**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**CENTRAL VALLEY REGION**

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Central Valley Home Page (http://www.waterboards.ca.gov/centralvalley)

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CA0003981**
**TENTATIVE ORDER R5-2026-XXXX**

# WASTE DISCHARGE REQUIREMENTS FOR THE SIERRA PACIFIC INDUSTRIES, BURNEY DIVISION SAWMILL, SHASTA COUNTY

**Table 1. Discharger Information**

| | |
|---|---|
| Discharger: | Sierra Pacific Industries |
| Name of Facility: | Burney Division |
| Facility Street Address: | 36336 Highway 299 East |
| Facility City, State, Zip: | Burney, CA 96013 |
| Facility County: | Shasta County |

**Table 2. Discharge Location**

| Discharge Point | Effluent Description | Discharge Point Latitude (North) | Discharge Point Longitude (West) | Receiving Water |
|---|---|---|---|---|
| D-001 | Historical | 40.875505° | 121.704986° | Canyon Creek |
| D-002 | Industrial Storm Water | 40.880475° | 121.705003° | Tributary to Canyon Creek |
| D-003 | Wastewater | 40.876389° | 121.704722° | Groundwater |
| D-004 | Wastewater | 40.873611° | 121.701667° | Groundwater |

**Table 3. Administrative Information**

| | |
|---|---|
| This Order was Adopted on: | **<Adoption Date>** |
| This Order shall become effective on: | **<Effective Date>** |
| This Order shall expire on: | **<Expiration Date>** |
| The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations (CCR), and an application for reissuance of a NPDES permit no later than: | **<1-year prior to Order Expiration Date>** |
| The United States Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Central Valley Region have classified this discharge as follows: | **Minor Discharge** |

I, Patrick Pulupa, 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, Central Valley Region, on **<DATE>**.

_____
**PATRICK PULUPA**, Executive Officer

## WASTE DISCHARGE REQUIREMENTS
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## TABLES



## ATTACHMENTS

## I. FACILITY INFORMATION

Information describing the Sierra Pacific Industries, Burney Division (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

## II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Central Valley Water Board), finds:

**A. 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 Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

**B. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of Public Resources Code. Additionally, the adoption of land discharge requirements for the Facility constituents permitting of an existing facility that is categorically exempt from the provisions of CEQA pursuant to CCR, title 14, section 15301.

**C. Background and Rationale for Requirements.** The Central Valley 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 and G are also incorporated into this Order.

**D. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections **IV.B, IV.C, V.B, and VI.C.2.c** 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.

**E. Monitoring and Reporting.** 40 C.F.R. section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This Order and the Monitoring and Reporting Program, provided in Attachment E, establish monitoring and reporting requirements to implement federal and State

requirements. The burden, including costs, of these monitoring and reporting requirements bears a reasonable relationship to the need for these reports and the benefits to be obtained therefrom. The Discharger, as owner and operator of the Facility, is responsible for these requirements, which are necessary to determine compliance with this Order. The need for these requirements is further discussed in the Fact Sheet, Attachment F.

**F. Notification of Interested Persons.** The Central Valley Water Board has notified the Discharger 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.

**G. Consideration of Public Comment.** The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that Order R5-2020-0017 is rescinded upon the effective date of this Order and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central Valley Water Board from taking enforcement action for violations of the previous Order.

## III. DISCHARGE PROHIBITIONS

**A**. Discharge of wastewater from the Facility, as the Facility is specifically described in the Fact Sheet in section II.B, in a manner different from that described in this Order is prohibited.

**B**. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions I.G. and I.H. (Attachment D).

**C**. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code.

**D**. The discharge of recirculated sprinkler wastewater from log yard area, commingled recirculated sprinkler wastewater and storm water (i.e., “first flush”), cooling tower blowdown, boiler blowdown, cooling tower and boiler water treatment system effluent (e.g., ROS reject wastewater), or other waste of recognizable sawmill or cogeneration origin to surface waters or surface water drainage courses is prohibited.

**E**. The discharge of leachate from wood byproduct stockpiles and ash stockpiles to surface waters or surface water drainage courses is prohibited. Best management practices (BMPs) must be implemented to prevent such discharge.

**F**. The discharge of ash, cooling tower solids, or any other solids recognized as originating from cogeneration operations to surface waters or surface water drainage courses is prohibited.

**G**. Discharge of wastewater from the Log Yard Pond (i.e., recirculated sprinkler operations wastewater), two Evaporation Ponds, Substation Pond, and Retention Pond offsite (e.g., to surface waters or surface water drainage courses) is prohibited except to a suitable treatment plant or for reclamation purposes specifically approved by the Executive Officer.

**H**. The discharge of debris as defined in 40 C.F.R. Part 429, or any woody material recognized as originating from the sawmill operations to surface waters or surface water drainage courses is prohibited. Best management practices (BMPs) must be implemented to prevent such discharge.

**I**. The discharge of wastewater from barking, sawmill and planing operations, as defined in 40 C.F.R. Part 429, to surface waters or surface water drainage courses is prohibited.

**J**. Discharge of waste classified as 'hazardous', as defined in the CCR, title 22, section 66261.1 et seq., including water treatment chemicals, solvents, or petroleum products (e.g., grease, gasoline, and diesel), is prohibited.

**K**. Discharge of waste classified as "hazardous" as defined in CCR, Title 23, section 2521(a), CCR, section 2510, et seq., or "designated" (other than as specifically allowed in this Order), as defined in section 13173 of the Water Code, to the ponds is prohibited.

**L**. No waste constituents shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.

## IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations – Discharge Point 002

#### 1. Final Effluent Limitations – Discharge Point 002

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 002. Unless otherwise specified compliance shall be measured at Monitoring Location SW-006, as described in the Monitoring and Reporting Program, Attachment E:

a. **pH:**

i. 6.0 Standard Units (SU) as an instantaneous minimum.

ii. 9.0 SU as an instantaneous maximum.

### 2. Interim Effluent Limitations – NOT APPLICABLE

## B. Land Discharge Specifications

### 1. Land Discharge Specifications – D-003 and D-004

a. The discharge shall remain within the permitted wastewater treatment, storage, disposal, and containment structures at all times.

b. The Discharger shall operate all systems and equipment to optimize the quality of the discharge including pond aerators and collection screens.

c. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

d. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is sufficient to provide containment, the operating freeboard in any pond shall never be less than two (2) feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

e. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historic rainfall patterns.

f. By **1 October** of each year, the available capacity shall at least equal the volume necessary to comply with Land Discharge Specifications IV.B.1.d and IV.B.1.e (above).

g. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer if they contain wastewater or commingled wastewater and storm water, or are otherwise legally required to be so designed and constructed.

h. Existing berms in need of emergency repairs are not subject to the certification requirement by a Registered Civil Engineer. Emergency measures are considered to be temporary and may trigger a more detailed evaluation of long-term infrastructure needs and require additional certification.

i. No waste discharge shall occur within the 100-year floodplain, with the exception of areas where documented engineering measures are in place to mitigate for potential flooding conditions.

j. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically,

   i. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.

   ii. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

   iii. Dead algae, vegetation, and debris shall not accumulate on the water surface.

   iv. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

k. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.

l. As a means of ensuring compliance with Land Discharge Specification IV.B.1.k (above), the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment, storage, or disposal pond shall not be less than 1.0 mg/L for three consecutive sampling events.

m. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.

n. The Discharger shall monitor solids accumulation in the wastewater ponds at least every year prior to the wet season and shall periodically remove solids as necessary to maintain adequate storage capacity and minimize organic loading in the ponds in accordance with the Storm Water Pollution Prevention Plan required by Provision VI.C.3.b (below).

o. The annual average electrical conductivity of storm water and wastewater discharged to land shall not exceed a performance-based **annual average trigger of 584 µmhos/cm**. For each reporting year

(July 1 through June 30), if the annual average EC exceeds this trigger, the Discharger shall evaluate sources of salinity contributing to the exceedance and revise the Salinity Evaluation and Minimization Plan (SEMP) to include measures and a schedule of actions necessary to control salinity in the discharge (Provision VI.C.3.a, below).

