CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NORTH COAST REGION

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ORDER R1-2026-0045
NPDES NO. CA0005932
WDID 1B80020OHUM

Waste Discharge Requirements for the California Redwood Company and the Trinity River Timber Company DBA North Fork Lumber Company

Korbel Sawmill
Humboldt County

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

Permittee	**California Redwood Company (property owner) and Trinity River Timber Company dba North Fork Lumber Company (operator)**
Name of Facility	**Korbel Sawmill**
Facility Address	**1165 Maple Creek Road** **Korbel, CA 95550** **Humboldt County**

Table 1. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North-South)	Discharge Point Longitude (East-West)	Receiving Water
001	Log Deck Sprinkler Water and Commingled Storm Water Runoff	40º52’27”	123º57’25”	North Fork Mad 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: **Minor 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 indicated above.

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Valerie Quinto, Executive Officer

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1. FACILITY INFORMATION

Information describing the California Redwood Company and Trinity River Timber Company dba North Fork Lumber Company (Permittee) and, Korbel Sawmill (Facility) is summarized on the cover page and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

2.1. Legal Authorities

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

2.2. Background and Rationale for Requirements

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

2.3. Provisions and Requirements Implementing State Law

The provisions/requirements in subsections 3.2, 3.5, 5.1, 6.3.4, 6.3.6 and section 10.6 of the Monitoring and Reporting Program are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

2.4. Notification of Interested Parties

The North Coast Regional Water Board as notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

2.5. Consideration of Public Comment

The North Coast 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. Anticipated Water Quality Impacts in Disadvantaged or Tribal Communities

The Permittee, California Redwood Company Trinity River Timber Company dba North Fork Lumber Company, operates within a disadvantaged community located along the North Fork Mad River in Humboldt County. Onsite operations that result in wastewater discharge include the application of water to log decks via sprinkler heads up to 24 hours per day to prevent whole logs from drying out and cracking and storm water runoff. The discharge is classified as "minor" under federal regulations and was previously regulated under Order No. R-2019-0005. The renewed permit contains new requirements to implement provisions for acute and chronic aquatic toxicity. Expanded monitoring and reporting requirements are included in the renewed Order to ensure 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).). Expanded monitoring and reporting requirements are included in the renewed Order to ensure discharges do not exceed water quality objectives.

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 Humboldt 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.

THEREFORE, IT IS HEREBY ORDERED, that Order R1-2019-0005 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 solids or digester supernatant is prohibited, except as authorized under section 6.3.7.1 of this Order (Solids 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 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, 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 discharge of treated process water to the North Fork Mad River and its tributaries is prohibited during the period from May 15 through September 30 of each year.

3.8. During the period from October 1 through May 14, discharges of treated process water to the North Fork Mad River and its tributaries shall not exceed one percent of the flow of the North Fork Mad River, as calculated by using the flow at United States Geological Survey (USGS) Gauge No. 11481200 in the Little River. For the purposes of this Order, compliance with this discharge prohibition shall be determined as follows:

3.8.1. The flow in the North Fork Mad River (Q_{NFMR}) shall be calculated using the flow in the Little River (Q_{LR}) and the following calculation (units must be in cubic feet per second):

$$Q_{NFMR} = (0.2912)(Q_{LR}^{1.1132})$$

3.8.2. The discharge of treated process water shall be adjusted at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow of the North Fork Mad River. Daily flow calculations shall be based on flow

meter comparisons reasonably read between the hours of 12:01 am and 12:00 midnight; and,

3.8.3. In no case shall the total volume of treated process water discharged in a calendar month exceed one percent of the total volume of the North Fork Mad River 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.

3.9. 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.

3.10. 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.

3.11. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited under Water Code section 13375.

3.12. The discharge of domestic waste, treated or untreated, to surface waters is prohibited.

3.13. The discharge of wood treatment chemicals or stain control fungicides to surface waters or to groundwater is prohibited.

3.14. The discharge of process wastewater from the Sawmill, including process wastewater from bark removal, sawing, resawing, edging, trimming, planing, machining, and by-product manufacturing to surface waters is prohibited. The only discharge water originates from stormwater runoff and log-deck sprinkler water that is treated using settlement basins and a constructed wetland prior to discharge to the Mad River (see Finding 2.1 of the Fact Sheet).

3.15. The discharge of debris[1] is prohibited.

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. Effluent Limitations – Discharge Point 001

4.1.1. Final Effluent Limitations – Discharge Point 001

4.1.1.1. The discharge of treated wastewater shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

[1] Debris is defined in Attachment A.

Table 2. Effluent Limitations – Discharge Point 001[(1)]

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	--	--	6.5	8.5

Table Notes

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

4.1.2. Aquatic Toxicity

The discharge of treated wastewater, as measured at Monitoring Location EFF-001, shall meet the following effluent limitations:

4.1.2.1. Acute Aquatic Toxicity

4.1.2.1.1. Maximum Daily Effluent Limitation

No acute toxicity test shall result in a "fail" at the IWC for the survival endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

4.1.2.1.2. Maximum Monthly Effluent Limitation

No more than one acute aquatic toxicity test initiated in a calendar month shall result in a "fail" at the IWC for any endpoint.

4.1.2.2. Chronic Aquatic Toxicity

4.1.2.2.1. Maximum Daily Effluent Limitation

No chronic toxicity test shall result in a "fail" at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the sub-lethal endpoint greater than or equal to 50 percent.

4.1.2.2.2. Maximum Monthly Effluent Limitation

No more than one chronic aquatic toxicity test initiated in a calendar month shall result in a "fail" at the IWC for any endpoint.

4.1.3. Interim Effluent Limitations – Not Applicable

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

4.2. Land Discharge Specifications – Not Applicable

This Order does not authorize discharges of wastewater or solids to land. Permittee is responsible for obtaining all necessary approvals and authorizations prior to the discharge of wastewater or solid waste to land, including all log-deck cleanup materials such as gravel and soil fines.

4.3. Recycling Specifications – Not Applicable

This Order does not authorize discharges of recycled water.

5. RECEIVING WATER LIMITATIONS

5.1. Groundwater Limitations

Groundwater limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Groundwater conditions not in conformance 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 10.6 of the Monitoring and Reporting Program.

6.2. Monitoring and Reporting Program (MRP) 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. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include a numeric chronic toxicity effluent limitation based on that objective.

6.3.1.4. Species Sensitivity Screening. Upon completion of the species sensitivity screening, this Order may be reopened to specify the most sensitive species. Furthermore, the maximum daily effluent limitation (MDEL) and (median monthly effluent limitation) MMEL, as identified in sections 4.1.2.1 and 4.1.2.2, may be modified to reflect the identified most sensitive species. Reopening of the permit is not required if the species sensitivity screening for acute toxicity indicates that the most sensitive species is *Ceriodaphnia dubia*, and the species sensitivity screening for chronic toxicity indicates that the most sensitive species is *Selenastrum capricornutum*.

6.3.1.5. 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.

6.3.1.6. Water Effects Ratios (WERs) and Metal Translators. Except for copper, lead, zinc, and nickel, a default WER of 1.0 has been used in this Order for calculating California Toxics Rule (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.

6.3.2. 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. The concentration of the pollutant is reported as “Detected, but Not Quantified” (DNQ) and the effluent limitation is less than the reporting limit (RL); or

6.3.2.1.2. 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 10.3.4.

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

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

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

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

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

6.3.2.2.5. 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:

6.3.2.2.5.1. All PMP monitoring results for the previous year;

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

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

6.3.2.2.5.4. 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. Settling Basin Operating Requirements

6.3.4.1. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

6.3.4.2. Basins shall be managed to prevent breeding of mosquitoes. In particular:

6.3.4.2.1. An erosion control program should assure small coves and irregularities are not created around the perimeter of the water surface;

6.3.4.2.2. Weeds shall be minimized; and

6.3.4.2.3. Vegetation, debris, and dead algae shall not accumulate on the water surface.

6.3.5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6.3.6. Other Special Provisions

6.3.6.1. Solids Disposal and Handling Requirements

Collected solids removed from liquid wastes shall be disposed of in a proper manner approved by the Executive Officer and consistent with the Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in the CCR, title 27, section 20005, et seq. (i.e., at a solid waste facility for which waste discharge requirements have been prescribed by a Regional Water Board) or in a manner approved by the Regional Water Board. For purposes of this provision:

6.3.6.1.1. "Woodwaste" includes bark, rock, and/or soil from the surface or perimeter of a log deck.

6.3.6.1.2. "Waste Piles" include windrows, fills, or dikes of woodwaste wherein visually identifiable material of woody origin may be found at depths greater than one foot below the surface.

6.3.6.1.3. "Waste Storage" occurs whenever a waste pile remains on the property more than 180 days.

6.3.6.1.4. "Waste Treatment" includes burning of wood piles.

6.3.6.2. The storage of basin sediments shall be done in a manner to prevent nuisance pollution or impairment of beneficial uses of waters of the United States.

6.3.6.3. Any proposed change in basin sediment practices shall be reported to the Executive Officer at least 90 days in advance of the change.

6.3.7. Toxicity Reduction Evaluation (TRE)

The Discharger shall initiate a TRE, as detailed in the Monitoring and Reporting Program (Attachment E, Section 5), when any combination of two or more effluent limitation exceedances occur within a single toxicity calendar month or within two successive toxicity calendar months. In addition, if other information indicates toxicity (e.g., results of additional monitoring, fish kills, intermittent recurring toxicity) or if there is no effluent available to complete a routine monitoring test or compliance test, the Executive Officer may require a TRE.

6.3.8. Compliance Schedules – Not Applicable

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 CTR 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 average monthly effluent limitation (AMEL) for CTR 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 analysis.

7.3. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B, 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. 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.

7.5. 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.

7.6. 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.

7.7. Aquatic Toxicity Limitations

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

7.7.1. If an aquatic toxicity test exceeds the applicable MDEL, as identified in sections 4.1.2.1.1 and 4.1.2.2.1 of this Order, the Permittee will be considered out of compliance for that single sample.

7.7.2. If acute aquatic toxicity testing exceeds the MMEL, as identified in section 4.1.2.1.2 of this Order, the Permittee will be considered out of compliance for that month. No more than one acute aquatic toxicity test initiated in a calendar month shall result in a “fail” at the IWC for any endpoint.

7.7.3. If chronic aquatic toxicity testing exceeds the MMEL, as identified in section 4.1.2.2.2 of this Order, the Permittee will be considered out of compliance for that month. No more than one chronic aquatic toxicity test initiated in a calendar month shall result in a “fail” at the IWC for any endpoint.

7.7.4. Compliance with aquatic toxicity routine monitoring, compliance monitoring, and TRE provisions shall constitute compliance with the aquatic toxicity requirements, as specified in the MRP (Attachment E, section 5).

ATTACHMENT A - DEFINITIONS

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

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

where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

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.

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

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

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

constituent with limitations expressed in other units of measurement (e.g., concentration).

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

For composite sampling, if 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.

Debris
Woody material such as bark, twigs, branches, heartwood or sapwood that will not pass through a 2.54 cm (1.0 in) diameter round opening and is present in the discharge from a wet storage facility.

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.

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-Karber. 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.

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

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

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

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

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

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

Median
The middle measurement in a set of data. 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 Test
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.

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.

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.

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.

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.

