directed to the USEPA Regional Administrator under 40 CFR 136.3(e) should include supportive data which show that the toxicity of the effluent sample is not reduced (e.g., because of volatilization and/or sorption of toxics on the sample container surfaces) by extending the holding time beyond more than 36 hours. However, in no case should more than 72 hours elapse between collection and first use of the sample.
- 7.5.2. The persistence of the toxicity of an effluent prior to its use in a toxicity test is of interest in assessing the validity of toxicity test data, and in determining the possible effects of allowing an extension of the holding time. Information on the effects of the extension in holding time on the toxicity of the samples must be obtained by comparing the results of multi-concentration acute toxicity tests performed on effluent samples held 36 hours with toxicity test results using the same samples after they were held for the requested, longer period. The portion of the sample set aside for the second test must be held under the same conditions as during shipment and holding.

7.6. Receiving Water Monitoring

7.6.1. Surface Water

7.6.1.1. Monitoring Locations RSW-003 and RSW-004

- 7.6.1.1.1. Receiving water monitoring is required to demonstrate compliance with the Receiving Water Limitations. Monitoring requirements at Monitoring Locations RSW-003 and RSW-004 for flow, BOD₅, pH, TSS, copper, dissolved oxygen, hardness, temperature, CTR priority pollutants, turbidity, ammonia (total and unionized), nitrate, and phosphorus have been retained from Order No. R1-2018-0034.
 - 7.6.1.1.1.1. The once per permit term CTR priority pollutant monitoring in the receiving water monitoring location RSW-003 is essential for characterization of background conditions and necessary to assess impacts of the discharge to beneficial use. As a result, in the event of discharge to surface waters, the Permittee must perform CTR priority pollutant in the receiving water as well. This monitoring is not required downstream of Discharge Point 001 at RSW-004 because the permittee does not currently discharge to the Russian River and should have no affect on downstream conditions.

7.6.1.1.2. Monthly receiving water monitoring for TDS is newly established by this Order and is necessary to ensure solids do not exhibit reasonable potential to cause or contribute to exceedance of water quality objectives established in the Basin Plan for TDS. This was previously included as a receiving water limitation contained in the Permittee's prior waste discharge requirements. Generalized receiving water limitations were removed from this Order based on the U.S. Supreme Court's decision in City and County of San Francisco v. U.S. EPA.

7.6.1.1.3. In addition to CTR priority pollutant monitoring, once per permit term monitoring for pesticides listed in Attachment G (Pesticide Characterization Study) is newly established by this order at Monitoring Location RSW-003 and RSW-004 to generate adequate data to perform an RPA. Pesticide monitoring shall be sampled concurrently with CTR pollutant monitoring.

7.6.1.2. **Monitoring Locations RSW-005 and RSW-006**

7.6.1.2.1. Monitoring Requirements at Monitoring Locations RSW-005 and RSW-006, for pH, hardness, specific conductance, temperature, chloride, copper, and nitrate have been retained from Order No. R1-2018-0034.

7.6.1.3. **Groundwater**

7.6.1.3.1. Monitoring requirements at Monitoring Locations GW-001, GW-007, GW-009, GW-010, GW-011, GW-012, GW-013, GW-014, GW-015, and GW-016 for depth to groundwater, pH, total coliform bacteria, specific conductance, chloride, copper, and nitrate have been retained from Order No. R1-2018-0034.

7.6.2. **Other Monitoring Requirements**

7.6.2.1. **Monitoring Location INT-001.** Internal monitoring at the end of the chlorine contact chamber is required to measure chlorine residual in lieu of daily coliform monitoring to assure adequate disinfection on a daily basis.

7.6.2.2. **Visual Monitoring.** Visual monitoring requirements for the effluent (Monitoring Location EFF-001) and downstream receiving water (Monitoring Location RSW-002) are retained from Order No. R1-2018-0034 and monitoring requirements for upstream receiving water (Monitoring Location RSW-003) have been added. These monitoring requirements are necessary to ensure compliance with receiving water limitations in section 5 of the Order.

7.6.2.3. **Sludge Monitoring.** Sludge monitoring requirements at Monitoring Location BIO-001 serve as a basis for the Permittee to develop the Sludge Handling and Disposal report that is required as part of the Annual Report pursuant to section 10.4.2.7. of the MRP.

7.6.2.4. **Pond Monitoring.** Flow observation requirements at Monitoring Locations PND-001 through PND-007 have been newly established in this order to provide a more accurate assessment of groundwater monitoring data.