**2. Land Application Area Specifications – LAA-001**

a. The discharge of industrial storm water shall be distributed uniformly on adequate acreage within the forested LAA to preclude the creation of nuisance conditions or unreasonable degradation of groundwater.

b. Application of industrial storm water to the forested LAA shall be managed to minimize erosion.

c. The forested LAA shall be managed to prevent the breeding of mosquitoes. In particular,

i. There shall be no standing water 72 hours after irrigation ceases;

ii. Tailwater ditches shall be maintained essentially free of emergent, marginal, and floating vegetation; and

iii. Low-pressure or unpressurized pipelines and diches accessible to mosquitoes shall not be used to store storm water.

d. LAAs shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Discharger shall temporarily stop water application immediately and implement corrective actions to ensure compliance with this Order.

e. Any irrigation runoff (tailwater) shall be confined to the forested LAA, returned to the Log Yard Pond, or discharged to surface water at SW-006.

f. Any storm water runoff from the forested LAA shall be allowed to percolate within the LAA, or be captured and returned to the Log Yard Pond, or discharged to surface water at SW-006.

**3. Solids Disposal Specifications – ASH-001**

Sludge, as used in this document, means the solid, semisolid, and liquid organic matter removed from treatment, storage, and disposal ponds. Solids, as used in this document, mean non-hazardous wood fly ash and bottom ash waste materials that are a result of the combustion of biomass material. Solids

also includes wood debris, twigs, chips, shavings and saw dust generated during sawmill operations.

a. Sludge and solid waste shall be removed from screens, sumps, staging areas and ponds as needed to ensure optimal operation and adequate storage capacity.

b. Any handling and storage of sludge and solid waste shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.

c. If removed from the Facility, sludge and solid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2, and in accordance with an approved Ash Management and Disposal Plan. Removal for reuse as a soil amendment, or land disposal at facilities (i.e., landfills, composting facilities, soil amendment sites operated in accordance with valid WDRs issued by a Regional Water Board) will satisfy this specification.

d. Any proposed change in solids use or disposal practice shall be reported in writing to the Executive Officer at least 30 days in advance of the change.

### C. Recycling Specifications – NOT APPLICABLE

## V. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Pursuant to Water Code section 13263 and the Basin Plan, the discharge shall not cause the receiving water to exceed the following toxicity water quality objectives:

a. Toxic substances shall not be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

b. **Acute Toxicity.** The acute aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.80, where the following null hypothesis, Ho, shall be used:

Ho: Mean response (ambient water) ≤ 0.80 • mean response (control)

And where the following alternative hypothesis, Ha, shall be used:

Ha: Mean response (ambient water) > 0.80 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting acute aquatic toxicity testing and rejecting this null hypothesis in accordance with the TST statistical approach. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the acute aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a "fail") is equivalent to an exceedance of the acute aquatic toxicity water quality objective.

c. **Chronic Toxicity.** The chronic aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.75, where the following null hypothesis, Ho, shall be used:

Ho: Mean response (ambient water) ≤ 0.75 • mean response (control)

And where the following alternative hypothesis, Ha, shall be used:

Ha: Mean response (ambient water) > 0.75 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing and rejecting this null hypothesis in accordance with the Test of Significant Toxicity (TST) statistical approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 (Chronic Freshwater and East Coast Methods) and Appendix B, Table B-1. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the chronic aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a "fail") is equivalent to an exceedance of the chronic aquatic toxicity water quality objective.

## B. Groundwater Limitations

Release of waste constituents from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of background groundwater quality, whichever is greater:

1. Constituents in concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding salinity provided that the Discharger complies with Salt Control Program Requirements.

2. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect any beneficial uses (e.g., by creating off-tastes and/or odor, producing detrimental physiological responses in human, plant, animal, or aquatic life [i.e., toxicity]).

## VI. PROVISIONS

### A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.

2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:

   a. If the Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, division 3, chapter 26.

   b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

      i. Violation of any term or condition contained in this Order;

      ii. Obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts;

      iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and

      iv. A material change in the character, location, or volume of discharge.

      The causes for modification include:

      i. New regulations. New regulations have been promulgated under section 405(d) of the CWA, or the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

      ii. Land application plans. When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

      iii. Change in sludge use or disposal practice. Under 40 C.F.R. section 122.62(a)(1), a change in the Discharger's sludge use or disposal practice is a cause for modification of the permit. It is cause for revocation and reissuance if the Discharger requests or agrees.

The Central Valley Water Board may review and revise this Order at any time upon application of any affected person or the Central Valley Water Board's own motion.

c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Central Valley Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

   The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:

   i. Contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or

   ii. Controls any pollutant limited in the Order.

   The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

e. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal.

g. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by U.S. EPA under section 307 of the CWA, or amendment thereto, for any discharge to the municipal system.

h. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.

i. Safeguard to electric power failure:

i. The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.

ii. Upon written request by the Central Valley Water Board, the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past 5 years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Central Valley Water Board.

iii. Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Central Valley Water Board not approve the existing safeguards, the Discharger shall, within 90 days of having been advised in writing by the Central Valley Water Board that the existing safeguards are inadequate, provide to the Central Valley Water Board and U.S. EPA a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Central Valley Water Board, become a condition of this Order.

j. The Discharger, upon written request of the Central Valley Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under the Central Valley Water Board Standard Provision contained in section VI.A.2.i of this Order.

The technical report shall:

i. Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

ii. Evaluate the effectiveness of present facilities and procedures and state when they became operational.

iii. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Central Valley Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of this Order, upon notice to the Discharger.

k. A publicly owned treatment works whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment and disposal facilities. The projections shall be made in January, based on the last 3 years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in 4 years, the Discharger shall notify the Central Valley Water Board by 31 January. A copy of the notification shall be sent to appropriate local elected officials, local permitting agencies and the press. Within 120 days of the notification, the Discharger shall submit a technical report showing how it will prevent flow volumes from exceeding capacity or how it will increase capacity to handle the larger flows. The Central Valley Water Board may extend the time for submitting the report.

l. The Discharger shall submit technical reports as directed by the Executive Officer. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

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

n. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.

o. This Order may be reopened to transfer ownership of control of this Order. The succeeding owner or operator must apply in writing requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory and certification requirements in the federal Standard Provisions (Attachment D, section V.B) and state that the new owner or operator assumes full responsibility for compliance with this Order.

p. If the Discharger submits a timely and complete ROWD for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

q. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

r. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, land discharge specification, or receiving water limitation of this Order, the Discharger shall notify the Central Valley Water Board by telephone (530) 224-4845 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Central Valley Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

## B. Monitoring and Reporting Program (MRP) Requirements

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

## C. Special Provisions

### 1. Reopener Provisions

a. Conditions that necessitate a major modification of a permit are described in 40 C.F.R. section 122.62, including, but not limited to:

i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, this permit may be reopened and modified in accordance with the new or amended standards.

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

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

c. **Water Effects Ratios (WER) and Metal Translators.** A default WER of 1.0 has been used in this Order for calculating criteria for applicable 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 Discharger performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

d. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).** On 17 January 2020, certain Basin Plan Amendments to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley became effective. Other provisions subject to U.S. EPA approval became effective on 2 November 2020, when approved by U.S. EPA. As the Central Valley Water Board moves forward to implement those provisions that are now in effect, this Order may be amended or modified to incorporate new or modified requirements necessary for implementation of the Basin Plan Amendments. More information regarding these Amendments can be found on the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) web page: (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

e. **Leachate Discharge Prohibition.** The Discharger is considering the addition of the wood byproduct stockpile leachate and/or ash stockpile leachate to its storm water treatment system for the option of surface water discharge at Discharge Point 002 (i.e., SW-006). If the Discharger submits a characterization of the wood byproduct stockpile leachate and/or the ash stockpile leachate and it is determined that the discharge would not cause, or threaten to cause pollution, contamination, or

nuisance in the receiving water, this Order may be amended or modified to revise Discharge Prohibition E and corresponding parts of the Order to allow discharge of wood fuel stockpile leachate and/or ash stockpile leachate to surface water.

f. **Test of Significant Toxicity.** This Order may be reopened for modification to revise the aquatic toxicity provisions if the Supreme Court determines that the test of significant toxicity cannot be used in NPDES permits and the State Water Board suspends or revises the aquatic toxicity water quality standards.