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

Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including

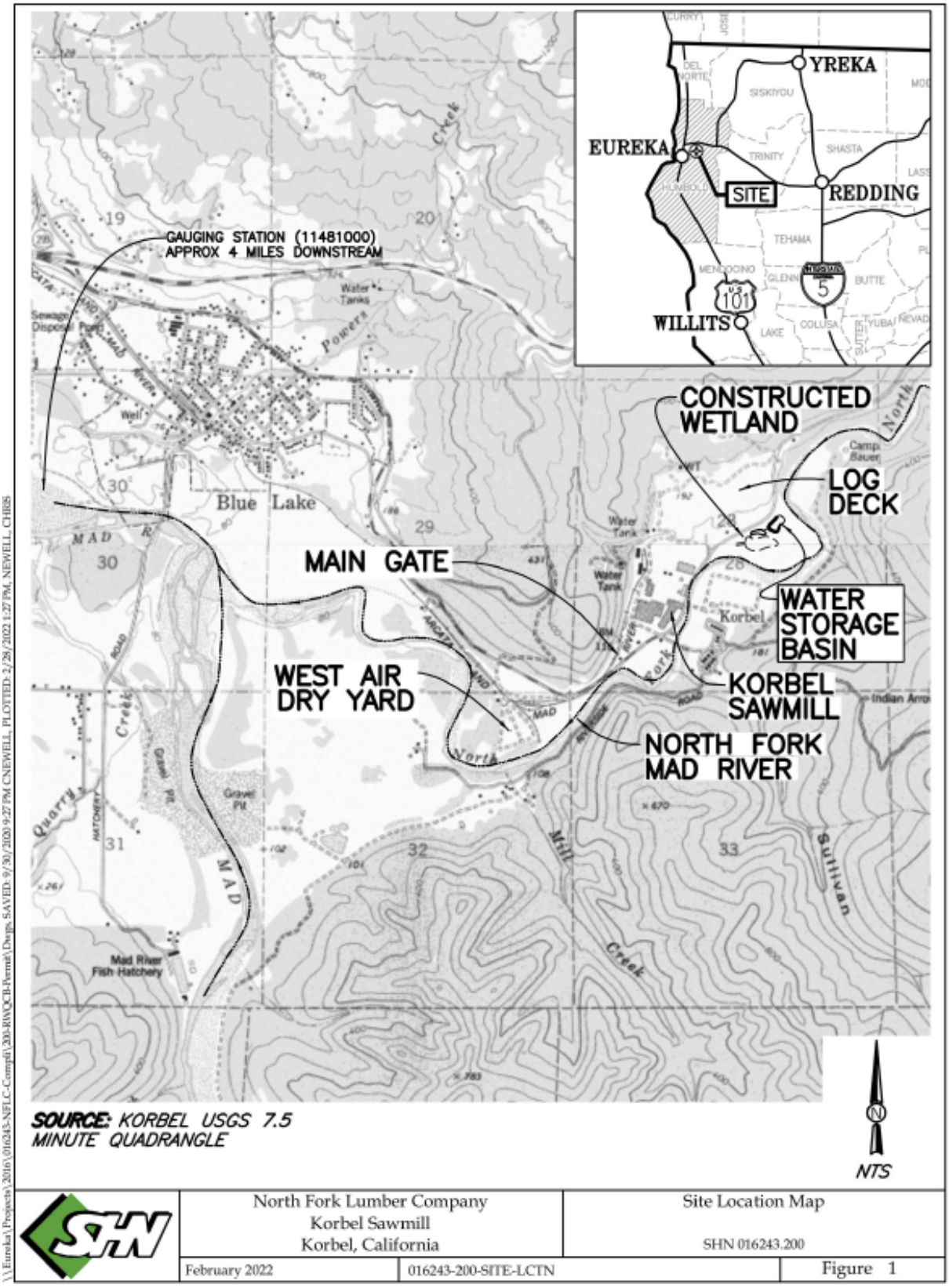
additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

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

Water Effect Ratio (WER)
An appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water. After a WER is determined for a site, a site specific aquatic life criterion can be calculated by multiplying an appropriate national, state, or recalculated criterion by the WER. Most WERs are expected to be equal to or greater than 1.0, but some might be less than 1.0.

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.

ATTACHMENT B - MAP



ATTACHMENT C - FLOW SCHEMATIC

Figure C-1. Block Flow Diagram of Log Deck and Constructed Wetland

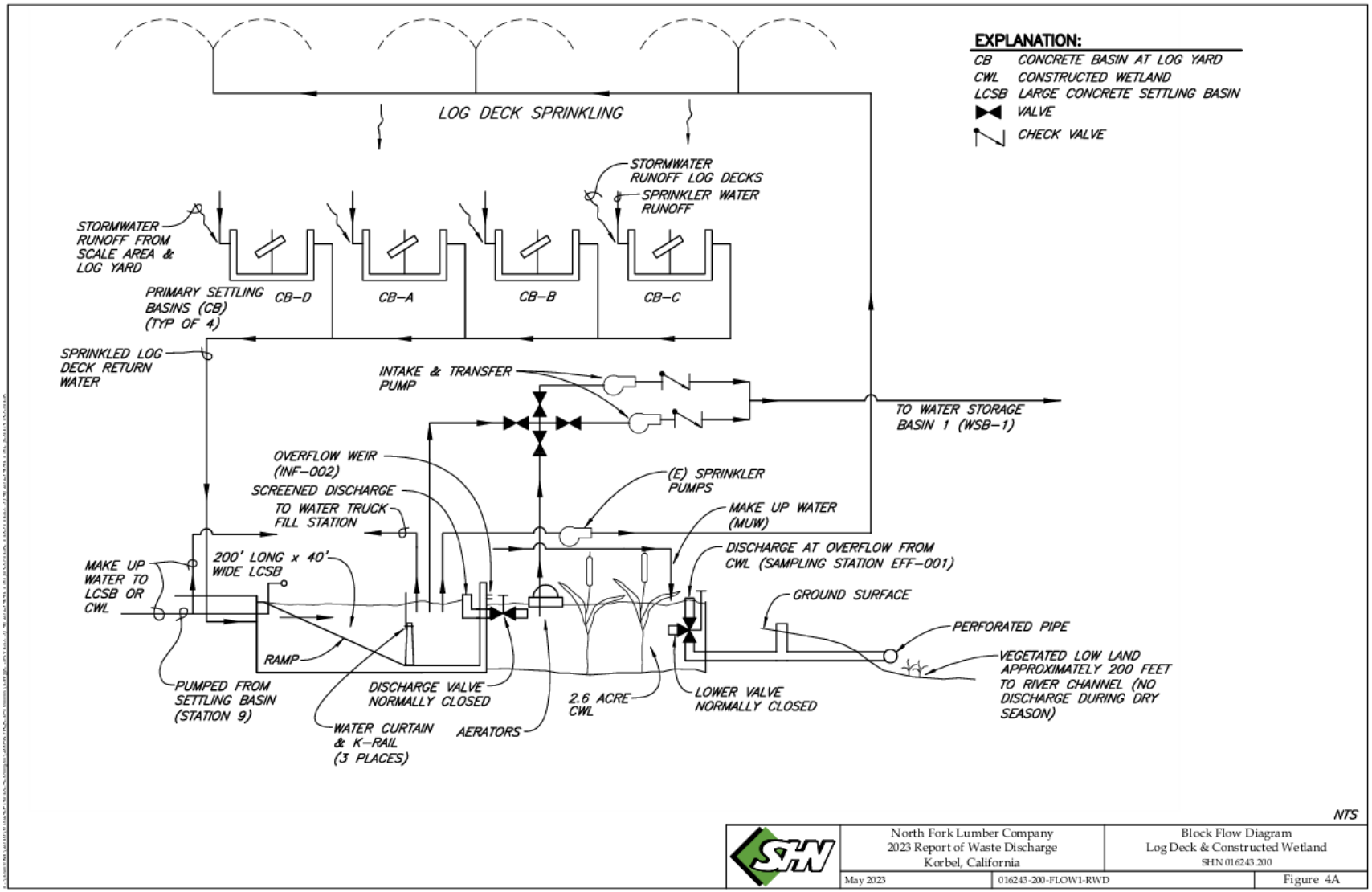


Figure C-2. Block Flow Diagram for the Lower Log Yard, Settling Basin, and Station #9

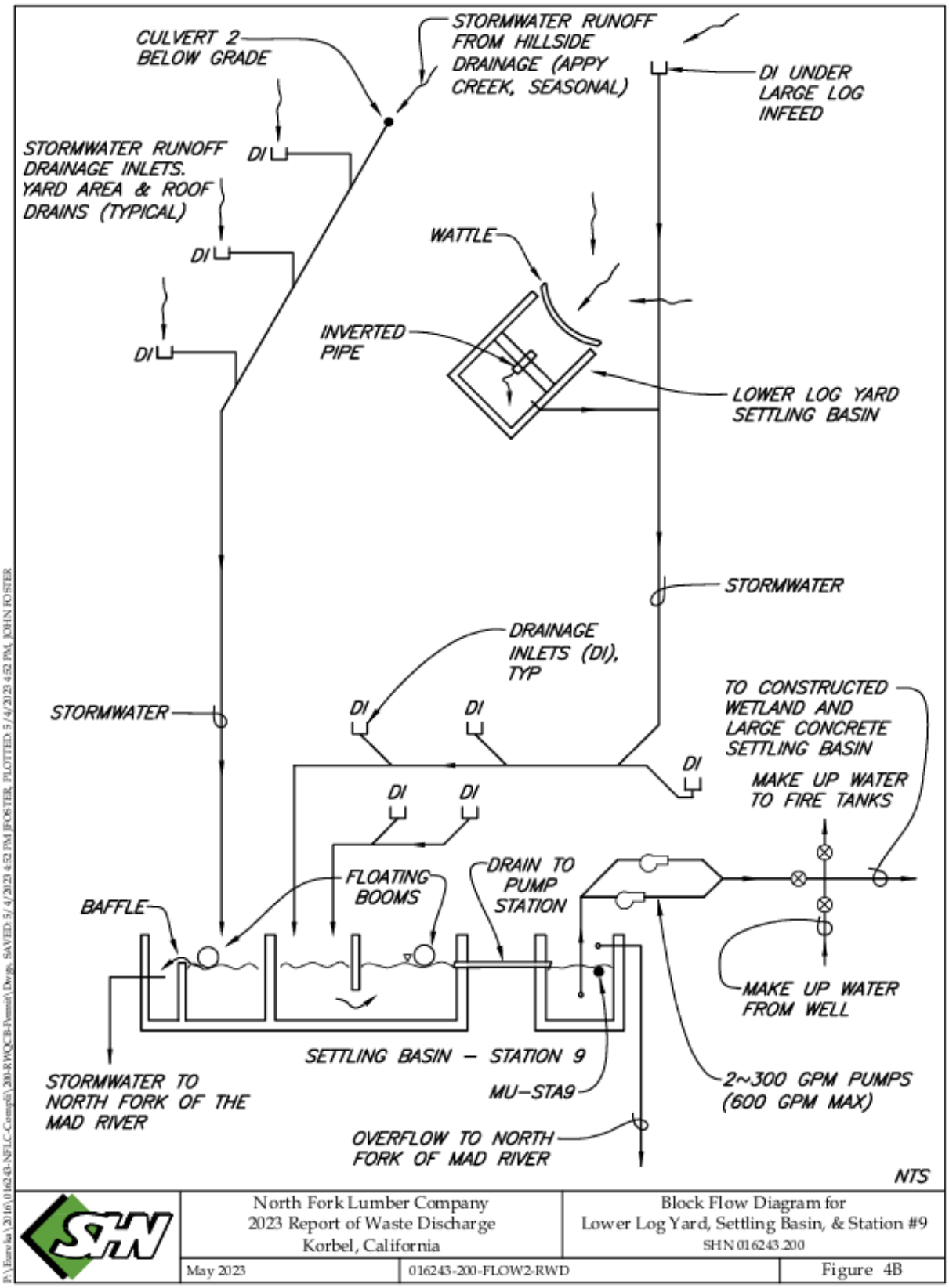
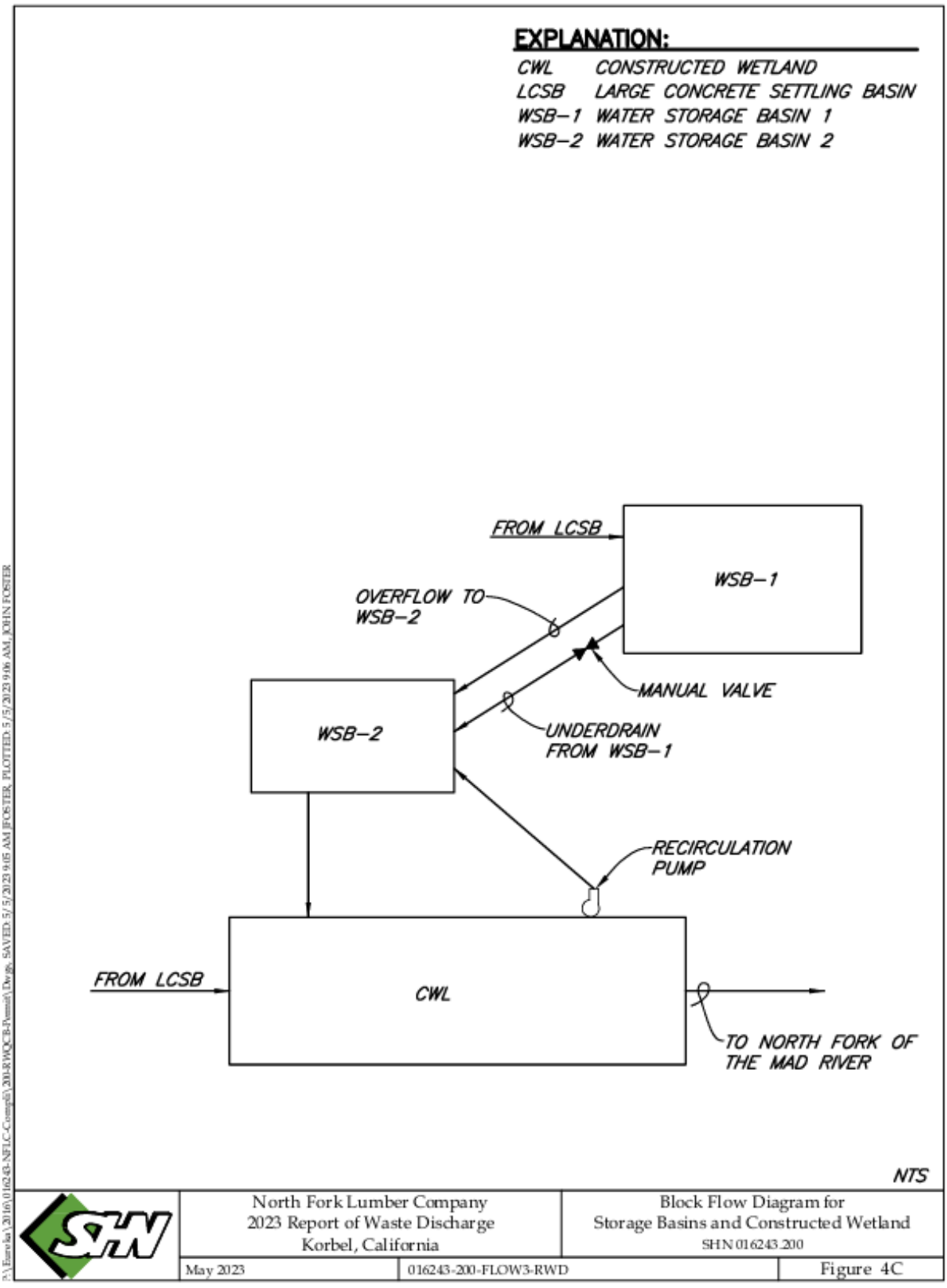