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

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

7.6.2.6. Accelerated Monitoring Requirements. Tables E-4 and E-5 of the MRP include accelerated monitoring requirements for parameters that are required to be monitored daily, weekly, monthly, quarterly, and four times per discharge season.

7.6.2.7. Flow Monitoring. Section 1.4 of the MRP requires proper installation, calibration, operation, and maintenance of flow metering devices.

7.6.2.8. Spill Notification. The MRP that is part of this Order establishes requirements for reporting spills and unauthorized discharges, with the exception of SSOs which must be reported in accordance with the requirements of State Water Board Order No. 2022-0103-DWQ.

7.6.2.9. Disaster Preparedness Assessment Report and Action Plan (MRP section 10.4.1.1.). 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 and implement the necessary control measures in accordance with an approved schedule of implementation.

7.6.2.10. Groundwater Characterization (MRP section 10.4.1.2.). In order to confirm compliance with Groundwater Limitations 5.3, the Permittee is required to perform monitoring, complete water quality analyses for characterization, and submit a technical report on the findings, as specified in MRP section 10.4.1.2. Site-specific conditions including the use of percolation ponds for effluent storage, may affect the

quality of surface waters within the area, therefore, the technical report is necessary to further assess potential impacts and to protect both surface and groundwater.

7.6.2.11. **Surface Water Discharge Report. (MRP section 10.4.1.3.)** Discharge Prohibition 3.9 requires that the permittee upgrades the Facility to meet advanced treatment standards before beginning discharge to the Russian River. If the Discharger intends to make alterations or additions to the Facility during the term of this Order to meet advanced wastewater treatment requirements, the Discharger shall submit a complete permit application to apply for coverage under a modified or reissued NPDES permit. If discharge quality is changed the Regional Water Boards will reassess the reasonable potential of discharge to impact receiving water.

7.6.2.11.1. **Russian River Dissolved Oxygen and Temperature Study. (MRP section 10.4.1.4.)** The Russian River has a designated beneficial use of WARM, COLD, and SPWN freshwater habitat. The Basin Plan States "At no time or place shall the temperature of any COLD [or WARM] water be increased by more than 5°F above natural receiving water temperature." The Basin plan also establishes dissolved oxygen water quality objectives in the of a daily minimum of 9.0 mg/L, 7-Day moving average of 11.0 mg/L. For waterbodies in which the aquatic life-based DO requirements are unachievable due to natural conditions, the Executive Officer may approve site specific background DO requirements can be applied as water quality objectives by calculating the daily minimum DO necessary to maintain 85% DO saturation during the dry season and 90% DO saturation during the wet season under site salinity, site atmospheric pressure, and natural receiving water temperatures.

This Order requires the Permittee to conduct a study to assess the Facility's ability to comply with the basin plan water quality objectives for dissolved oxygen and temperature. This provision requires additional studies and reporting, to be included with the next ROWD, on the discharge's impacts to the receiving water temperature.

8. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, North Coast Region (North Coast Regional Water Board) has considered the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the City of Cloverdale Wastewater Treatment Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages 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 waste discharge requirements for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following posting on the Notification was provided through the following posting on the [Regional Water Board's site](#)

(https://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs/).

The public had access to the agenda and any changes in dates and locations through the [Regional Water Board's site](https://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs/) (https://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs/).

8.2. Written Comments

Interested persons were invited to submit written comments concerning these tentative WDRs as provided through the notification process. Comments were due to the Regional Water Board Executive Office electronically 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](https://www.waterboards.ca.gov/northcoast/) at (<https://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 **October 28, 2026**.

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: **December 3, 2026**
Time: 9:00 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. On the [Regional Water Board website](https://www.waterboards.ca.gov/northcoast/) (<https://www.waterboards.ca.gov/northcoast/>) 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 at [Water Quality Petitions Website](http://www.waterboards.ca.gov/public_notices/petitions/waterquality/wqpetition_instr.shtml)
(http://www.waterboards.ca.gov/public_notices/petitions/waterquality/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 Justin McSmith at Justin.McSmith@waterboards.ca.gov or (707) -876-2082.