**2. Special Studies, Technical Reports and Additional Monitoring Requirements**

a. **Storm Water Action Levels and Best Management Practice (BMP) Improvement Evaluation.** If the discharge from Discharge Point D-002 (SW-006) exceeds any industrial storm water action level in Table 4, the Discharger must conduct a BMP Improvement Evaluation and implement, if necessary, BMP improvements to reduce the industrial storm water pollutant concentrations below the action level. The BMP Improvement Evaluation and proposed BMP improvements must be submitted to the Central Valley Water Board within 60 days of the exceedance date. The BMP improvement(s) must be implemented as soon as practicable thereafter. The Facility's Industrial Storm Water Pollution Prevention Plan (SWPPP) shall be updated in response to any implemented BMP improvements, as appropriate.

This Order includes the following storm water action levels:

**Table 4. Storm Water Action Levels**

| Parameter | Units | Annual Average Action Level | Instantaneous Maximum Action Level |
|---|---|---|---|
| Aluminum, Total Recoverable | µg/L | 1,100 | -- |
| Chemical Oxygen Demand | mg/L | 120 | -- |
| Electrical Conductivity @ 25°C | µmhos/cm | 700 | -- |
| Iron, Total Recoverable | µg/L | 1,000 | -- |
| Manganese, Total Recoverable | µg/L | 1,000 | -- |
| Oil and Grease | mg/L | 15 | 25 |
| Settleable Solids | ml/L | 0.2 | -- |
| Tannins and Lignins | mg/L | 30 | -- |
| Total Suspended Solids | mg/L | 100 | 400 |
| Zinc, Total Recoverable | µg/L | 260 | -- |

i. Compliance with the Annual Average Storm Water Action Level will be evaluated as an annual average of all analytical results within a reporting year, which is designated in Attachment A as beginning July 1 and ending June 30.

ii An exceedance of Instantaneous Maximum Storm Water Action Level occurs when two or more analytical results within a reporting year exceed the Instantaneous Maximum Storm Water Action Level.

iii. The Storm Water Action Levels in Table 4 are not effluent limitations on the industrial storm water discharge. An exceedance of an action level does not constitute a violation of this Order. The action levels are the pollutant concentrations above which the Central Valley Water Board has determined represent a level of concern and require further evaluation of the Discharger's SWPPP as it relates to controlling the discharge of the subject pollutant from the Facility.

Exceedance of a Storm Water Action Level requires the Discharger to conduct a BMP Improvement Evaluation. If the Storm Water Action Level continues to be exceeded after implementation of initial BMP improvements, the Discharger shall demonstrate that no further pollutant reduction is technologically available and economically achievable in light of best industry practice to meet the action level.

b. **Method of Compliance Report.** This provision requires the Discharger to submit a Method of Compliance Report by the due date provided in Attachment E, Table E-12. The rationale for the Method of Compliance Report is discussed in Fact Sheet section VI.B.2.b. The Method of Compliance Report shall provide a plan to address noted compliance issues and pond storage deficiencies and provide a timeline to implement improvements. The Report shall include the results of an assessment of the adequacy of pond operating procedures, an evaluation of pond influent and effluent sources, and the results of an analysis of potential engineering improvements to the pond transfer system (e.g., new pumps, changes to the pipe network) and/or pond system (e.g., additional storage).

c. **Background Well Work Plan.** This provision requires the Discharger to submit a work plan to address the dry background monitoring well (MW-6). The work plan shall also include a time schedule to replace the well. The rationale for the Background Well Work Plan is discussed in Fact Sheet section VI.B.2.c. The Discharger shall submit a Background Well Work Plan by the due date provided in Attachment E, Table E-12. The well shall be replaced following approval of the work plan.

d. **Groundwater Monitoring Annual Report:** Annual monitoring reports shall be submitted to the Central Valley Water Board by the **1st of February of the following year** (i.e., 1 January – 31 December report is due the next February 1st). Each Groundwater Monitoring Annual Report shall include the following:

i. Results of Groundwater Monitoring, if performed during the quarter, including:

(a) A narrative description of all preparatory, monitoring, sampling, and sample handling for groundwater monitoring.

(b) A field log for each well documenting depth to groundwater; method of purging; parameters measured before, during, and after purging; sample preparation (e.g., filtering); and sample preservation.

(c) Calculation of the groundwater elevation at each monitoring well, and determination of groundwater flow direction and gradient on the date of measurement.

(d) Summary data tables of historical and current water table elevations and analytical results.

(e) A scaled map showing relevant structures and features of the facility, the locations of monitoring wells, surface waters, and groundwater elevation contours referenced to an appropriate datum (e.g., NGVD).

ii. Copies of laboratory analytical report(s).

iii. A comparison of monitoring data to the groundwater limitations, and discharge specifications and an explanation of any violation of those requirements.

iv. A copy of inspection log page(s) documenting inspections completed during the quarter.

v. A copy of calibration log page(s) verifying calibration of all hand-held monitoring instruments performed during the quarter.

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

a. **Salinity Evaluation and Minimization Plan (SEMP).** The Discharger shall continue to implement a SEMP to identify and address sources of salinity discharged from the Facility.

The Discharger submitted a Notice of Intent to comply with the Salt Control Program and was determined to be eligible for the Alternative Permitting Approach. Accordingly, the Discharger shall participate in the CV-SALTS Prioritization and Optimization (P&O) Study. Furthermore, an evaluation of the effectiveness of the SEMP shall be submitted with the ROWD. The evaluation shall include, at minimum, the reporting year annual average concentrations of effluent electrical conductivity during the term of the Order.

i. **Surface Water Discharge.** If the industrial storm water discharge (SW-006) annual average electrical conductivity concentration for any reporting year (beginning July 1 and ending June 30) exceeds the SWAL of **700 µmhos/cm** (Section VI.C.2.a), the Discharger shall evaluate possible sources of salinity contributing to the exceedance of the trigger and update the SEMP to include a plan of action to control salinity.

ii. **Land Discharge.** If the pond (PND-001 through PND-006) annual average electrical conductivity concentration for any reporting year (beginning July 1 and ending June 30) exceeds a performance-based trigger **584 µmhos/cm** (Section IV.B.1.o), the Discharger shall evaluate possible sources of salinity contributing to the exceedance of the trigger and update the SEMP to include a plan of action to control salinity.

b. **Storm Water Pollution Prevention Plan (SWPPP).**

i. This Order requires the Discharger to continue to implement a site-specific SWPPP for the Facility. An updated SWPPP that addresses the necessary BMPs to ensure compliance with industrial Storm Water Action Levels specified in Table 4 (Section VI.C.2.a, above) shall be submitted to the Central Valley Water Board by the due date listed in Table E-12 of the Monitoring and Reporting Program. The SWPPP must include the information needed to determine compliance with all requirements of this Order and shall contain at a minimum, the following elements:

(a) Facility name and contact information;

(b) Site map;

(c) List of significant materials;

(d) Description of potential pollutant sources;

(e) Assessment of potential pollutant sources;

(f) Minimum BMPs;

(g) Advanced BMPs;

(h) Monitoring Implementation Plan;

(i) Salinity Evaluation and Minimization Plan; and

(j) Date that SWPPP was initially prepared and the date of each SWPPP amendment, if applicable.

ii. **BMP Summary Table.** The Discharger shall prepare a table, to be included in the SWPPP, summarizing each identified area of industrial activity, the associated industrial pollutant sources, the industrial pollutants, and the BMPs being implemented.

iii. **SWPPP Revisions.** The Discharger shall amend the SWPPP whenever there is a change in construction, site operation, or maintenance, which may affect the discharge of significant quantities of pollutants to surface water or groundwater. The SWPPP must also be amended if there are violations of this permit, or the Discharger has not achieved the general objectives of controlling pollutants in the storm water discharges. If the SWPPP has been significantly revised, the revised SWPPP shall be submitted to the Central Valley Water Board for review.

iv. A copy of the SWPPP shall be maintained at the Facility.

c. **First Flush Collection.** Each year, after cessation of log yard sprinkling, the Discharger shall collect the first 2 inches of rainfall from the log deck drainage areas NPDES 2-1 through NPDES 2-5 plus any recirculated sprinkler wastewater remaining in the Log Yard Pond (i.e., the “first flush”, which consists of comingled log deck recirculated sprinkler wastewater and storm water). The “first flush” shall be collected in the Log Yard Pond and the entire pond contents discharged either to the two Evaporation Ponds and/or the Retention Pond. The “first flush” shall not reach surface water. The “first flush” must be collected and conveyed from the Log Yard Pond to these ponds (Retention Pond and/or two Evaporation Ponds) for any subsequent sprinkling of logs prior to storm water discharge to surface water (i.e., the “first flush” collection may occur more than once a year). This Facility-specific BMP may be modified by approval of the Executive Officer.