Figure C-3. Block Flow Diagram for Storage Basins and Constructed Wetland



ATTACHMENT D - STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

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

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

1.2. Need to Halt or Reduce Activity Not a Defense

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

1.3. Duty to Mitigate

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

1.4. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

1.5. Property Rights

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

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

1.6. Inspection and Entry

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

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

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

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

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

1.7. Bypass

1.7.1. Definitions

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

1.7.1.2. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

1.7.2. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not

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

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

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

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

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

1.7.4. Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the bypass defense has the burden of proof.

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

1.7.6. Notice

1.7.6.1. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. As of December 21, 2025, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)

1.7.6.2. Unanticipated bypass. The Permittee shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2025, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. 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).)

4. STANDARD PROVISIONS – RECORDS

4.1. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board 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 a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

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

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

5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

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

5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted

to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

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

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

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

5.3. Monitoring Reports

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

5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 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, 2023, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. 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 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. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Permittees shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

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

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

7.1.1.2. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4 dinitrophenol and 2 methyl 4,6 dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

7.1.1.3. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

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

7.1.2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

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

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

7.1.2.3. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

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

ATTACHMENT E - MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

1. GENERAL MONITORING PROVISIONS

1.1. Wastewater Monitoring Provision

Composite samples may be taken by a proportional sampling device 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 provision of Water Code section 13176, and must include quality assurance/quality control data with their 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 0-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-002	Water flowing over the settling basin weir into the constructed wetland.
001	EFF-001	Process wastewater discharged from the constructed wetland to the North Fork Mad River.
--	RSW-001	Upstream receiving water monitoring location in the North Fork Mad River at the water hole upstream of the constructed wetland discharge at Discharge Point 001.
--	RSW-002	Downstream receiving water monitoring location in the North Fork Mad River downstream of the constructed wetland discharge at Discharge Point 001.

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-002 as follows:

Table 0-2. Influent Monitoring – Monitoring Location INF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Influent Flow [1,2]	gallons	Meter	Continuous	--

Table Notes

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
2. Total influent flow should account for both pumped on-site well water, and estimated volume of water recirculated from the large concrete settling/stilling basin to the log deck sprinklers.				

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

4.1.1. The Permittee shall monitor process wastewater to be discharged from the constructed wetland to the North Fork Mad River at Monitoring Location EFF-001 as follows:

Table 0-3. Effluent Monitoring – Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Effluent Flow[1]	mgd	Meter	Continuous	--
Discharge Dilution Rate	% of stream flow	Calculate	Daily	--
pH	standard units	Field	Monthly[2]	Part 136[3]
Total Suspended Solids (TSS)	mg/L	Composite	Monthly	Part 136[3]
Copper, Total Recoverable	µg/L	Composite	Quarterly	Part 136[3]
Lead, Total Recoverable	µg/L	Composite	Quarterly	Part 136[3]
Nickel, Total Recoverable	µg/L	Composite	Quarterly	Part 136[3]
Zinc, Total Recoverable	µg/L	Composite	Quarterly	Part 136[3]
Chemical Oxygen Demand (COD)	mg/L	Composite	Monthly	Part 136[3]
Color	Color units	Grab	Monthly	Part 136[3]
Debris	N/A	Visual	Monthly	N/A

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Field	Monthly	Part 136[3]
Hardness, Total (as $CaCO_3$)	mg/L	Grab	Monthly	Part 136[3]
Settleable Solids	mg/L	Grab	Monthly	Part 136[3]
Temperature	°C or °F	Field	Monthly	Part 136[3]
Turbidity	NTU	Field	Monthly	Part 136[3]
Acute Toxicity	Pass or Fail, and % Effect	Composite	Annually	See Section 5 below
Chronic Toxicity	Pass or Fail, and % Effect	Composite	Quarterly[4]	See Section 5 below
CTR Priority Pollutants[5]	µg/L	Grab	Once per permit term[6]	Part 136[3,7]
Pesticide Monitoring[8]	µg/L	Grab	Once per permit term	Part 136[3,7]

Table Notes

1. Each quarter, the Permittee shall report the daily average and monthly average flows.
2. 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.
3. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration).
4. The discharger shall conduct at least one chronic aquatic toxicity test each calendar quarter during which there is expected to be at least 15 days of discharge.
5. 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.
6. CTR priority pollutant sampling shall be completed no later than April 1, 2030. Effluent and receiving water monitoring shall occur concurrently.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
7. Analytical methods must achieve the lowest 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 method detection limit (MDL) for each sample result. 8. Pesticide monitoring shall include all pollutants included in Table E-6 (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. Acute 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)

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 5.3.1 below.

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 year during which there is a 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.

5.2. Chronic Toxicity Testing

5.2.1. 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:

5.2.2. 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.

5.2.3. In-stream Waste Concentration (IWC) for Chronic Toxicity. The chronic toxicity IWC for this discharge is 100 percent effluent.

5.2.4. 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). Species and test methods shall be selected from the following:

5.2.4.1. A 7-day static renewal toxicity test with a vertebrate, the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).

5.2.4.2. A static renewal toxicity test with an invertebrate, the water flea, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).

5.2.4.3. 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).

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 5.3.1 below.

5.2.5. 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 5.2.4, 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.

5.2.6. Routine Monitoring Requirements. The Permittee shall conduct at least one chronic aquatic toxicity test each calendar quarter 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 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 advanced treatment wastewater discharge.

5.3. Other Requirements

5.3.1. 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.

5.3.2. 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 5.4.1, 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.

5.3.3. Compliance Monitoring Requirements. If an acute or chronic 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.

5.3.4. 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.

5.3.4.1.1. 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.

5.3.5. 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).

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

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

5.3.5.2. 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:

5.3.5.2.1. 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);

5.3.5.2.2. Any manipulations done to lab control/diluent and effluent such as filtration, nutrient addition, etc.;

5.3.5.2.3. Tabular summary of test results for control water and each effluent dilution;

5.3.5.2.4. The toxicity test results reported as either a "Pass" or "Fail", and the "Percent Effect" at the IWC for each endpoint; and

5.3.5.2.5. Identification of any anomalies or nuances in the test procedures or results.

5.3.6. 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.

5.4. Toxicity Reduction Evaluation (TRE) Process

5.4.1. Generic TRE Work Plan. The Permittee submitted a generic TRE Work Plan to the Regional Water Board in July 2018. The Permittee's generic TRE Work Plan shall be reviewed no later than **August 1, 2027,** 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:

5.4.1.1. 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.

5.4.1.2. 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.

5.4.1.3. 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).

5.4.2. 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:

5.4.2.1. Further actions by the Permittee to investigate, identify, and correct causes of toxicity.

5.4.2.2. Actions the Permittee will take to mitigate effects of the discharge and prevent the recurrence of toxicity.

5.4.2.3. A schedule for these actions, progress reports, and the final report.

5.4.3. TIE Implementation. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test methods and, as guidance, EPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

5.4.4. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

5.4.5. 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.

5.4.5.1. 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 – NOT APPLICABLE

This Order does not authorize discharges to land.

7. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

This Order does not authorize discharges of recycled water.

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Monitoring Location RSW-001

8.1.1. The Permittee shall monitor the North Fork Mad River at Monitoring Location RSW-001 during periods of discharge as follows:

Table 0-4. Receiving Water Monitoring Requirements – Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Gage[1]	Daily	--
pH	Standard units	Grab	Monthly	Part 136[2]
Chemical Oxygen Demand (COD)	mg/L	Grab	Monthly	Part 136[2]
Color	Color Units	Grab	Monthly	Part 136[2]
Dissolved oxygen	mg/L	Grab	Weekly	Part 136[2]
Hardness, Total (as $CaCO_3$)	mg/L	Grab	Monthly	Part 136[2]
Temperature	°C or °F	Grab	Monthly	Part 136[2]
Turbidity	NTU	Grab	Monthly	Part 136[2]
Specific Conductance	µmhos/cm	Grab	Monthly	Part 136[2]
Total Dissolved Solids	mg/L	Grab	Monthly	Part 136[2]
CTR Priority Pollutants[3]	µg/L	Grab	Once per permit term[4]	Part 136[2,5]
Pesticide Monitoring[6]	µg/L	Grab	Once per permit term	Part 136[2,5]

Table Notes

1. Based on flow readings in the Little River, measured at USGS Gauge No. 11481200.
2. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration). 3. 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. 4. CTR priority pollutant sampling shall be completed no later than April 1, 2030. Effluent and receiving water monitoring shall occur concurrently. 5. Analytical methods must achieve the lowest 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. 6. Pesticide monitoring shall include all pollutants included in Table E-6 (Pesticide Characterization) and occur concurrently with CTR pollutant monitoring.				