Table F-9. City of Cloverdale RPA Summary

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
1,1-Dichloroethane	ug/L	< 0.5	--	5	N/A	N/A	N/A	N/A	5	No
1,1,1-Trichloroethane	ug/L	< 0.5	--	200	N/A	N/A	N/A	N/A	200	No
1,1,2-Trichloroethane	ug/L	< 0.5	--	0.6	N/A	N/A	0.6	42	5	No
1,1,2,2-Tetrachloroethane	ug/L	< 0.5	--	0.17	N/A	N/A	0.17	11	1	Ud
1,2-Dichloroethane	ug/L	< 0.5	--	0.38	N/A	N/A	0.38	99	0.5	Ud
cis-1,2-Dichloroethene	ug/L	< 0.5	--	6	N/A	N/A	N/A	N/A	6	No
1,2-Dichloropropane	ug/L	< 0.5	--	0.52	N/A	N/A	0.52	39	5	No
1,2,4-Trichlorobenzene	ug/L	< 5	--	5	N/A	N/A	35	70	5	Ud
1,3-Dichlorobenzene	ug/L	< 0.5	--	400	N/A	N/A	400	2600	N/A	No
1,3-Dichloropropylene	ug/L	< 0.5	--	0.5	N/A	N/A	10	1700	0.5	Ud
1,4-Dichlorobenzene	ug/L	< 0.5	--	5	N/A	N/A	400	2600	5	No
Acrolein	ug/L	< 5	--	3	3	3	320	780	N/A	Ud
Acrylonitrile	ug/L	< 2	--	0.059	N/A	N/A	0.059	0.66	N/A	Ud
Benzene	ug/L	< 0.3	--	1	N/A	N/A	1.2	71	1	No
Bromoform	ug/L	0.91	--	4.3	N/A	N/A	4.3	360	80	Ud
Carbon tetrachloride	ug/L	< 0.5	--	0.25	N/A	N/A	0.25	4.4	0.5	Ud
Chlorobenzene	ug/L	< 0.5	--	70	N/A	N/A	680	21000	70	No
Chloroethane	ug/L	< 0.5	--	--	N/A	N/A	N/A	N/A	N/A	Uo
2-Chloroethylvinyl Ether	ug/L	< 1	--	--	N/A	N/A	N/A	N/A	N/A	Uo
Chloroform	ug/L	7.8	--	80	N/A	N/A	5.7	470	80	No
Methyl Chloride	ug/L	< 0.5	--	--	N/A	N/A	N/A	N/A	N/A	Uo

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
Chlorodibromomethane	ug/L	4.75	--	0.41	N/A	N/A	0.41	34	80	Yes
Dichlorobromomethane	ug/L	4.75	--	0.56	N/A	N/A	0.56	46	80	Yes
Ethylbenzene	ug/L	< 0.5	--	300	N/A	N/A	3100	29000	300	No
Tetrachloroethylene	ug/L	< 0.5	--	0.8	N/A	N/A	0.8	8.85	5	No
trans-1,2-Dichloroethylene	ug/L	0.52	--	10	N/A	N/A	700	140000	10	No
Trichloroethylene	ug/L	< 0.5	--	2.7	N/A	N/A	2.7	81	5	No
Vinyl Chloride	ug/L	< 0.5	--	0.5	N/A	N/A	2	525	0.5	No
1,2-Diphenylhydrazine	ug/L	< 1	--	0.04	N/A	N/A	0.04	0.54	N/A	No
2-Chlorophenol	ug/L	< 5	--	120	N/A	N/A	120	400	N/A	No
2,4-Dichlorophenol	ug/L	< 5	--	93	N/A	N/A	93	790	N/A	No
2,4-Dimethylphenol	ug/L	< 2	--	540	N/A	N/A	540	2300	N/A	No
2,4-Dinitrophenol	ug/L	< 5	--	70	N/A	N/A	70	14000	N/A	No
2,4,6-Trichlorophenol	ug/L	< 10	--	2.1	N/A	N/A	2.1	6.5	N/A	No
2-Nitrophenol	ug/L	< 10	--	--	N/A	N/A	N/A	N/A	N/A	No
2-Chloronaphthalene	ug/L	< 10	--	1700	N/A	N/A	1700	4300	N/A	No
3,3-Dichlorobenzidine	ug/L	< 5	--	0.04	N/A	N/A	0.04	0.077	N/A	No
4-Chloro-3-methylphenol	ug/L	< 1	--	--	N/A	N/A	N/A	N/A	N/A	No
2-Methyl-4,6-Dinitrophenol	ug/L	< 5	--	13.4	N/A	N/A	13.4	765	N/A	No
4-Nitrophenol	ug/L	< 10	--	--	N/A	N/A	N/A	N/A	N/A	No
4-Bromophenyl Phenyl Ether	ug/L	< 5	--	--	N/A	N/A	N/A	N/A	N/A	No
4-Chlorophenyl Phenyl Ether	ug/L	< 5	--	--	N/A	N/A	N/A	N/A	N/A	No