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

a. **Treatment, Storage, and Disposal Pond Operating Requirements.** (i.e., Log Yard Pond, Fire Pond, two Evaporation Ponds, Substation Pond, and Retention Pond.)

i. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure.

ii. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

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

iv. All ponds and open containment structures shall be managed to prevent breeding of mosquitos. In particular,

(a) An erosion control program should ensure that small coves and irregularities are not created around the perimeter of the water surface;

(b) Weeds shall be minimized; and

(c) Dead algae, vegetation, and debris shall not accumulate on the water surface.

v. Freeboard shall never be less than 2 feet (measured vertically to the lowest point of overflow) except if lesser freeboard does not threaten the integrity of the pond, no overflow of the pond occurs, and lesser freeboard is due to direct precipitation or storm water runoff occurring as a result of annual precipitation with greater than 100-year recurrence interval, or a storm event with an intensity greater than 25-year, 24-hour storm event. As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

vi. The Log Yard Pond, Retention Pond and Evaporation Ponds shall have enough capacity to store the runoff from the log deck resulting from the cumulative total of 2 inches of rainfall measured at the Facility according to section IX.A of the MRP, Attachment E. The cumulative total of 2 inches of rainfall shall commence on the date the sprinkling of the log deck ceases for the wet season.

vii. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the pond areas (or property owned by the Discharger).

viii. As a means of discerning compliance with section VI.C.4.a.vii (above) the dissolved oxygen content in the upper zone (1 foot) of

wastewater in ponds shall not be less than 1.0 mg/L. This requirement does not apply when the pond contains less than 1.0 foot of water at its shallowest point.

ix. Ponds shall not have a pH less than 6.0 or greater than 9.0.

x. The discharge shall not cause degradation to any water supply.

xi. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control flow or water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.

**5. Special Provisions for Publicly-Owned Treatment Works (POTWs) – NOT APPLICABLE**

**6. Other Special Provisions**

a. **Sludge, Wood Byproduct, and/or Ash Management.**

i. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, California Code of Regulations (CCR), Division 2, Subdivision 1, Section 20005, et seq.

ii. **Ash Management and Disposal Plan.** The Discharger shall submit an ash management and disposal plan to the Central Valley Water Board in accordance with the time schedule included in the Technical Reports Table E-12. The plan shall describe, at a minimum:

(a) Sources and amount of ash generated annually;

(b) Location(s) of the temporary on-site storage, a description of the containment area and its associated BMPs, including but not limited to good housekeeping practices that minimize or prevent material tracking and mobilization by contact with storm water; and

(c) Plans for ultimate disposal. For landfill disposal, include the present classification of the landfill the name and location of the landfill.

iii. Any proposed change in sludge or ash use or disposal practice shall be reported to the Executive Officer at least 30 days in advance of the change.

iv. Non-hazardous fly ash removed from the Facility shall be:

(a) Beneficially reused, such as for soil amendment; or

(b) Disposed in a dedicated unit consistent with Title 27, Section 20200(b); or

(c) Disposed in a Class III landfill consistent with Title 27, Section 20200(d).

Any other use shall require approval by the Executive Officer.

v. This Order does not authorize storage, transportation, or disposal of ash or other wastes characterized as hazardous wastes. Appropriate separate regulatory coverage must be secured for such activities.

vi. Management of wood byproduct (biomass fuel) stockpiles and ash stockpiles shall not adversely affect surface water and groundwater quality.

**7. Compliance Schedules – Not Applicable**

## VII. COMPLIANCE DETERMINATION

**A. Industrial Storm Water Action Levels (sections VI.C.2.a, Table 4).** Compliance with the annual average SWALs in Table 4 will be evaluated as an annual average of analytical results within a reporting year, which is designated in Attachment A as beginning July 1 and ending June 30. An exceedance of an Instantaneous Maximum SWALs in Table 4 occurs when two or more analytical results within a reporting year exceeds the Instantaneous Maximum SWAL. The SWALs in Table 4 are not effluent limitations on the industrial storm water discharge. An exceedance of an action level does not constitute a violation of this Order. The action levels are the pollutant concentrations above which the Central Valley Water Board has determined represent a level of concern and require further evaluation of the Discharger's SWPPP as it relates to controlling the discharge of the subject pollutant from the Facility. Exceedance of an action level requires the Discharger to conduct a BMP Improvement Evaluation in accordance with section VI.C.2.a.

**B. Aluminum Storm Water Action Level (section VI.C.2.a).** Compliance with the storm water action level for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.

**C. Dissolved Oxygen Land Discharge Specification (section IV.B.1.l and section VI.C.4.a.viii).** Notwithstanding the dissolved oxygen monitoring frequency

specified in the Monitoring and Reporting Program (Attachment E, section VI.A.1), if the dissolved oxygen in any single pond is below 1.0 mg/L for any single sampling event, the Discharger shall implement daily dissolved oxygen monitoring of that pond until the minimum dissolved oxygen concentration is achieved for at least three consecutive days. If the dissolved oxygen in any single pond is below 1.0 mg/L for three consecutive days, the Discharger shall report the findings to the Central Valley Water Board in accordance with General Monitoring Provisions in the Monitoring and Reporting Program (Attachment E, section I). The written notification shall include a specific plan to resolve the low dissolved oxygen results within 30 days of the first date of violation.

**D. CV-SALTS Discharge to Land (section VI.C.3.a.ii).** For land discharges to any facility pond, compliance with effluent salinity trigger (e.g., electrical conductivity) shall be determined based on the performance-based trigger and the Discharger's enrollment under the Alternative Salinity Permitting Approach of the Central Valley Salt Control Program. Exceedance of the performance-based trigger will not be considered a violation of this Order provided the Discharger remains in compliance with all applicable Alternative Approach requirements, including active participation in the Prioritization and Optimization (P&O) Study and continued implementation of a Salinity Evaluation and Minimization Plan (SEMP). Persistent exceedances, groundwater degradation confirmed to be caused by the discharge, or failure to meet Salt Control Program participation requirements may result in further investigation and potential enforcement.

# ATTACHMENT A – DEFINITIONS

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

**Alternative Hypothesis**
A statement used to propose a statistically significant relationship in a set of given observations. Under the TST approach, when the Null Hypothesis is rejected, the Alternative Hypothesis is accepted in its place, indicating a relationship between variables and an acceptable level of toxicity.

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

Arithmetic mean = $\mu = \Sigma x / n$

where: $\Sigma x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

**Ash Stockpile Leachate**
Liquid formed when precipitation, or other liquid (e.g., sprinkler water for dust control), pass through and around an exposed ash stockpile and constituents transfer from the ash material into the surrounding liquid (i.e., they leach out).

**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.

**Best Management Practices (BMPs)**
Those control measures taken to mitigate changes to both quantity and quality of runoff caused through changes to land use. Specifically, those measures that are required to reduce or prevent pollutants in industrial storm water discharges in compliance with BAT/BCT.

**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.

**Bottom Ash**
The coarse ash particulate produced during the combustion of wood byproducts in the boiler, including boiler slag. The ash that drops out of the furnace gas stream and settles at the furnace bottom or is dislodged from furnace walls.

**Calendar Month**
A period of time from of the first of a month to the last day of the month (e.g., from January 1 to January 31, from April 1 to April 30, or from December 1 to December 31).

**Calendar Quarter**
A period of time defined as three consecutive calendar months (e.g., from January 1 to March 31, from April 1 to June 30, or from October 1 to December 31).

**Calendar Year**
A period of time defined as twelve consecutive calendar months (i.e., January 1 to December 31).

**Chronic Aquatic Toxicity Test**
A test to determine an adverse effect (sub-lethal or lethal) on a group of aquatic test organisms during an exposure of duration long enough to assess sub-lethal effects.

**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**
Debris is defined as 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.

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

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

**Endpoint**
An effect that is measured in a toxicity study. Endpoints in toxicity tests may include, but are not limited to survival, reproduction, and growth. A measured response of a receptor to a stressor. An endpoint can be measured in a toxicity test or field survey.

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

**Estuaries**
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.

**First Flush**
The First Flush collection contains wastewater originating from the log deck pond (Log Yard Pond, LND-001) and the initial industrial storm water runoff from the first two inches of rainfall from the log deck drainage area after log deck sprinkling with recirculated wastewater from the log deck pond has ceased. The source of the wastewater in the first flush is the result of the recirculation of wastewater from the log deck pond (LND-001) for log sprinkling activities. The First Flush collection may occur more than once in a wet season if the Discharger intermittently sprinkles logs with wastewater from the log deck pond (LND-001). The First Flush is considered wastewater and is prohibited from being discharged to surface water.