8.2. Monitoring Location RSW-002

8.2.1. The Permittee shall monitor the North Fork Mad River at Monitoring Location RSW-002 during periods of discharge as follows:

Table 0-5. Receiving Water Monitoring Requirements – Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	Standard units	Grab	Monthly	Part 136[1]
Chemical Oxygen Demand (COD)	mg/L	Grab	Monthly	Part 136[1]
Color	Color Units	Grab	Monthly	Part 136[1]
Dissolved oxygen	mg/L	Grab	Weekly	Part 136[1]
Temperature	°C or °F	Grab	Monthly	Part 136[1]
Turbidity	NTU	Grab	Monthly	Part 136[1]
Specific Conductance	µmhos/cm	Grab	Monthly	Part 136[1]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Dissolved Solids	mg/L	Grab	Monthly	Part 136[1]

Table Notes

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration).

9. OTHER MONITORING REQUIREMENTS

9.1. Visual Monitoring (Monitoring Locations EFF-001, RSW-001, and RSW-002)

9.1.1. 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 debris, floating materials, coloration, objectionable aquatic growths, oil and grease films, and odors. Visual observations, including corrective action measures taken to address these water quality concerns, shall be recorded and included in the Permittee's quarterly SMRs.

10. REPORTING REQUIREMENTS

10.1. Special Studies, Technical Papers, and Additional Monitoring Requirements

10.1.1. Pesticide Characterization Study. The purpose of this study is to collect effluent and receiving water 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 North Folk Mad River. Therefore, the permittee will complete pesticide characterization monitoring for those pesticides listed in Table E-6 below:

Table 0-6. 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

Constituent	Units	CAS Number
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

10.1.2. Pesticide monitoring shall be conducted concurrently with CTR pollutant monitoring.

10.2. General Monitoring and Reporting Requirements

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

10.3. Self-Monitoring Reports (SMRs)

10.3.1. The Permittee shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal. The Permittee shall maintain sufficient staffing and resources to ensure it submits 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.

10.3.2. 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.

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

Table 0-7. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	First day of second calendar month following the end of each quarter (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	1st 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	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	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)

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Annually	January 1 following (or on) permit effective date>	January 1 through December 31	March 1, each year (with annual report)
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

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

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

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ 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 (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

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

10.3.4.4. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

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

10.3.5.1. 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 calculations 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.

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

10.3.5.2.1. Facility name and address;

10.3.5.2.2. WDID number;

10.3.5.2.3. Applicable period of monitoring and reporting;

10.3.5.2.4. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);

10.3.5.2.5. Corrective actions taken or planned; and

10.3.5.2.6. The proposed time schedule for corrective actions.

10.3.5.3. 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).

10.3.5.4. The Permittee shall also submit all groundwater monitoring data to the State Water Board's Geographic Environmental Information Management System database (GeoTracker) at http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml.

10.3.5.5. 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 (http://waterboards.ca.gov/northcoast).

10.4. Discharge Monitoring Reports (DMRs)

10.4.1. DMRs are U.S. EPA reporting requirements. The Permittee shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. 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, November 1). Information about electronic DMR submittal is available at the DMR website: (http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring).

10.5. Other Reports

10.5.1. Special Study Reports and Progress Reports. As specified in the Special Provisions contained in section 6.3. of the Order, special study and progress reports shall be submitted in accordance with the following reporting requirements.

Table 0-8. Reporting Requirements for Special Provisions Reports

Order Section	Special Provision Requirement	Reporting Requirement
Special Provision 6.3.2.1	Pollutant Minimization Program	If required by the Regional Water Board Executive Officer
Special Provision 6.3.2.2.5	Pollutant Minimization Program, Annual Facility Report	March 1, annually, following development of a Pollutant Minimization Program
MRP General Monitoring Provisions 1.6	DMR-QA Study Report	Annually, per State Water Board instructions
MRP Effluent Monitoring Requirement 5.3.6	Verbal and written notification of chronic toxicity fail result	Within 24 hours after receipt of a fail result.
MRP Effluent Monitoring Requirement 5.4.1	Generic TRE Work Plan review and update	Review by August 1, 2027. Update as necessary
MRP Effluent Monitoring Requirement 5.4.2	TRE Workplan	No later than 30 days receipt of the acute or chronic toxicity monitoring result, or other toxicity event, that initiated the TRE requirement.
MRP Reporting Requirement 10.1.1	Pesticide Characterization Study	September 1, 2030
MRP Reporting Requirement 10.5.2	Annual Report	March 1, annually
MRP Notification Requirement 10.6	Notification of spills and unauthorized discharges	Oral reporting within 24 hours and written report within 5 days

10.5.2. 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 10.3.5.5, above. The report shall be submitted by **March 1st** of the following year. The report shall, at a minimum, include the following:

10.5.2.1. 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.

10.5.2.2. 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.

10.5.2.3. The names and general responsibilities of all persons employed at the Facility;

10.5.2.4. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations; and

10.5.2.5. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.

10.6. Spill Notification

10.6.1. 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 Board[2] 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

[2] 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.

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:

10.6.1.1. Name and contact information of caller;

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

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

10.6.1.4. Surface water bodies impacted, if any;

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

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

10.6.1.7. Responding agencies.

ATTACHMENT F - FACT SHEET

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ATTACHMENT F - FACT SHEET

As described in section 2.2 of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Permittee. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Permittee.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 0-1. Facility Information

WDID	1B80020OHUM
Permittee	California Redwood Company and Trinity River Timber Company dba North Fork Lumber Company
Name of Facility	Korbel Sawmill
Facility Address	1165 Maple Creek Road Korbel, CA 95550 Humboldt County
Facility Contact, Title and Phone	Ken Dunn, Operations Manager, (530) 524-1116
Authorized Person to Sign and Submit Reports	Ken Dunn, Operations Manager, (530) 524-1116
Mailing Address	P.O. Box 1038, Blue Lake, CA 95525
Billing Address	Same as Mailing Address
Type of Facility	Sawmill and Planing Mill (SIC Code 2421) Log Storage and Handling (SIC Code 2411)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable

Facility Permitted Flow	13.6 million gallons per day (mgd)
Facility Design Flow	13.6 mgd
Watershed	Mad River Hydrologic Unit, North Fork Mad River Hydrologic Area
Receiving Water	North Fork Mad River
Receiving Water Type	Inland Surface Water

1.1. California Redwood Company (Permittee) is the property owner and Trinity River Timber Company doing business as North Fork Lumber Company (Permittee) is the business owner and operator of the Korbel Sawmill (hereinafter Facility). The Regional Water Board staff finds that as the operator of the Facility, it is appropriate to name Trinity River Timber Company dba North Fork Lumber Company as the party primarily responsible for day-to-day operations, including fulfilling the monitoring and reporting requirements under this Order. California Redwood Company remains secondarily responsible for these requirements.

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 1 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. 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.

1.2. The Facility discharges log deck recycled sprinkler water to the North Fork Mad River, a water of the United States. The Permittee was previously regulated by Order No. R1-2019-0005 and NPDES Permit No. CA0005932 adopted on April 18, 2019, expired on May 31, 2024, and administratively continued through the effective date of this Order. Attachment B provides a map of the area around the Facility and a site drainage plan. Attachment C provides flow schematics of the Facility. A site visit was conducted on June 11, 2026, to observe operations and collect additional data to develop permit limitations and requirements for discharge.

1.3. The Permittee filed a report of waste discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit on June 1, 2023. The application was deemed complete on May 30, 2024.

2. FACILITY DESCRIPTION

The Permittees, California Redwood Company and Trinity River Timber Company dba North Fork Lumber Company, respectively, own and operate the Korbel Sawmill situated on approximately 150 acres in the town of Korbel and adjacent to the North Fork of the Mad River. The Facility was formerly owned and operated by California Redwood Company, but North Fork Lumber Company has been operating and maintaining the Facility since June 1, 2016.

Historically, onsite operations included sawmilling operations, lumber planing, lumber drying in kilns with an associated boiler water system, lumber storage and shipping, wet and dry log decking and sorting, and byproduct generation and management. The California Redwood Company decommissioned the boiler and kilns in August 2014 and the sawmill and planing operations in February 2015. Between May 2016 and December 2017, the mill was completely modernized and fulltime sawmill operations began in January 2018. Onsite operations now include decking and sprinkling fir logs; debarking and bucking; sawing, milling, and planing operations; lumber storage and shipping; and by-product generation. However, the discharge of any process wastewater from the Sawmill, including process wastewater from bark removal, sawing, resawing, edging, trimming, planing, machining, and by-product manufacturing to surface waters is prohibited (see Discharge Prohibitions 3.14). The only discharge water originates from stormwater runoff and log-deck sprinkler water that is treated using settlement basins and a constructed wetland prior to discharge to the Mad River (see item 2.1 below).

2.1. Description of Process Water Treatment and Controls

The wet decking operations include the application of water to log decks via sprinkler heads up to 24 hours per day to prevent whole logs from drying out and cracking. Log deck sprinkling occurs year-round. Storm water runoff and log-deck sprinkler water is conveyed from approximately 42 acres of the log deck and scale yard area, through ditches and culverts into four primary catch basins. Each catch basin is vegetated and equipped with a screened outlet. From the catch basins,

the commingled process water flows into a large concrete settling/stilling basin. Water for log deck sprinkling is provided from on-site wells and recirculated water from the settling/stilling basin.

Storm water runoff from the dry decked lower log yard is collected and conveyed to a settling basin and pump station, referred to as Station 9. This storm water runoff water empties into the second chamber of Station 9, which has concrete baffle walls and absorbent booms. Water flows into the third and fourth chambers, then to the pump station where it gets discharged to the North Fork Mad River or transferred to the large concrete settling/stilling basin. Appy Creek flows underground beneath the site and through the first chamber of Station 9. Appy Creek flows do not commingle with storm water runoff that enters the second chamber.

Log deck sprinkler runoff and storm water runoff from Station 9 is combined in the concrete settling/stilling basin. The concrete settling/stilling basin is 200 feet long by 40 feet wide, with the depth varying from 5-feet at the western end to 6-feet at the eastern/outlet end. A concrete ramp allows for removal of the settled material after draining. The large concrete settling/stilling basin has three K-rails with silt curtains attached that are installed at set intervals withing the basin, which promotes settling and minimizes the amount of suspended sediment being discharged to the constructed wetland. The Permittee maintains a floating oil absorbent boom across the overflow weir from the settling/stilling basin to the constructed wetland to minimize the release of oily water.

Water from the settling/stilling basin is either recirculated to the log deck sprinklers, pumped to the large storage basin (WSB-1), or allowed to flow over the outlet weir of the basin into the constructed wetland. Water in WSB-1 can be transferred to the adjacent swale (WSB-2) via gate valve near the base of WSB-1. Water in WSB-2 can then be transferred back to the constructed wetland or be added back to the large concrete settling/stilling basin for log deck sprinkler water. During dry weather, water can be pumped from onsite wells or Station 9 if water is needed for wetland vegetation. Settled material is removed from the settling/stilling basin annually.

The Permittee purchased an ozone generator trailer in 2025 with a capacity of 1,000 grams per hour and a pump that can run up to 150 gallons per minute. When needed, this system is primarily used to treat water in WSB-2, prior to transferring it to the constructed wetland. The portability of the system provides flexibility to apply ozone to other basins within the water management system where there is access to a power supply.

The Permittee completed improvements to the constructed wetland to improve performance during the term of Order No. R1-2019-0005, including reconfiguration of the gravel berms in the wetland interior to provide additional settling, aeration, and direct flow through vegetated areas between each berm. Filter fabric is

installed around the wetland outlet pipe to prevent the discharge of materials larger than 1 inch.

Associated with the sawmill is the CRC Woodwaste Disposal Site (WDS) located on the hillside about 0.25 miles northwest of the Korbel sawmill. The site was formerly used exclusively for the disposal of non-hazardous woodwaste (woody debris, soil, and gravel), which was generated during log-deck cleanup operations. All log-deck cleanup materials are now taken to the separating yard and separated into hog fuel and non-combustible waste (gravel and soil fines). The gravel is reused at the facility and the hog fuel and soil fines are transported offsite by local companies for beneficial reuse, such as soil amendments. The WDS is permitted under separate Order No. R1-2002-0037 as amended by Amendment Order No. R1-2013-0011.

2.2. Discharge Points and Receiving Waters

Treated process water from the constructed wetland discharges to a large vegetated low-lying area adjacent to the North Fork Mad River via a 3-foot diameter perforated outlet tee. The constructed wetland outflow is regulated by flows going over the 5-foot 4-inch diameter concrete outlet weir.