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
Acenaphthene	ug/L	< 1	--	1200	N/A	N/A	1200	2700	N/A	No
Acenaphthylene	ug/L	< 10	--	--	N/A	N/A	N/A	N/A	N/A	No
Anthracene	ug/L	< 10	--	9600	N/A	N/A	9600	110000	N/A	No
Benzidine	ug/L	< 5	--	0.00012	N/A	N/A	0.00012	0.00054	N/A	No
Benzo(a)pyrene	ug/L	< 10	--	0.0044	N/A	N/A	0.0044	0.049	0.2	No
Benzo(ghi)perylene	ug/L	< 5	--	--	N/A	N/A	N/A	N/A	N/A	No
Benzo(k)fluoranthene	ug/L	< 10	--	0.0044	N/A	N/A	0.0044	0.049	N/A	No
Bis (2-Chloroethoxy) Methane	ug/L	< 5	--	--	N/A	N/A	N/A	N/A	N/A	No
Bis (2-Chloroethyl) Ether	ug/L	< 1	--	0.031	N/A	N/A	0.031	1.4	N/A	No
Bis (2-Chloroisopropyl) Ether	ug/L	< 2	--	1400	N/A	N/A	1400	170000	N/A	No
Bis (2-Ethylhexyl) Phthalate	ug/L	< 5	--	1.8	N/A	N/A	1.8	5.9	4	No
Butylbenzyl Phthalate	ug/L	< 10	--	3000	N/A	N/A	3000	5200	N/A	No
Chrysene	ug/L	< 10	--	0.0044	N/A	N/A	0.0044	0.049	N/A	No
Di-n-butyl Phthalate	ug/L	< 10	--	2700	N/A	N/A	2700	12000	N/A	No
Di-n-octyl Phthalate	ug/L	< 10	--	--	N/A	N/A	N/A	N/A	N/A	No
Diethyl Phthalate	ug/L	< 2	--	23000	N/A	N/A	23000	120000	N/A	No
Dimethyl Phthalate	ug/L	< 2	--	313000	N/A	N/A	313000	2900000	N/A	No
Fluoranthene	ug/L	< 1	--	300	N/A	N/A	300	370	N/A	No
Fluorene	ug/L	< 10	--	1300	N/A	N/A	1300	14000	N/A	No
Hexachlorocyclopenta diene	ug/L	< 5	--	50	N/A	N/A	240	17000	50	No
Indeno (1,2,3-cd) Pyrene	ug/L	< 10	--	0.0044	N/A	N/A	0.0044	0.049	N/A	No
Isophorone	ug/L	< 1	--	8.4	N/A	N/A	8.4	600	N/A	No

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
N-Nitrosodiphenylamine	ug/L	< 5	--	5	N/A	N/A	5	16	N/A	No
N-Nitrosodi-n-Propylamine	ug/L	< 5	--	0.005	N/A	N/A	0.005	1.4	N/A	No
Nitrobenzene	ug/L	< 1	--	17	N/A	N/A	17	1900	N/A	No
Pentachlorophenol	ug/L	< 5	--	0.28	5.277750 683	4.0491 21727	0.28	8.2	1	No
Phenanthrene	ug/L	< 5	--	--	N/A	N/A	N/A	N/A	N/A	No
Phenol, Single Compound	ug/L	< 1	--	21000	N/A	N/A	21000	4600000	N/A	No
Pyrene	ug/L	< 10	--	960	N/A	N/A	960	11000	N/A	No
4,4-DDD	ug/L	< 0.01	--	0.00083	1.1	0.001	0.00083	0.00084	N/A	No
4,4-DDE	ug/L	< 0.02	--	0.00059	1.1	0.001	0.00059	0.00059	N/A	No
4,4-DDT	ug/L	< 0.02	--	0.00059	1.1	0.001	0.00059	0.00059	N/A	No
alpha-BHC	ug/L	< 0.01	--	0.0039	N/A	N/A	0.0039	0.013	N/A	No
Aldrin	ug/L	< 0.005	--	0.00013	3	N/A	0.00013	0.00014	N/A	No
beta-BHC	ug/L	< 0.005	--	0.014	N/A	N/A	0.014	0.046	N/A	No
Chlordane	ug/L	< 0.05	--	0.00057	2.4	0.0043	0.00057	0.00059	0.1	No
delta-BHC	ug/L	< 0.005	--	--	N/A	N/A	N/A	N/A	N/A	No
Dieldrin	ug/L	< 0.1	--	0.00014	0.24	0.056	0.00014	0.00014	N/A	No
Endosulfan Sulfate	ug/L	< 0.05	--	110	N/A	N/A	110	240	N/A	No
Endrin	ug/L	< 0.01	--	0.036	0.086	0.036	0.76	0.81	2	No
Endrin Aldehyde	ug/L	< 0.01	--	0.76	N/A	N/A	0.76	0.81	N/A	No
Heptachlor	ug/L	< 0.01	--	0.00021	0.52	0.0038	0.00021	0.00021	0.01	No
Heptachlor Epoxide	ug/L	< 0.01	--	0.0001	0.52	0.0038	0.0001	0.00011	0.01	No
gamma-BHC	ug/L	< 0.01	--	0.019	0.95	0.08	0.019	0.063	0.2	No
PCB(1)	ug/L	< 0.5	--	0.00017	N/A	0.014	0.00017	0.00017	0.5	No