**Fly Ash**
The fine ash particulate produced from the combustion of wood byproducts in the boiler. The ash that is carried out of the furnace by a gas stream and is collected by a capture device such as a mechanical precipitator, electrostatic precipitator, or fabric filter.

**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).

**Instream Waste Concentration (IWC)**
The concentration of effluent in the receiving water after mixing.

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

**Median**
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

**Method Detection Limit (MDL)**
MDL is the minimum measured 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.

**Not Detected (ND)**
Sample results which are less than the laboratory's MDL.

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

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

**Percent Effect**
The percent effect at the instream waste concentration (IWC) shall be calculated using untransformed data and the following equation:

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

**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 Central Valley 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 Central Valley Water Board.

**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.

**Reporting Year**
A reporting year for the determination of compliance with storm water action levels shall be designated as July 1 through June 30.

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

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

**Source of Drinking Water**
Any water designated as municipal or domestic supply (MUN) in a Central Valley 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 ($\sigma$)**
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum [(x - \mu)^2] / (n - 1))^{0.5}$$

where:

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

**Statewide Toxicity Provisions**
The Statewide Toxicity Provisions became effective on 25 April 2022 and include statewide numeric water quality objectives for both acute and chronic toxicity and a program of implementation to control toxicity.

**Storm Water**
Storm water runoff from the site originates from a 25-acre log yard area, fuel building, rolling stock shop, sawmill, oil shed, fuel house, cogeneration plant, and cooling tower (Industrial Storm Water) and the remaining areas of the Facility (General Industrial Storm Water). Attachment C includes a site map (Figure C-1) that delineates the industrial storm water area drainage areas.

**Industrial Storm Water.** Industrial storm water in Drainage Area 1, NPDES 1-1 through NPDES 1-3 and NPDES 2-1 through NPDES 2-5 drainage areas, and the Land Application Area (LAA) are regulated by this Order as Industrial Storm Water. Industrial Storm Water is defined as storm water runoff, after First Flush collection, from these drainage areas that may have had direct contact with decked logs and sediment, and may contain non-contact saw cooling water, kiln condensate, and spring water. Industrial Storm Water that is collected in the Log Yard Pond is applied by sprinkler irrigation to the forested LAA, where the LAA tailwater is conveyed and allowed to discharge to an unnamed tributary to Canyon Creek at Discharge Point 002 (SW-006).

This Facility falls under the SIC code 2421 for General Sawmills and Planing Mills and SIC code 4911 for Steam Electric Power Generating Facilities, where coverage for both is authorized under State Water Resources Control Board's (State Water Board) General Permit for Storm Water Associated with Industrial Activities Order 2014-0057-DWQ, as amended in 2015 and 2018, NPDES Order No. CAS000001 (Industrial General Permit or IGP). The activities conducted in these drainage areas are consistent with the SIC Code and the authorized coverage under the Industrial General Permit; however, this individual industrial storm water permit was required until the Discharger could eliminate pollutants in the discharge and comply with the numeric action levels in the Industrial General Permit.

**General Industrial Storm Water.** This Order does not regulate discharges of general industrial storm water from Drainage Areas 2 through 5. All storm water runoff from these drainage areas is directed to discharge to Canyon Creek via four outfalls (i.e., SW-1,

SW-2, SW-3, SW-4) under the State Water Resources Control Board's (State Water Board) General Permit for Storm Water Associated with Industrial Activities Order 2014-0057-DWQ, as amended in 2015 and 2018, NPDES Order No. CAS000001 (Industrial General Permit or IGP).

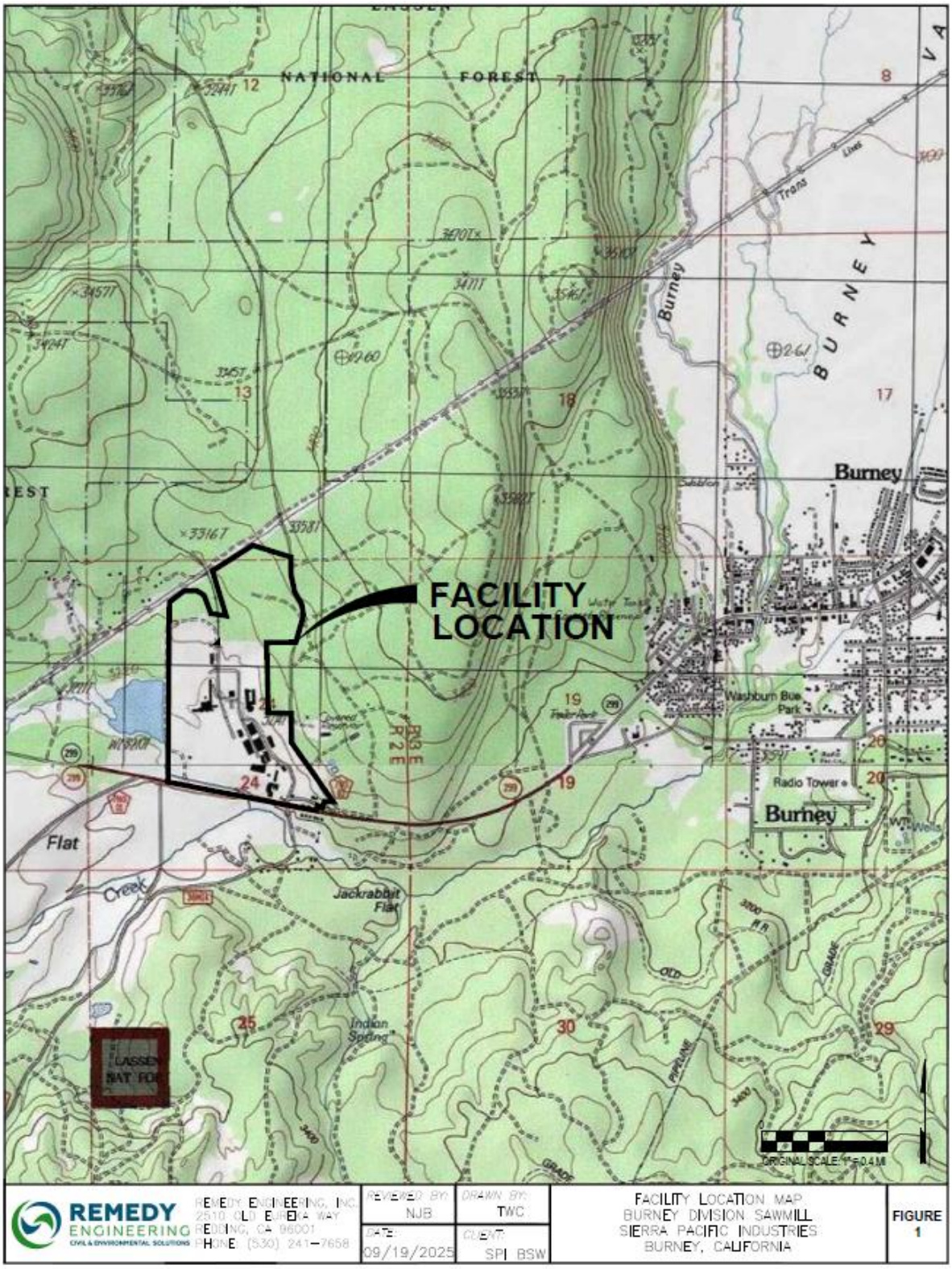
**Test of Significant Toxicity (TST)**
A statistical approach used to analyze aquatic toxicity test data, as described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 (Chronic Freshwater and East Coast Methods) and Appendix B, Table B-1.

**Wastewater**
Wastewater generated from the sawmill and cogeneration operations shall include log deck recirculated sprinkler wastewater, first flush wastewater from Drainage Area 1 and NPDES 2-1 through NPDES 2-5, boiler and cooling tower blowdown, and boiler and cooling tower water treatment system effluent (e.g., ROS reject water). Attachment C includes a site map (Figure C-1) that identifies the industrial storm water drainage areas.

**Wood Byproduct**
Wood byproducts are pieces of wood material that are left over from timber industry processes such as commercial lumber production at sawmills and planing mills. It includes bark, hog fuel, wood chips, planner shavings and other wood waste from offsite sources (e.g., wood chips from forest timber harvest operations).