Order No. R1-2013-0008 authorized discharges to land at the former Discharge Point 002 consisting of cooling water discharged from the mill processes and storm water runoff from around the hog and fueling areas. These wastewaters were collected in a clarifier and pumped to forested land where it was land applied via a sprinkler system. Process water is no longer discharged at this location, and spray irrigation of storm water is now covered by the General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES No. CAS000001, Order No. 2014-0057-DWQ). Discharge Point 002 has not been retained in this Order.

2.3. Summary of Existing Requirements and SMR Data

Effluent limitations contained in Order No. R1-2019-0005 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of Order No. R1-2019-0005 are as follows:

Table 0-2. Historic Effluent Limitations and Monitoring Data[0]

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
pH	Standard units	--	--	6.5-8.5[2]	--	--	6.53-7.61
Nickel Impact Ratio	ratio	1[3]	--	1[3]	3.63	--	1.81
Zinc Impact Ratio	ratio	1[3]	--	1[3]	3.02	--	1.51
Acute Toxicity	% survival	70[4]/90[5]	--	--	85	--	--

Table Notes

1. Monitoring Data from March 2021 through March 2026.
2. Represents instantaneous minimum and instantaneous maximum effluent limits.
3. The Nickel Impact Ratio (NIR) and Zinc Impact Ratio (ZIR) are calculated as the ratio of the zinc and nickel concentration in the effluent and the applicable zinc and nickel standard (AMEL and MDEL).
4. Minimum for any one bioassay.
5. Median for any three or more consecutive bioassays.
6. Represents the minimum observed percent survival.

2.4. Compliance Summary

On October 4, 2021, the Regional Water Board invited the Discharger to enter settlement negotiations prior to the Regional Water Board issuing an administrative civil liability complaint (ACLC) for 24 violations for pH, Nickel Impact Ratio, and Zinc Impact Ratio. Of these violations that occurred during the period between June 1, 2019, and March 31, 2022, 19 were subject to MMPs, pursuant to Water Code section 13385, subdivisions (h) and (i), for an administrative civil liability totaling $57,000.

On July 28, 2022, the Executive Officer issued a Settlement Agreement and Stipulation for Entry of ACL Order No. R1-2022-0034 and assessed $57,000 in total penalties. The Parties agree that $36,000 of this administrative civil liability shall be permanently suspended pending completion of the Supplemental Environmental Project (SEP). The SEP consists of a portion of a project known as the Mad River Estuary Floodplain Habitat and Public Access Enhancement Project. The project was successfully completed in Spring 2023.

Due to the Facility's inability to comply with nickel and zinc effluent limitations in their previous NPDES permit (Order No. R1-2019-0005), a Time Schedule Order (TSO) was issued to California Redwood Company, Korbel Sawmill (CRC) and became effective on March 7, 2022. The TSO provided a compliance schedule for CRC to develop, submit, and implement methods of compliance, including the development and implementation of pollution prevention activities, or the construction of necessary treatment facility upgrades to meet the new effluent limitations for nickel and zinc. The Facility was required to achieve full compliance with the nickel and zinc effluent limitations by December 1, 2024.

On January 13, 2022, in accordance with task A of their TSO, the Facility submitted a Nickel and Zinc Water-Effect Ratio (WER) Work Plan that proposed to derive site specific water quality criteria for nickel and zinc by conducting a Water Effect Ratio (WER) study as their preferred alternative to achieving compliance with final limitations. The Permittee submitted their final WER report to the Regional Water Board on July 31, 2024. Results from the study concluded that the Facility's effluent has a WER value greater than one for nickel and zinc (a condition where the metals are effectively less toxic to the primary test species, *Ceriodaphnia dubia* or water flea, in site water relative to the laboratory-controlled water). Results from the study also provided supporting information for the Regional Water Board to continue the use of WER values for copper and lead, in conjunction with the newly proposed WER values for nickel and zinc to calculate site specific water quality criteria.

With the completion of the WER study, Regional Water Board found that the Permittee had made progress in resolving the Facility's nickel and zinc discharge exceedances. Furthermore, when results from the finalized WER study and the resulting RPA analysis were weighed in, the Permittee can be considered to have

completed task F of their TSO which requires achieving full compliance with final effluent limitations for nickel and zinc.

The R1-2022-0012 TSO was extended on October 10, 2025 (with the issuance of Order No. R1-2025-0050) to extend the final compliance date to December 1, 2027, and maintain interim limitations for the 2026-2027 discharge season (to avoid accruing mandatory minimum penalties (MMPs)) for discharge(s) exceeding effluent limitations established in their previous NPDES permit (R1-2019-0005) prior to the adoption of this revised NPDES permit (R1-2026-0045).

2.5. Planned Changes

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

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

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

3.2. California Environmental Quality Act (CEQA)

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

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

3.3.1. Water Quality Control Plan

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

Beneficial uses applicable to the North Fork Mad River within the North Fork Mad River Hydrologic Area of the Mad River Hydrologic Unit are summarized in Table F-3, below:

Table 0-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	North Fork Mad River within the North Fork Mad River Hydrologic Area of the Mad River Hydrologic Unit	Existing: Municipal and domestic supply (MUN); Agricultural supply (AGR); Industrial service supply (IND); Industrial process supply (PRO); Groundwater recharge (GWR); Freshwater replenishment (FRSH); Navigation (NAV); Water contact recreation (REC-1); Non-contact water recreation (REC-2); Commercial and sport fishing (COMM); 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: Hydropower generation (POW); 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 Mad River and its tributaries, no point source waste discharges are allowed during the period of May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow unless an exception to the requirement is granted by the Regional Water Board.

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 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.

This Order does not include any compliance schedules or interim effluent limitations

3.3.6. Antidegradation Policy

Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution 68-16 (“Statement of Policy with Respect to Maintaining High Quality of Waters in California”). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal

law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

3.3.7. Anti-Backsliding Requirements

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

3.3.8. Endangered Species Act Requirements

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

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

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 Mad River as impaired by temperature, sediment, and turbidity. Pursuant to CWA section 303(d), the Regional Water Board will develop TMDLs or alternate programs of implementation to address the impairment which will be implemented through various programs, including through provisions of NPDES permits.

With regard to temperature, the critical time period for temperature is in the summer, which is also the time period when point source discharges from the Facility are prohibited. Because of the summer discharge prohibition, the Facility does not contribute to temperature loadings in the receiving water during the hottest, most critical season of the year.

With regard to sediment, aspects of the sediment impairing the North Fork Mad 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.

On December 21, 2007, U.S. EPA approved the Mad River TMDLs for Sediment and Turbidity. In the Mad River basin, turbidity levels are closely linked with suspended sediment load. The TMDL identified that almost all sources of sediment in the Mad River watershed are from diffuse, nonpoint sources. Sediment is the pollutant for both the sediment and the turbidity TMDLs. Turbidity can be measured directly in the stream, but the pollutant causing the exceedance of the turbidity water quality standards in the Mad River watershed is fine sediment, or the suspended sediment load. The sediment and turbidity TMDLs are set equal to the loading capacity of the Mad River watershed. The TMDLs are the estimate of the total amount of sediment, from both natural and human-caused sources, that can be delivered to streams in the watershed without exceeding applicable water quality standards.

The U.S. EPA set the TMDLs at 120 percent of natural sediment loading for Mad River watershed. This approach to setting sediment TMDLs has been used in most of the watersheds in the North Coast of California. It is based on the assumption that a certain amount of loading greater than what is natural is acceptable, and will still result in meeting water quality standards. Prior TMDL studies of the relationship between sediment loading rates and fish habitat effects found that many North Coast waters supported healthy fish habitat conditions during periods in which sediment loads were up to 125 percent of natural loading rates. For the Mad River TMDL, U.S. EPA set the TMDLs more conservatively, at 120 percent of natural loading rates, in order to ensure that the turbidity water

quality standard is met (i.e., that “turbidity shall not be increased more than 20 percent above naturally occurring background levels”).

The TMDL identifies the Korbel Sawmill Complex NPDES permits as not allowing process water discharges to surface waters and, as a result, does not apply waste load allocations (WLAs) to the Facility. The Facility does, however, discharge process water to surface waters at Discharge Point 001. Review of the TMDL WLAs for other point source dischargers indicates that the WLAs for TSS and settleable solids were developed using limitations for these substances from the existing facility NPDES permits. However, Order No. R1-2002-0037 for the Facility did not contain any existing limitations for TSS or settleable solids. The TMDL WLA for turbidity, on the other hand, was derived from the water quality objective for turbidity in the Basin Plan. As a result, the only TMDL WLA applicable to the Facility is for turbidity, which is consistent with the turbidity receiving water limitation from Order No. R1-2019-0005 that was based on the Basin Plan. 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. Receiving water data over the term of Order No. R1-2019-0005 demonstrated that the discharge from the Facility has not resulted in a net increase in receiving water turbidity over naturally occurring background level. This Order continues to require turbidity monitoring during periods of discharge to determine the future necessity of a turbidity effluent limitation.

3.5. Other Plans, Polices and Regulations

3.5.1. On November 14, 2016, the Permittee received 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) for storm water discharges from the Facility.

3.5.2. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Permittee must file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights, and receive approval for such a change. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under Water Code section 1211.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent

limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

4.1. Discharge Prohibitions

4.1.1. Discharge Prohibition 3.1. The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.

This prohibition has been retained from Order No. R1-2019-0005 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 not disclosed by the Permittee, and are not reasonably anticipated to be present in the discharge. 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. R1-2019-0005. 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, and considered the provisions of section 13241. 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 solids or digester supernatant is prohibited, except as authorized under section 6.3.7.1 of this Order (Solids Disposal and Handling Requirements).

This prohibition has been retained from Order No. R1-2019-0005 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 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 G (Bypass) and H (Upset).

This prohibition has been retained from Order No. R1-2019-0005 and is based on the Basin Plan to protect the beneficial uses of the receiving water from unpermitted discharges, and the intent of the Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the state without filing for and being issued an Order. This prohibition applies to spills not related to sanitary sewer overflows (SSOs) and other unauthorized discharges of wastewater within the collection, treatment, and disposal facilities. The discharge of untreated or partially treated wastewater from the collection, treatment, or disposal facility represents an unauthorized bypass pursuant to 40 C.F.R. section 122.41(m) or an unauthorized discharge which poses a threat to human health and/or aquatic life, and therefore is explicitly prohibited by this Order.

4.1.5. Discharge Prohibition 3.5. 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, sections 60307(a) and 60307(b) of the California Code of Regulations (CCR).

This prohibition is retained from Order No. R1-2019-0005, and is necessary to prohibit unauthorized discharges to land.

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. R1-2019-0005. 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 discharge of treated process water to the North Fork Mad 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. R1-2019-0005 and is required by the Basin Plan. The Basin Plan prohibits discharges to the Mad 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 Mad River during the period of the year when the Mad River and its tributaries experience the heaviest water-contact recreation use.

4.1.8. Discharge Prohibition 3.8. During the period from October 1 through May 14, discharges of treated process water to the North Fork Mad River and its tributaries shall not exceed one percent of the flow of the North Fork Mad River, as calculated by using the flow at United States Geological Survey (USGS) Gauge No. 11481200 in the Little River. For the purposes of this Order, compliance with this discharge prohibition shall be determined as follows:

4.1.8.1. The flow in the North Fork Mad River (QNFMR) shall be calculated using the flow in the Little River (QLR) and the following calculation (units must be in cubic feet per second):

$$Q_{NFMR} = (0.2912)(Q_{LR}^{1.1132})$$

4.1.8.2. The discharge of treated process water shall be adjusted at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow of the North Fork Mad River. Daily flow calculations shall be based on flow meter comparisons reasonably read between the hours of 12:01 am and 12:00 midnight; and,

4.1.8.3. In no case shall the total volume of treated process water discharged in a calendar month exceed one percent of the total volume of the North Fork Mad River 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. R1-2019-0005 and is required by the Basin Plan (Section 5.2, North Coastal Basin Discharge Prohibition No. 3). The Basin Plan prohibits discharges to the Mad 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 with the one-percent flow requirement will be determined. This prohibition, set forth in Provision 3.8 of this Order, specifies that the discharge may comply with the one percent requirement as a monthly average for the surface water discharge season if a reading in the North Fork Mad River is taken at least once daily, and the discharge flow rate shall not be set for greater than one percent of the flow of the river at the time of the daily reading.