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
Toxaphene	ug/L	< 0.5	--	0.0002	0.73	0.0002	0.00073	0.00075	3	No
Antimony, Total Recoverable	ug/L	< 0.5	--	6	N/A	N/A	14	4300	6	No
Arsenic, Total Recoverable	ug/L	< 0.5	--	10	340	150	N/A	N/A	10	No
Beryllium, Total Recoverable	ug/L	< 0.1	--	4	N/A	N/A	N/A	N/A	4	No
Cadmium, Total Recoverable	ug/L	< 0.1	-	2.6	N/A	2.6	N/A	N/A	5	No
Chromium (III)	ug/L	< 0.5	-	220	1800	220	N/A	N/A	N/A	No
Chromium (total)	ug/L	< 0.5	--	50	N/A	N/A	N/A	N/A	50	No
Chromium (VI)	ug/L	< 0.01	--	11	16	11	N/A	N/A	N/A	No
Copper, Total Recoverable	ug/L	100	-	9.7	15	9.7	1300	N/A	1000	Yes
Cyanide, Total (as CN)	ug/L	< 0.003	--	5.2	22	5.2	700	220000	150	No
Lead, Total Recoverable	ug/L	0.48	-	15	N/A	N/A	N/A	N/A	15	No
Mercury, Total Recoverable	ug/L	< 0.02	--	2	N/A	N/A	N/A	N/A	2	No
Nickel, Total Recoverable	ug/L	2	-	54	490	54	610	4600	100	No
Selenium, Total Recoverable	ug/L	< 2	--	5	20	5	170	4200	50	No
Silver, Total Recoverable	ug/L	< 0.1	-	100	N/A	N/A	N/A	N/A	100	No
Thallium, Total Recoverable	ug/L	< 0.1	--	1.7	N/A	N/A	1.7	6.3	2	No

Constituent Name	Units	MEC ¹	B	C	CMC	CCC	Water & Org. ²	Org. Only ³	MCL	RP ^{4,5,6}
Zinc, Total Recoverable	ug/L	16	-	120	120	120	7400	26000	5000	No

Table Notes:

1. MEC = Maximum Effluent Concentration
2. Water & Org = CTR Water Quality Criteria for Human Health for Consumption of Water & Organisms
3. Org. Only = CTR Water Quality Criteria for Human Health for Organisms Only
4. RP = Reasonable Potential
5. Ud = Undetermined, Insufficient Data
6. Uo = Undetermined, No Water Quality Criteria.

ATTACHMENT G - PESTICIDE CHARACTERIZATION STUDY

Table G-1: Pesticide Monitoring

Constituent	Units	CAS Number
1,2,3-Trichloropropane (TCP)	µg/L	96-18-4
Tributyltin	µg/L	688-73-3
Alachlor	µg/L	15972-60-8
Atrazine	µg/L	1912-24-9
Bentazon	µg/L	25057-89-0
Carbofuran	µg/L	1563-66-2
2,4-D	µg/L	94-75-7
Dalapon	µg/L	75-99-0
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	96-12-8
Diquat	µg/L	85-00-7
Endothal	µg/L	145-73-3
Ethylene Dibromide (EDB)	µg/L	106-93-4
Methoxychlor	µg/L	72-43-5
Molinate (Ordram)	µg/L	2212-67-1
Oxamyl	µg/L	23135-22-0
Picloram	µg/L	1918-02-1
Simazine (Princep)	µg/L	122-34-9
Thiobencarb	µg/L	28249-77-6
2,4,5-TP (Silvex)	µg/L	93-72-1
Chlorpyrifos	µg/L	2921-88-2
Diazinon	µg/L	333-41-5