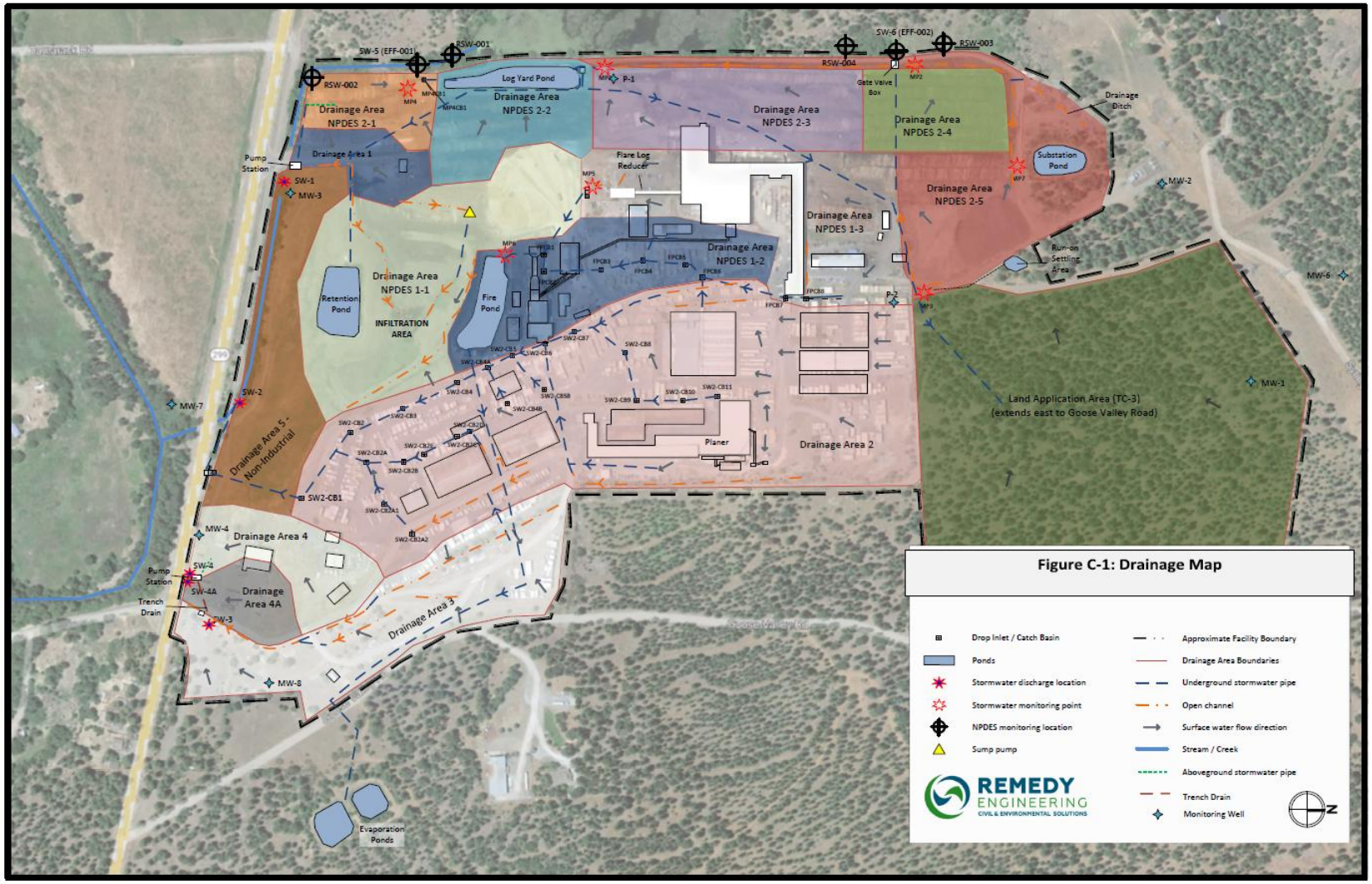
**Wood Byproduct Stockpile Leachate**
Liquid formed when precipitation, or other liquid (e.g., sprinkler water for dust control), pass through and around an exposed wood byproduct stockpile and constituents transfer from the wood byproduct material into the surrounding liquid (i.e., they leach out).

## ATTACHMENT B – MAP



## ATTACHMENT C – FLOW SCHEMATIC

### Figure C-1. Facility Storm Water Drainage Map



# ATTACHMENT D – STANDARD PROVISIONS

## I. STANDARD PROVISIONS – PERMIT COMPLIANCE

### A. Duty to Comply:

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code 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. section 122.41(a); Wat. Code, sections 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

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

### B. Need to Halt or Reduce Activity Not a Defense

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

### C. Duty to Mitigate

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

### D. Proper Operation and Maintenance

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

### E. Property Rights

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

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. section 122.5(c).)

## F. Inspection and Entry

The Discharger shall allow the Central Valley 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. section 1318(a)(4)(B); 40 C.F.R. section 122.41(i); Wat. Code, section 13267, 13383):

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

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. section 1318(a)(4)(B)(ii); 40 C.F.R. section 122.41(i)(2); Wat. Code, sections 13267, 13383);

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. section 1318(a)(4)(B)(ii); 40 C.F.R. section 122.41(i)(3); Wat. Code, section 13267, 13383); and

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. section 1318(a)(4)(B); 40 C.F.R. section 122.41(i)(4); Wat. Code, sections 13267, 13383.)

## G. Bypass

1. Definitions

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

   b. "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. section 122.41(m)(1)(ii).)

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

subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. section 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Central Valley Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. section 122.41(m)(4)(i)):

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

   b. 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. section 122.41(m)(4)(i)(B)); and

   c. The Discharger submitted notice to the Central Valley Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. section 122.41(m)(4)(i)(C).)

4. The Central Valley Water Board may approve an anticipated bypass, after considering its adverse effects, if the Central Valley Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. section 122.41(m)(4)(ii).)

5. **Notice**

   a. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Central Valley Water Board. As of 21 December 2023, all notices shall be submitted electronically to the initial recipient (State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/), defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. Part 3, section 122.22, and 40 C.F.R. Part 127. (40 C.F.R. section 122.41(m)(3)(i).)

   b. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions – Reporting V.E below (24-hour notice). The notice shall be sent to the Central Valley Water Board. As of 21 December 2023, all notices shall be submitted electronically to the initial recipient (State Water Board's California Integrated Water Quality System (CIWQS) Program website. (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/), defined in Standard Provisions – Reporting V.J below. Notices shall comply with

40 C.F.R. Part 3, section 122.22, and 40 C.F.R. Part 127. (40 C.F.R. section 122.41(m)(3)(ii).)

## H. Upset

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

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 I.H.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. section 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. section 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. section 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. section 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.1 below (24-hour notice) (40 C.F.R. section 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. section 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. section 122.41(n)(4).)

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

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

### B. Duty to Reapply

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

### C. Transfers

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

## III. STANDARD PROVISIONS – MONITORING

**A**. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. section 122.41(j)(1).)

**B**. 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. subchapters N or O. 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 or O. For the purposes of this paragraph, a method is sufficiently sensitive when 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 or O for the measured pollutant or pollutant parameter, or when:

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;

    a. 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;

    b. 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.

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, subchapters N or O, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. sections 122.21(e)(3), 122.41(j)(4); 122.44(i)(1)(iv).)

## IV. STANDARD PROVISIONS – RECORDS

**A**. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Valley Water Board Executive Officer at any time. (40 C.F.R. section 122.41(j)(2).)

**B.** Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. section 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. section 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. section 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. section 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. section 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. section 122.41(j)(3)(vi).)

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

1. The name and address of any permit applicant or Discharger (40 C.F.R. section 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. section 122.7(b)(2).)

## V. STANDARD PROVISIONS – REPORTING

### A. Duty to Provide Information

The Discharger shall furnish to the Central Valley Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Central Valley Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Central Valley Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. section 122.41(h); Wat. Code, sections 13267, 13383.)

### B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Central Valley Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 C.F.R. section 122.41(k).)

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. section 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Central Valley Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. section 122.22(b)(1));

    b. 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. section 122.22(b)(2)); and

c. The written authorization is submitted to the Central Valley Water Board and State Water Board. (40 C.F.R. section 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.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 V.B.3 above must be submitted to the Central Valley 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. section 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.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. section 122.22(d).)