4.1.9. Discharge Prohibition 3.9. 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.

This prohibition is newly established by this Order and based on the Basin Plan 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.

4.1.10. Discharge Prohibition 3.10. 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 based on the Basin Plan 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.

4.1.11. Discharge Prohibition 3.11. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited under Water Code section 13375.

This prohibition has been retained from Order No. R1-2019-0005 and is based on the discharge prohibitions contained in section 13375 of the Water Code.

4.1.12. Discharge Prohibition 3.12. The discharge of domestic waste, treated or untreated, to surface waters is prohibited.

This prohibition has been retained from Order No. R1-2019-0005 and is based on the Basin Plan policy on the control of water quality with respect to on-site waste treatment and disposal practices.

4.1.13. Discharge Prohibition 3.13. The discharge of wood treatment chemicals or stain control fungicides to surface waters or to groundwater is prohibited.

This prohibition has been retained from Order No. R1-2019-0005 and is necessary to protect beneficial uses of the receiving water.

4.1.14. Discharge Prohibition 3.14. The discharge to surface water of process wastewater from bark removal (other than hydraulic barking as defined in 40 C.F.R. 429.11), sawing, resawing, edging, trimming, planning and machining is prohibited.

This prohibition has been retained from Order No. R1-2019-0005 and is based on the effluent limitations, guidelines and standards (ELGs) for the Sawmills and Planing Mills Subcategory for the Timber Products Processing Point Source Category (40 C.F.R. part 429, subpart K), which prohibits discharge of process wastewater pollutants from timber product processing procedures that include bark removal (other than hydraulic barking as defined in 40 C.F.R. 429.11), sawing, resawing, edging, trimming, planning and machining.

4.1.15. Discharge Prohibition 3.15. The discharge of debris is prohibited.

This prohibition has been retained from Order No. R1-2019-0005 and is based on the ELGs for the Sawmills and Planing Mills Subcategory for the Timber Products Processing Point Source Category (40 C.F.R. part 429, subpart I), which prohibits discharge of debris to surface waters.

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

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

4.2.1.1. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial

category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

4.2.1.2. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

4.2.1.3. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.

4.2.1.4. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

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

4.2.2. Applicable Technology-Based Effluent Limitations

Pursuant to CWA section 306(b)(1)(B), U.S. EPA has established standards of performance (technology-based limitations and standards) for sawmills and planing mills at 40 C.F.R. part 429, Effluent Guidelines and Standards for the Timber Products Processing Point Source Category. The requirements of 40 C.F.R. part 429 are applicable to any timber products processing operation, and any plant producing insulation board with wood as the major raw material, which discharges or may discharge process wastewater pollutants to the waters of the United States. The current Facility operations include lumber manufacturing, lumber and log storage, and wet decking, therefore effluent limits established 40 C.F.R. part 429, specifically subparts A (Barking), I (Wet Storage), and K (Sawmills and Planing Mills), are applicable to the discharge. Consistent with Order No. R1 2013-0008, this Order applies the requirements of 40 C.F.R. part 429.

4.2.2.1. Effluent Limitations Guidelines Based on 40 C.F.R. part 429

4.2.2.1.1. Standards of Performance Based on BPT

4.2.2.1.1.1. Barking: There shall be no discharge of process wastewater pollutants from mechanical barking operations into navigable waters [40 C.F.R. section 429.21(a)].

4.2.2.1.2. Standards of Performance Based on BPT and BAT

4.2.2.1.2.1. Wet Storage: There shall be no debris discharged and the pH shall be within the range of 6.0 to 9.0 [40 C.F.R. sections 429.101 and 429.103].

4.2.2.1.2.2. Sawmills and Planing Mills: There shall be no discharge of process wastewater pollutants into navigable waters [40 C.F.R. sections 429.121 and 429.123].

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 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, water quality-based effluent limitations (WQBELs) must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

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

4.3.2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

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

4.3.2.2. 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 Division of Drinking Water (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 and for the calculation of effluent limitations for nickel and zinc.

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 North Fork Mad 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. The RPA for this Facility 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. R1-2019-0005 and applies to discharges to the North Fork Mad 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 429 subpart I are not sufficient to meet these Basin Plan water quality standards.

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. For this RPA, the Regional Water Board used effluent and receiving water monitoring data generated from samples collected on February 27, 2023, for CTR pollutants. Additional effluent data for copper, lead, nickel, and zinc collected between March 2021 and March 2026, was also used in conducting the RPA.

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 7 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

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 all 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 0-4. Historic Effluent Limitations and Monitoring Data[0]

CTR No.	Pollutant	Units	C or Most Stringent WQO/WQC	MEC or Minimum DL[1]	B or Minimum DL[1]	RPA Result[2]
1	Antimony	µg/L	6	0.25	0.088	No

CTR No.	Pollutant	Units	C or Most Stringent WQO/WQC	MEC or Minimum DL[1]	B or Minimum DL[1]	RPA Result[2]
2	Arsenic	µg/L	10	8.5	0.079	No
3	Beryllium	µg/L	4	0.18	0.18	No
5	Chromium (Total)	µg/L	60	16	5.9	No
6	Copper	µg/L	123	28	3.9	No
7	Lead	µg/L	22.7	5.6	0.86	No
8	Mercury	µg/L	4	0.014	0.0094	No
9	Nickel	µg/L	100	51	6.7	No
13	Zinc	µg/L	101	67	6.3	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. 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).

Additional details regarding priority pollutant constituents for which reasonable potential was not found, but warrant further explanations are included in the following paragraphs:

Nickel. The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for nickel. The criteria for nickel is in dissolved concentrations. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. The U.S. EPA default conversion factors for nickel in freshwater are 0.998 for the acute criteria and 0.997 for the chronic criteria. The default WER used for calculating criteria for nickel is 1.0. The Permittee has conducted a WER study to determine the site-specific toxicity of nickel in the receiving water at the point of discharge. The Permittee's study concluded that a site specific WER of 10.9 for total recoverable nickel and 7.10 for dissolved nickel apply to the discharge. Using the worst-case measured hardness from the receiving water (22 mg/L), the U.S. EPA recommended dissolved-total translators of 0.998 and 0.997, respectively, and the site-specific WER, the applicable acute criterion (maximum 1-hour average concentration is 1,418 µg/L and the applicable chronic criterion (maximum 4-day average concentration) is 157.5 µg/L. The

MEC measured for nickel was 51 µg/L, based on 38 results obtained between March 2021 and March 2026. Therefore, nickel in the effluent does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives.

Zinc. The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for zinc. The criteria for zinc is in dissolved concentrations. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. The U.S. EPA default conversion factors for zinc in freshwater are 0.978 for the acute criteria and 0.986 for the chronic criteria. The default WER used for calculating criteria for zinc is 1.0. The Permittee has conducted a WER study to determine the site-specific toxicity of zinc in the receiving water at the point of discharge. The Permittee's study concluded that a site specific WER of 3.11 for total recoverable zinc and 2,15 for dissolved zinc apply to the discharge. Using the worst-case measured hardness from the receiving water (22 mg/L), the U.S. EPA recommended dissolved-total translators of 0.978 and 0.986, respectively, and the site-specific WER, the applicable acute criterion (maximum 1-hour average concentration) is 101 µg/L and the applicable chronic criterion (maximum 4-day average concentration) is 102 µg/L. The MEC measured for zinc was 67 µg/L, based on 37 results obtained between March 2021 and March 2026. Therefore, zinc in the effluent does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives.

Copper. The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for copper. The criteria for copper is 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 water effects ratio (WER) set for calculating criteria for copper is 1.0. The Permittee has conducted a WER study to determine the site-specific toxicity of copper in the receiving water at the point of discharge. The Permittee's study concluded that a site specific WER of 50 for total recoverable copper and 43 for dissolved copper apply to the discharge. Using the worst-case measured hardness from the receiving water (22 mg/L), the U.S. EPA recommended dissolved-total translator of 0.96, and the site-specific WER, the applicable chronic criterion (maximum 4-day average concentration of 2.5 µg/L) is adjusted to 122.8 µg/L and the applicable acute criterion (maximum 1-hour average concentration of 3.2 µg/L) is adjusted to 161.4 µg/L. The MEC measured for copper was 28 µg/L, based on 16 results obtained between March 2021 and March 2026. Therefore, copper in the effluent does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives.

Lead. The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for lead. The criteria for lead are in dissolved

concentrations. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. The acute and chronic the conversion factors for lead are dependent on hardness, and are derived using the following equation:

Conversion Factor = 1.46203 – [(ln{hardness})(0.145712)]

Using the worst-case measured hardness from the receiving water (22 mg/L), the resulting conversion factors are both 1.012. However, since dissolved lead is a fraction of total lead, the conversion factor should not be greater than 1. Therefore, a conservative conversion factor of 1 was used to calculate the acute and chronic CTR criteria.

The WER used for calculating criteria for lead is 1.0. The Permittee has conducted a WER study to determine the site-specific toxicity of lead in the receiving water at the point of discharge. The Permittee's study concluded that a site-specific WER of >49 for dissolved lead applies to the discharge. Total recoverable lead samples collected for the study did not meet test acceptability standards; therefore, a WER for total lead could not be developed. In the absence of a WER for total lead, the WER for dissolved lead has been used to calculate the acute and chronic CTR criteria.

Using the worst-case measured hardness from the receiving water (22 mg/L), a conversion factor of 1, and the site-specific WER of >49, the applicable chronic criterion (maximum 4-day average concentration of 0.46 µg/L) is adjusted to 22.7 µg/L and the applicable acute criterion (maximum 1-hour average concentration of 11.9 µg/L) is adjusted to 161 µg/L. The MEC measured for lead was 5.60 µg/L, based on 16 results obtained between March 2021 and March 2026. Therefore, lead in the effluent does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives.

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 (nickel and zinc), 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 reasonable potential analysis described in Fact Sheet section 4.3.3 did not identify the need to calculate effluent limitations for any pollutants with aquatic life criteria, therefore Steps 2 and 3 are included to describe the procedure that would be used in the future if reasonable potential is found for any pollutant(s) with aquatic life criteria.

Step 3: WQBELs, including an average monthly effluent limitation (AMEL) and maximum daily effluent limitation (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. The sampling frequency is set equal to 4 (n = 4) for the acute criterion and chronic 4-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. Since reasonable potential was not found for any pollutants with aquatic life criterion/objectives, no effluent limitations were calculated for this permit.

Step 4: When the most stringent water quality criterion/objective is a human health criterion/objective, the AMEL is set equal to the ECA. From Table 2 of the SIP, when CV = 0.6 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.

No human health water quality criteria/objectives were exceeded, therefore there is no need to calculate any human health WQBELs.

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 in this Order 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 toxicity, as specified in the MRP (Attachment E, section 5).

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) mean response of regulatory management concern—than the No Observed Effect Concentration (NOEC) hypothesis-testing approach. The TST hypothesis testing approach more reliably identifies toxicity – in relation to the acute (0.20 or more) mean responses of regulatory management concern – than the NOEC approach used previously to establish effluent limitations for acute toxicity.

In a letter dated February 12, 2014, the State Water Board submitted an alternative test process (ATP) request to U.S. EPA Region 9 for the statewide use of a two-concentration toxicity test design when using the TST approach. This two-concentration test design is composed of a single effluent concentration and a control concentration. U.S. EPA approved the ATP request on March 17th, 2014. In June 2014, the approval was challenged in court on procedural grounds under the Administrative Procedures Act by the Southern California Alliance of Publicly Owned Treatment Works (SCAP) and the Central Valley Clean Water Association (CVCWA). The U.S. EPA withdrew the approval and notified the State Water Board in a memo dated February 11, 2015.