6. Any person providing the electronic signature for such documents described in Standard Provision – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all of the 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. section 122.22(e).)

## C. Monitoring Reports

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. section 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Central Valley Water Board or State Water Board for reporting the results of monitoring, sludge use, or disposal practices. As of 21 December 2016, all reports and forms must be submitted

electronically to the initial recipient, defined in Standard Provisions – Reporting V.J, and comply with 40 C.F.R. part 3, section 122.22, and 40 C.F.R. part 127. (40 C.F.R. section 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Central Valley Water Board. (40 C.F.R. section 122.41(l)(4)(ii).)

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. section 122.41(l)(4)(iii).)

## D. 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. section 122.41(l)(5).)

## E. Twenty-Four Hour Reporting

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

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

   As of 21 December 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient (State Water Board) defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3. They may also

require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. section 122.41(l)(6)(i).)

**F. Planned Changes**

The Discharger shall give notice to the Central Valley 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. section 122.41(l)(1)):

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. section 122.41(l)(1)(i)); or

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 VII.A.1). (40 C.F.R. section 122.41(l)(1)(ii).)

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

**G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Central Valley 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. section 122.41(l)(2).)

**H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E 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 V.E and the applicable required data in appendix A to 40 C.F.R. part 127. The Central Valley Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. section 122.41(l)(7).)

### I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Central Valley Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. section 122.41(l)(8).)

### J. 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 appropriate initial recipient, as determined by U.S. EPA, and as 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. section 122.41(l)(9).)

## VI. STANDARD PROVISIONS – ENFORCEMENT

**A**. The Central Valley Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13350, 13385, 13386, and 13387.

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

### A. Non-Municipal Facilities

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

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. section 122.42(a)(1)):

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

    b. 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. section 122.42(a)(1)(ii));

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

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

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. section 122.42(a)(2)):

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

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

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

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

# ATTACHMENT E – MONITORING AND REPORTING PROGRAM

## Table of Contents



## Tables

# ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (40 C.F.R. section 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring and reporting requirements that implement federal and California requirements.

## I. GENERAL MONITORING PROVISIONS

**A**. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Central Valley Water Board.

**B**. Final effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.

**C**. Chemical, bacteriological, and bioassay analyses of any material required by this Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW; formerly the Department of Public Health), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. In the event an accredited laboratory is not available to the Discharger for any onsite field measurements such as pH, dissolved oxygen (DO), turbidity, temperature, and residual chlorine, such analyses performed by a non-accredited laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program for any onsite field measurements such as pH, DO, turbidity, temperature, and residual chlorine must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.

**D**. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

**E**. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

**F**. Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for a pollutant/parameter where:

1. The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;

2. The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;

3. The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.

**G**. The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this Monitoring and Reporting Program.

## II. MONITORING LOCATIONS

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

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

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|---|---|---|
| D-001 | SW-005 | **Historical Storm Water Discharge Point.** Prior outfall structure for the discharge of industrial storm water from the Log Yard Pond to Canyon Creek.<br>Latitude: 40.875505° N Longitude: 121.704986° W |
| -- | RSW-001 | **Historical Upstream Receiving Water.** In Canyon Creek, 100 feet upstream from Discharge Point 001.<br>Latitude: 40.875555° N - Longitude: 121.713333° W |
| -- | RSW-002 | **Historical Downstream Receiving Water.** In Canyon Creek, 100 feet downstream from Discharge Point 001<br>Latitude: 40.875000° N - Longitude: 121.704722° W |
| D-002 | SW-006 | **Industrial Storm Water.** A location where a representative sample of the industrial storm water treated by the forested LAA can be obtained to prior to discharge to the unnamed tributary to Canyon Creek at Discharge Point 002.<br>Latitude: 40.880475° N, Longitude: 121.708003° W |

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|---|---|---|
| -- | RSW-003 | **Upstream Receiving Water.** Unnamed tributary to Canyon Creek, approximately 100 feet upstream from the confluence of Discharge Point 002 and the unnamed tributary to Canyon Creek. Latitude: 40.880555° N - Longitude: 121.705278° W |
| -- | RSW-004 | **Downstream Receiving Water.** Unnamed tributary to Canyon Creek, approximately 100 feet downstream from the confluence of Discharge Point 002 and the unnamed tributary to Canyon Creek. Latitude: 40.880000° N - Longitude: 121.705000° W |
| -- | LAA-001 | **Land Application Area.** A location where representative monitoring of the application of industrial storm water to the forested LAA can be obtained. Latitude: 40.881944° N - Longitude: 121.697500° W |
| -- | SPL-001 | **Industrial Supply Water.** A location where a representative sample of the groundwater supply (PW-1, PW-2, and PW-3) for the cogeneration plant can be obtained prior to chemical additives and ROS treatment. Latitude: 40.873611° N - Longitude: 121.697778° W |
| -- | MW-001, MW-002, MW-006 | **Upgradient Groundwater Monitoring Wells.** MW-1, MW-2, and MW-6 are located upgradient of the industrial activities at the Facility. |
| | MW-003, MW-004, MW-005, MW-007, MW-008 | **Downgradient Groundwater Monitoring Wells.** MW-3, MW-4, MW-5, MW-7 and MW-8 are located downgradient of the industrial activities at the Facility. |
| D-003 | LND-001 | **Log Yard Pond** located in the southwest end of the log deck drainage area. During the dry season, the pond is used to recirculate sprinkler wastewater for the wet log deck operations. During the wet season, the pond is used to collect post-first flush industrial storm water from the log deck drainage areas (NPDES 2-1 through NPDES 2-5 and Drainage Area 1). Latitude: 40.876389° N - Longitude: 121.704722° W |
| -- | LND-002 | **Fire Pond** located on the south side of the cogeneration plant and used to collect industrial storm water runoff from the sawmill drainage area (NPDES 1-3) and cogeneration drainage area (NPDES 1-2). Latitude: 40.876667° N - Longitude: 121.699722° W |

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|---|---|---|
| -- | LND-003 | **Evaporation Pond 1** located in the southeast corner of the Facility and used for the storage, treatment, and disposal of wastewater from the sawmill and cogeneration operations (i.e., recirculated log deck sprinkler wastewater, first flush, and cogeneration wastewater).<br>Latitude: 40.875000° N - Longitude: 121.695000° W |
| -- | LND-004 | **Evaporation Pond 2** located in the southeast corner of the Facility and used for the storage, treatment, and disposal of wastewater from the sawmill and cogeneration operations (i.e., recirculated log deck sprinkler wastewater, first flush, and cogeneration wastewater).<br>Latitude: 40.875000° N - Longitude: 121.693333° W |
| -- | LND-005 | **Substation Pond** located on the north side of the Facility and used for the storage, treatment, and disposal of wastewater from the sawmill and cogeneration operations (i.e., recirculated log deck sprinkler wastewater, first flush, and cogeneration wastewater).<br>Latitude: 40.881944° N - Longitude: 121.703055° W |
| D-004 | LND-006 | **Retention Pond** on the south side of the Facility and used for the storage, treatment, and disposal of wastewater from the sawmill and cogeneration operations (i.e., recirculated log deck sprinkler wastewater, first flush, and cogeneration wastewater).<br>Latitude: 40.873611° - Longitude: 121.701667° W |
| -- | ASH-001 | **Ash Storage Area.** A location where a representative sample of wood ash can be collected prior to disposal offsite as an agricultural soil amendment.<br>Latitude: 40.875555° N - Longitude: 121.702222° W |

**Table E-1 Note:**

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

## III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

## IV. EFFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location SW-005 – HISTORICAL

1. **Historical Storm Water Discharge Point.** Industrial storm water from the Log Yard Pond can no longer be discharged at Discharge Point 001 to Canyon Creek. Discharge Point 001 has been permanently removed by the Discharger (i.e., designated historical).