It is important to note that U.S. EPA's rescission of its approval of the ATP is not based on the substantive TST statistical analysis or the scientific validity of a two-concentration test design. The withdrawal letter also states that currently

there is a proposed rulemaking to change the language in the ATP regulations at 40 C.F.R. part 136.

The benefits of requiring the TST in new or amended permits include improving the statistical power of the toxicity test and simplifying the analysis as compared to the traditional hypothesis statistical approaches or point estimates. The calculations are straightforward and provide a clear pass/fail result. With the withdrawal of the two- concentration test design approval, an NPDES permit can still require the TST for statistical analyses. Toxicity tests shall be run using a multi-concentration test design in accordance with 40 C.F.R. section 136.3, and the TST shall be utilized with the biological responses from the permitted instream waste concentration (IWC) and the control (effluent concentration of zero). However, even with only two of the five concentration biological responses being used, cost savings in the form of time and effort are still realized for the statistical analysis and data interpretation carried out by the Permittee, lab, and permit manager. This Order requires application of the TST for statistical analysis of whole effluent toxicity data.

Tests of Significant Toxicity Design. The TST's null hypothesis for chronic toxicity is:

H0: Mean response (IWC in % effluent) ≤ 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) ≤ 0.75 mean response (control)

Results shall be analyzed using the TST hypothesis testing approach in the MRP. For any chronic aquatic toxicity test method with both lethal and sub-lethal endpoints, the sub-lethal endpoint shall only be required. 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 (Attachment E, 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.

4.3.5.1. Acute Aquatic Toxicity

Order No. R1-2019-0005 included an effluent limitation for acute toxicity in accordance with the Basin Plan, which requires that the average survival of test organisms in undiluted effluent for any three consecutive 96-hour bioassay tests be at least 90 percent, with no single test having less than 70 percent survival. Furthermore, the permittee was subject to determination of "Pass" or "Fail" and "Percent (%) Effect" from acute toxicity using the Test of Significant Toxicity (TST) approach. The water flea (*Ceriodaphnia dubia*) was used for five acute toxicity tests in January 2021, January 2022 November 2023, March 2024, and November 2025.

The Toxicity Provisions identify that a discharge has reasonable potential to cause or contribute to an excursion above the acute aquatic toxicity water quality objectives if any of the acute aquatic toxicity tests results in a 'fail" at the in-stream waste concentration (IWC), or if any of the acute aquatic toxicity tests have a percent effect at the IWC greater than 10 percent. As the November 4, 2025, acute aquatic toxicity test resulted in a fail, with a percent effect for survival that exceeded 10%, it has been determined that a discharge from this Facility does have reasonable potential to cause or contribute to an exceedance of the water quality objectives for acute toxicity and the corresponding MDEL and MMEL have been included in this Order. Attachment E of this Order requires annual acute aquatic toxicity monitoring to demonstrate compliance with the Toxicity Provisions.

4.3.5.2. Chronic Aquatic Toxicity

For Order No. R1-2019-0005, the SIP required the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan. Under this monitoring, the Permittee was subject to determination of "Pass" or "Fail" and "Percent (%) Effect" from chronic toxicity using the Test of Significant Toxicity (TST) approach. Algae (*Selenastrum capricornutum*) was used for quarterly chronic toxicity tests during periods of discharge from March 2021 through March 2026.

The Toxicity Provisions identify that a discharge has reasonable potential to cause or contribute to an excursion above the chronic aquatic toxicity water quality objectives if any of the chronic aquatic toxicity tests results in a 'fail" at the IWC, of if any of the chronic aquatic toxicity tests have a percent effect at the IWC greater than 10 percent. As chronic aquatic toxicity tests conducted on January 4, 2022, April 21, 2022, December 19, 2022, and January 20,

2023, all resulted in a fail, with a percent effect for reproduction that exceeded 10%, it has been determined that a discharge from this Facility does have reasonable potential to cause or contribute to an exceedance of the water quality objectives for chronic toxicity and the corresponding MDEL and MMEL have been included in this Order. Attachment E of this Order requires quarterly chronic aquatic toxicity monitoring to demonstrate compliance with the Toxicity Provisions.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R1-2013-0008, with the exception effluent limitations for copper and lead.

Order No. R1-2019-0005 included effluent limitations for nickel and zinc based on the CTR aquatic life criteria. The Permittee has conducted a WER study to determine the site-specific toxicity of nickel and zinc in the receiving water at the point of discharge. The Permittee's study concluded that a site specific WER of 10.9 for total recoverable nickel and 7.10 for dissolved nickel, and a site specific WER of 3.11 for total recoverable zinc and 2.15 for dissolved zinc apply to the discharge. As shown in Table F-4 of this Fact Sheet, effluent monitoring data for nickel and zinc indicates that the discharge does not demonstrate reasonable potential to cause or contribute to an exceedance of the applicable CTR aquatic life criterion for nickel and zinc. The updated effluent nickel and zinc data and the updated WERs constitute new information, which permits the removal of effluent limitations consistent with CWA section 402(o)(2)(B). Therefore, this Order does not retain effluent limitations for nickel and zinc at Discharge Point 001.

4.4.2. Antidegradation Policies

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. R1-2019-0005.

4.4.3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on debris based on BPT. Restrictions on this pollutant 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 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 4.3.1 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 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 C.F.R. section 131.21(c)(1). 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 131.21(c)(2). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

4.5. Interim Effluent Limitations – Not Applicable

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

4.6. Land Discharge Specifications

This Order does not authorize discharges to land.

4.7. Recycling Specifications – Not Applicable

This Order does not authorize discharges of recycled water.

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.

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 Regional Water Board added Discharge Prohibition 3.9 to ensure that the discharge of chemical constituents above MCLs and secondary MCLs remains prohibited, and Discharge Prohibition 3.10 to ensure that material in concentrations that result in a visible film or coating on the surface are not discharged in concentrations that would affect the beneficial use (MUN).

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.

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. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

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

6.3.1.1.1. 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.

6.3.1.1.2. When new information that was not available at the time of permit issuance would have justified different permit conditions at the time of issuance.

6.3.1.2. 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.

6.3.1.3. 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.

6.3.1.4. Species Sensitivity Screening (Special Provision 6.3.1.4). 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.

6.3.1.5. 303(d)-Listed Pollutants (Special Provision 6.3.1.5). 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.

6.3.1.6. Water Effects Ratios (WERs) and Metal Translators (Special Provision 6.3.1.6). 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.

6.3.2. Best Management Practices and Pollution Prevention

6.3.2.1. 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.

6.3.3. Construction, Operation, and Maintenance Specifications

6.3.3.1. Operation and Maintenance (Special Provisions 6.3.4.1 and 2). 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-todate 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.

6.3.3.2. Settling Basin Operating Requirements (Special Provision 6.3.4.1). The Permittee operates a number of settling basins for commingled process water and storm water runoff. This Order requires the Permittee to operate the settling basins in a manner that prevents nuisance conditions and protects public health.

6.3.4. Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable

6.3.5. Other Special Provisions

6.3.5.1. Solids Disposal and Handling Requirements (Special Provision 6.3.7.1). This provision requires the Permittee to properly dispose of basin sediments and other solids removed from liquid waste in accordance with the provisions of the Water Code and title 27 of the CCR.

6.3.6. Compliance Schedules – Not Applicable

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

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

7.1. Influent Monitoring

7.1.1. Influent monitoring requirements for flow at Monitoring Location INF-001 from Order No. R1-2019-0005 were changed to Monitoring Location INF-002 and are necessary to evaluate the water balance for the constructed wetland.

7.2. Effluent Monitoring

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

7.2.1. Monitoring Location EFF-001

7.2.1.1. Effluent monitoring frequencies and sample types for flow, pH, TSS, COD, color, debris, dissolved oxygen, hardness, settleable solids, temperature, and turbidity have been retained from Order No. R1-2019-0005.

7.2.1.2. Effluent monitoring data collected during the term of Order No. R1-2019-0005 indicates that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives for copper, lead, nickel, and zinc. However, in order to ensure discharges of copper, lead, nickel, and zinc are not contributing to aquatic toxicity in the effluent, this Order includes quarterly monitoring for copper, lead, nickel, and zinc.

7.2.1.3. This Order includes a prohibition of discharges that exceed one percent of the flow of the North Fork Mad River as measured at Monitoring Location RSW-001 in the North Fork Mad River near Korbel. Therefore, this Order requires the Permittee to calculate and report the discharge dilution rate to determine compliance with the prohibition.

7.2.1.4. The once per permit term CTR priority pollutant monitoring must be performed in time to submit the data with the Report of Waste Discharge; therefore, Table Note 6 in Table E-3 of the MRP specifies that this monitoring must be completed by **April 1, 2030**.

7.2.1.5. In addition to CTR priority pollutant monitoring, once per permit term monitoring for pesticides listed in Table E-6 (Pesticide Characterization Study) of the Monitoring and Reporting Program 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.

7.3. Whole Effluent Toxicity Testing Requirements

Effluent monitoring data collected during the term of Order No. R1-2019-0005 indicates that the discharge exhibits reasonable potential to cause or contribute to an exceedance of water quality objectives for acute aquatic toxicity. Therefore, this Order includes annual effluent monitoring requirements for acute aquatic toxicity. Furthermore, effluent data indicates that the discharge further exhibits reasonable potential to cause or contribute to an exceedance of water quality objectives for

chronic aquatic toxicity. This Order includes quarterly 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 their 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.

7.4. Receiving Water Monitoring

7.4.1. Surface Water

7.4.1.1. Monitoring Location RSW-001

7.4.1.1.1. Receiving water monitoring is required to demonstrate compliance with the Receiving Water Limitations. Monitoring requirements at Monitoring Location RSW-001 for flow, pH, COD, color, dissolved oxygen, hardness, temperature, turbidity, specific conductance, total dissolved solids, and CTR priority pollutants have been retained from Order No. R1-2019-0005.

7.4.1.1.2. The once per permit term CTR priority pollutant monitoring must be performed in time to submit the data with the Report of Waste Discharge; therefore, Table Note 4 in Table E-4 of the MRP specifies that this monitoring must be completed by April 1, 2030.

7.4.1.1.3. 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-001 to generate adequate data to perform an RPA. Pesticide monitoring shall be sampled concurrently with CTR pollutant monitoring

7.4.1.2. Monitoring Location RSW-002

7.4.1.2.1. Monitoring Requirements at Monitoring Location RSW-002 for pH, COD, color, dissolved oxygen, temperature, turbidity, specific conductance, and total dissolved solids have been retained from Order No. R1-2019-0005.

7.5. Other Monitoring Requirements

7.5.1. Visual Monitoring. Visual monitoring requirements for the effluent (Monitoring Location EFF-001) and receiving water (Monitoring Locations RSW-001 and RSW-002) to ensure compliance with receiving water limitations in section 5 of the Order have been retained from Order No. R1-2019-0005.

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

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

7.5.3. Accelerated Monitoring Requirements. Table E-3 of the MRP includes accelerated monitoring requirements for parameters that are required to be monitored monthly.

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

7.5.5. Spill Notification. The MRP that is part of this Order establishes requirements for reporting spills and unauthorized discharges, with the exception of Sanitary Sewer Overflows (SSOs), which must be reported in accordance with the requirements of State Water Board Order No. WQ 2022-0103-DWQ and any revisions thereto.

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 that will serve as an National Pollutant Discharge Elimination System (NPDES) permit for Korbel Sawmill. 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 Regional Water Board's Internet site at: 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 website at: 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 at http://www.waterboards.ca.gov/northcoast.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on **October 5, 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 3-4, 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. Our Web address is http://www.waterboards.ca.gov/northcoast where you can access the current agenda for changes in dates and locations.

8.4. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

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

8.5. Information and Copying

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

8.6. Register of Interested Persons

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

8.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Matthew Herman at (707) 576-2683.

Attachment 0-1. Korbel Sawmill RPA Summary

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Antimony	ug/L	0.25	0.088	6	--	--	14	--	6	No
Arsenic	ug/L	8.5	0.079	10	340	150	--	--	10	No
Beryllium	ug/L	0.18	0.18	4.0	--	--	--	--	4.0	No
Cadmium	ug/L	<0.1	<0.1	0.7	0.8	0.7	--	--	5.0	No
Chromium (III)	ug/L	16	5.9	60	502	59.9	--	--	--	No
Chromium (VI)	ug/L	<20	<10	11	16	11	--	--	50	No
Copper	ug/L	28	3.9	123	161	123	1,300	--	--	No
Lead	ug/L	5.6	0.86	22.7	582	22.7	--	--	--	No
Mercury	ug/L	0.014	0.0094	0.050	--	--	0.050	--	2,000	No
Nickel	ug/L	51	6.7	100	1,418	158	610	--	100	No
Selenium	ug/L	<1.0	<1.0	5	--	5	--	--	50	No
Silver	ug/L	<0.1	<0.1	0.3	0.3	--	--	--	--	No
Thallium	ug/L	0.052	<0.1	1.7	--	--	1.7	--	2	No
Zinc	ug/L	67	6.3	101	101	102	--	--	--	No
Cyanide	ug/L	3	<3.0	5.2	22	5.2	700	--	150	No
Asbestos	MFL	--	--	7	--	--	7	--	7	Ud
2,3,7,8 TCDD	ug/L	<1.1E-06	<9.2E-07	1.3E-08	--	--	1.3E-08	--	3.0E-05	No
Acrolein	ug/L	<2.0	<2.0	320	--	--	320	780	--	No
Acrylonitrile	ug/L	<2.0	<2.0	0.059	--	--	0.059	--	--	No
Benzene	ug/L	<0.50	<0.50	1	--	--	1.2	--	1	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Bromoform	ug/L	<0.50	<0.50	4.3	--	--	4.3	--	--	No
Carbon Tetrachloride	ug/L	<0.50	<0.50	0.25	--	--	0.25	--	0.5	No
Chlorobenzene	ug/L	<0.50	<0.50	70	--	--	680	--	70	No
Chlorodibromomethane	ug/L	<0.25	<0.25	0.401	--	--	0.401	--	--	No
Chloroethane	ug/L	<0.50	<0.50	No Criteria	--	--	--	--	--	Uo
2-Chloroethylvinyl ether	ug/L	<1.0	<1.0	No Criteria	--	--	--	--	--	Uo
Chloroform	ug/L	<0.50	<0.50	No Criteria	--	--	--	--	--	Uo
Dichlorobromomethane	ug/L	<0.50	<0.50	0.56	--	--	0.56	--	--	No
1,1-Dichloroethane	ug/L	<0.50	<0.50	5	--	--	--	--	5	No
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.38	--	--	0.38	--	0.5	No
1,1-Dichloroethylene	ug/L	<0.50	<0.50	0.057	--	--	0.057	--	6	No
1,2-Dichloropropane	ug/L	<0.50	<0.50	0.52	--	--	0.52	--	5	No
1,3-Dichloropropylene	ug/L	<0.50	<0.50	0.5	--	--	10	--	0.5	No
Ethylbenzene	ug/L	<0.50	<0.50	300	--	--	3,100	--	300	No
Methyl Bromide	ug/L	<0.50	<0.50	48	--	--	48	--	--	No
Methyl Chloride	ug/L	<0.50	<0.50	No Criteria	--	--	--	--	--	Uo
Methylene Chloride	ug/L	<0.50	<0.50	4.7	--	--	4.7	--	5	No
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.17	--	--	0.17	--	1	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Tetrachloroethylene	ug/L	<0.50	<0.50	0.8	--	--	0.8	--	5	No
Toluene	ug/L	<0.50	<0.50	150	--	--	6,800	--	150	No
1,2-Trans-Dichloroethylene	ug/L	<0.50	<0.50	10	--	--	700	--	10	No
1,1,1-Trichloroethane	ug/L	<0.50	<0.50	200	--	--	--	--	200	No
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.6	--	--	0.6	--	5	No
Trichloroethylene	ug/L	<0.50	<0.50	2.7	--	--	2.7	--	5	No
Vinyl Chloride	ug/L	<0.50	<0.50	0.5	--	--	2	--	0.5	No
2-Chlorophenol	ug/L	<2.0	<2.0	120	--	--	120	--	--	No
2,4-Dichlorophenol	ug/L	<1.0	<1.0	93	--	--	93	--	--	No
2,4-Dimethylphenol	ug/L	<2.0	<2.0	540	--	--	540	--	--	No
2-Methyl- 4,6-Dinitrophenol	ug/L	<5.0	<5.0	13	--	--	13	--	--	No
2,4-Dinitrophenol	ug/L	<5.0	<5.0	70	--	--	70	--	--	No
2-Nitrophenol	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
4-Nitrophenol	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
3-Methyl 4-Chlorophenol	ug/L	<1.0	<1.0	No Criteria	--	--	--	--	--	Uo
Pentachlorophenol	ug/L	<1.0	<1.0	0.28	9	7	0.28	--	1	No
Phenol	ug/L	<1.0	<1.0	21,000	--	--	21,000	--	--	No
2,4,6-Trichlorophenol	ug/L	<2.0	<2.0	2.1	--	--	2.1	--	--	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Acenaphthene	ug/L	<0.3	<0.3	1,200	--	--	1,200	--	--	No
Acenaphthylene	ug/L	<0.2	<0.2	No Criteria	--	--	--	--	--	Uo
Anthracene	ug/L	<0.3	<0.3	9,600	--	--	9,600	--	--	No
Benzidine	ug/L	<5.0	<5.0	0.00012	--	--	0.00012	--	--	No
Benzo(a)Anthracene	ug/L	<0.3	<0.3	0.0044	--	--	0.0044	--	--	No
Benzo(a)Pyrene	ug/L	<0.3	<0.3	0.0044	--	--	0.0044	--	0.2	No
Benzo(b)Fluoranthene	ug/L	<0.3	<0.3	0.0044	--	--	0.0044	--	--	No
Benzo(ghi)Perylene	ug/L	<0.1	<0.1	No Criteria	--	--	--	--	--	Uo
Benzo(k)Fluoranthene	ug/L	<0.3	<0.3	0.0044	--	--	0.0044	--	--	No
Bis(2-Chloroethoxy)Methane	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
Bis(2-Chloroethyl)Ether	ug/L	<1.0	<1.0	0.031	--	--	0.031	--	--	No
Bis(2-Chloroisopropyl)Ether	ug/L	<2.0	<2.0	1,400	--	--	1,400	--	--	No
Bis(2-Ethylhexyl)Phthalate	ug/L	<1.0	<1.0	1.8	--	--	1.8	--	4	No
4-Bromophenyl Phenyl Ether	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
Butylbenzyl Phthalate	ug/L	<5.0	<5.0	3,000	--	--	3,000	--	--	No
2-Chloronaphthalene	ug/L	<5.0	<5.0	1,700	--	--	1,700	--	--	No
4-Chlorophenyl Phenyl Ether	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
Chrysene	ug/L	<0.3	<0.3	0.0044	--	--	0.0044	--	--	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Dibenzo(a,h)Anthracene	ug/L	<0.1	<0.1	0.0044	--	--	0.0044	--	--	No
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	600	--	--	2,700	--	600	No
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	400	--	--	400	--	--	No
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	5	--	--	400	--	5	No
3,3 Dichlorobenzidine	ug/L	<5.0	<5.0	0.04	--	--	0.04	--	--	No
Diethyl Phthalate	ug/L	<2.0	<2.0	23,000	--	--	23,000	--	--	No
Dimethyl Phthalate	ug/L	<2.0	<2.0	313,000	--	--	313,000	--	--	No
Di-n-Butyl Phthalate	ug/L	<5.0	<5.0	2,700	--	--	2,700	--	--	No
2,4-Dinitrotoluene	ug/L	<5.0	<5.0	0.11	--	--	0.11	--	--	No
2,6-Dinitrotoluene	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
Di-n-Octyl Phthalate	ug/L	<5.0	<5.0	No Criteria	--	--	--	--	--	Uo
1,2-Diphenylhydrazine	ug/L	<1.0	<1.0	0.04	--	--	0.04	--	--	No
Fluoranthene	ug/L	<0.05	<0.05	300	--	--	300	--	--	No
Fluorene	ug/L	<0.1	<0.1	1,300	--	--	1,300	--	--	No
Hexachlorobenzene	ug/L	<1.0	<1.0	0.00075	--	--	0.00075	--	1	No
Hexachlorobutadiene	ug/L	<1.0	<1.0	0.44	--	--	0.44	--	--	No
Hexachlorocyclopentadiene	ug/L	<1.0	<1.0	50	--	--	240	--	50	No
Hexachloroethane	ug/L	<1.0	<1.0	1.9	--	--	1.9	--	--	No
Indeno(1,2,3-cd)Pyrene	ug/L	<0.05	<0.05	0.0044	--	--	0.0044	--	--	No
Isophorone	ug/L	<1.0	<1.0	8.4	--	--	8.4	--	--	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
Naphthalene	ug/L	<0.2	<0.2	No Criteria	--	--	--	--	--	Uo
Nitrobenzene	ug/L	<1.0	<1.0	17	--	--	17	--	--	No
N-Nitrosodimethylamine	ug/L	<5.0	<5.0	0.00069	--	--	0.00069	--	--	No
N-Nitrosodi-n-Propylamine	ug/L	<5.0	<5.0	0.005	--	--	0.005	--	--	No
N-Nitrosodiphenylamine	ug/L	<1.0	<1.0	5	--	--	5	--	--	No
Phenanthrene	ug/L	<0.05	<0.05	No Criteria	--	--	--	--	--	Uo
Pyrene	ug/L	<0.05	<0.05	960	--	--	960	--	--	No
1,2,4-Trichlorobenzene	ug/L	<5.0	<5.0	5	--	--	2,700	--	5	No
Aldrin	ug/L	<0.0050	<0.0050	0.00013	3	--	0.00013	--	--	No
alpha-BHC	ug/L	<0.010	<0.010	0.0039	--	--	0.0039	--	--	No
beta-BHC	ug/L	<0.0050	<0.0050	0.014	--	--	0.014	--	--	No
gamma-BHC	ug/L	<0.010	<0.010	0.019	0.95	--	0.019	--	0.2	No
delta-BHC	ug/L	<0.0050	<0.0050	No Criteria	--	--	--	--	--	Uo
Chlordane	ug/L	<0.010	<0.010	0.00057	2.4	0.0043	0.00057	--	0.1	No
4,4'-DDT	ug/L	<0.010	<0.010	0.00059	1.1	0.001	0.00059	--	--	No
4,4'-DDE	ug/L	<0.010	<0.010	0.00059	--	--	0.00059	--	--	No
4,4'-DDD	ug/L	<0.010	<0.010	0.00083	--	--	0.00083	--	--	No
Dieldrin	ug/L	<0.010	<0.010	0.00014	0.24	0.056	0.00014	--	--	No
alpha-Endosulfan	ug/L	<0.010	<0.010	0.056	0.22	0.056	110	--	--	No

Constituent	Units	MEC	B	C	CMC	CC	Water & Org[2]	Org Only[3]	MCL	RP[4]
beta-Endolsulfan	ug/L	<0.010	<0.010	0.056	0.22	0.056	110	--	--	No
Endosulfan Sulfate	ug/L	<0.010	<0.010	110	--	--	110	--	--	No
Endrin	ug/L	<0.010	<0.010	00.36	0.086	0.036	0.76	--	2	No
Endrin Aldehyde	ug/L	<0.010	<0.010	0.76	--	--	0.76	--	--	No
Heptachlor	ug/L	<0.010	<0.010	0.00021	0.52	0.0038	0.00021	--	0.01	No
Heptachlor Epoxide	ug/L	<0.010	<0.010	0.0001	0.52	0.0038	0.0001	--	0.01	No
PCBs sum	ug/L	<0.10	<0.10	0.00017	--	0.014	0.00017	--	0.5	No
Toxaphene	ug/L	<0.50	<0.50	0.0002	0.73	0.0002	0.00073	--	3	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, No Effluent Data
6. Uo = Undetermined, No Water Quality Criteria