### B. Monitoring Location SW-006

1. The Discharger shall monitor industrial storm water (effluent) at SW-006 in accordance with Table E-2 and the testing requirements described in section IV.B.2 below:

**Table E-2. Industrial Storm Water (Effluent) Monitoring**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Flow | MGD | Meter | 1/Day |
| Dissolved Oxygen | mg/L | Grab | 1/Week |
| Electrical Conductivity @ 25°Celcius | µmhos/cm | Grab | 1/Week |
| pH | Standard Units | Grab | 1/Week |
| Temperature | ºC | Grab | 1/Week |
| Aluminum, Total Recoverable | µg/L | Grab | 1/Month |
| Aluminum, Filtered | µg/L | Grab | 1/Month |
| Chemical Oxygen Demand (COD) | mg/L | Grab | 1/Month |
| Color | Standard Units | Grab | 1/Month |
| Copper, Total Recoverable | µg/L | Grab | 1/Month |
| Dissolved Organic Carbon (DOC) | mg/L | Grab | 1/Month |
| Hardness, Total (as CaCO3) | mg/L | Grab | 1/Month |
| Iron, Total Recoverable | µg/L | Grab | 1/Month |
| Iron, Filtered | µg/L | Grab | 1/Month |
| Manganese, Total Recoverable | µg/L | Grab | 1/Month |
| Manganese, Filtered | µg/L | Grab | 1/Month |
| Oil and Grease | mg/L | Grab | 1/Month |
| Settleable Solids | ml/L | Grab | 1/Month |
| Tannins and Lignins | mg/L | Grab | 1/Month |
| Total Dissolved Solids (TDS) | mg/L | Grab | 1/Month |
| Total Suspended Solids (TSS) | mg/L | Grab | 1/Month |
| Turbidity | NTU | Grab | 1/Month |
| Zinc, Total Recoverable | µg/L | Grab | 1/Month |
| Acute Whole Effluent Toxicity | (see section V.B) | (see section V.B) | 2/Year |
| Chronic Whole Effluent Toxicity | (see section V.C) | (see section V.C) | 1/Permit Term |
| Priority Pollutants and Other Constituents of Concern | Various | (see section IX.D) | 1/Permit Term |

2. **Table E-2 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-2:

   a. **Applicable to all parameters.** Samples shall be collected during the first 24-hours of the first discharge after the dry season during daytime business hours and according to the sample frequency in Table E-2 thereafter. Receiving water sampling shall be collected concurrently with industrial storm water (effluent) sampling, when applicable.

   b. **Flow Measurement.** Hydraulic flow rates are required when discharging to surface water, at a representative location prior to the point of discharge. In the absence of a functional flow meter, the Discharger shall estimate flow using alternative methods such as pump run time, pond water level changes, or other verifiable means appropriate for the conveyance system (e.g., open channel flow or pressure pipeline) and the liquid type. The method of measurement or estimation must be clearly specified in monitoring reports. Unless otherwise specified, any operational flow meter shall be equipped with a totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters used shall be calibrated at the frequency recommended by the manufacturer, typically at least once per year, and records of calibration or verification of alternative flow estimation methods shall be maintained for review upon request.

   c. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.

   d. **Sufficiently Sensitive Methods (SSM) Rule.** For all priority pollutant constituents listed in Table E-2 the RL shall be consistent with sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) and the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv).

   e. **Handheld Field Meter.** A handheld field meter may be used for **dissolved oxygen, electrical conductivity, pH, and temperature** provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

f. **Temperature**, **pH**, **hardness, and dissolved oxygen** shall be taken approximately at the same time on the same date with receiving water samples for these parameters.

g. **Dissolved Organic Carbon monitoring** shall be conducted concurrently with aluminum, pH, and hardness sampling.

h. **Filtered metals.** Metals with secondary maximum contaminant levels (aluminum, iron, and manganese) shall be determined from samples that have passed through a **1.5-micron filter** to reduce filterable residue prior to preservation and analysis. Metal constituents will then be analyzed using the acid-soluble procedure described in U.S. EPA-approved test methods as appropriate, or other methods approved by the Central Valley Water Board.

i. **Hardness** samples shall be collected concurrently with metals samples.

j. **Whole Effluent Toxicity monitoring** shall be in accordance with section V of this MRP.

k. **Aluminum.** Compliance with the storm water action level for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.

3. **Intermittent Discharge.** If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Toxicity Calendar Month, Quarter, and Year.

1. **Toxicity Calendar Month.** The toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine toxicity monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, or from June 15 to July 14, or from 31 January to February 28).

2. **Toxicity Calendar Quarter.** A toxicity calendar quarter is defined as three consecutive toxicity calendar months. For purposes of this Order, the toxicity calendar quarters begin on 1 January, 1 April, 1 July, and 1 October (i.e., from

1 January to 31 March, from 1 April to 30 June, from 1 July to 30 September, and 1 October to 31 December).

3. **Toxicity Calendar Year.** A toxicity calendar year is defined as twelve consecutive toxicity calendar months. For purposes of this Order, the toxicity calendar year will be the same as the storm water reporting year, which begins on 1 July (i.e., 1 July to 30 June), in years in which there are at least 15 days of discharge in at least one toxicity calendar quarter.

**B. Acute Toxicity Testing.** The Discharger shall meet the following acute toxicity testing requirements:

1. **Instream Waste Concentration (IWC) for Acute Toxicity.** The acute toxicity IWC is 100 percent effluent.

2. **Routine Monitoring Frequency.** The Discharger shall perform routine acute toxicity testing **twice per toxicity calendar year** in years in which there are at least 15 days of discharge in at least one toxicity calendar quarter.

3. **Acute Toxicity MMEL Compliance Testing.** Not applicable.

4. **Sample Types.** The Discharger may use flow-through or static renewal testing. For static renewal testing, the industrial storm water (effluent) samples shall be grab samples and shall be representative of the volume and quality of the discharge. The industrial storm water (effluent) samples shall be taken at Monitoring Location SW-006.

5. **Test Species.** Test species shall be rainbow trout (*Oncorhynchus mykiss*).

6. **Methods.** The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition or methods identified in the Code of Federal Regulations, title 40, part 136, or other U.S. EPA-approved methods. Temperature, total residual chlorine, and pH shall be recorded at the time of sample collection. No pH adjustment may be made unless approved by the Executive Officer.

7. **Test Failure.** If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must conduct a replacement test as soon as possible, as specified in subsection A.8, below.

8. **Replacement Test.** When a required toxicity test for routine monitoring 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, as applicable, for the toxicity 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 shall not be used to substitute for any other required toxicity tests.

Any specific monitoring event is not required to be initiated in the required time period when the Central Valley Water Board staff determines that the test was not initiated in the required time period due to circumstances outside of the Discharger's control that were not preventable with the reasonable exercise of care, and the Discharger promptly initiates, and ultimately completes, a replacement test.

**C. Chronic Toxicity Testing.** The Discharger shall meet the following chronic toxicity testing requirements:

1. **Instream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC is 100 percent effluent.

2. **Routine Monitoring Frequency.** The Discharger shall perform routine chronic toxicity testing **once per permit term** in a year in which there are at least 15 days of discharge in at least one toxicity calendar quarter.

3. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.

4. **Test Species.** Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with:

   a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);

   b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and

   c. The green algae, *Selenastrum capricornutum* (growth test).

5. **Test Methods.** Discharger shall conduct the chronic toxicity tests on industrial storm water (effluent) samples at the instream waste concentration for the discharge in accordance with species and test methods in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R02/013, 2002; Table IA, 40 C.F.R. part 136).

6. **Dilution and Control Water.** Dilution water and control water shall be prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

7. **Test Failure.** If the effluent chronic toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013, the Discharger must conduct a Replacement Test as soon as possible, as specified in subsection C.8, below.

8. **Replacement Test.** When a required toxicity test for routine monitoring 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, as applicable, for the toxicity 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, as applicable, for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test 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.

   Scenarios could occur in which a test is not initiated by a Discharger within the required time period. When this is caused by circumstances outside of the Discharger's control, that were not preventable with the reasonable exercise of care, the Central Valley Water Board will not require the test to be initiated within the originally required time period, provided that the Discharger promptly initiates, and ultimately completes, a replacement test. In such cases, the Central Valley Water Board must determine that the circumstances were not preventable with the reasonable exercise of care.

**D. Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are below.

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

2. The null hypothesis (Ho) for the TST statistical approach is:

   Mean discharge IWC response ≤ RMD x Mean control response, where the chronic RMD = 0.75 and the acute RMD = 0.80.

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

3. The relative "Percent Effect" at the discharge IWC is defined and reported as:

   Percent Effect = ((Mean control response – Mean discharge IWC response) / Mean control response) x 100.

   This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control, the test result is "Fail"). The Welch's t-test employed by the TST

statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

**E. WET Testing Notification Requirements.** The Discharger shall notify the Central Valley Water Board of test results with acute toxicity or a chronic toxicity test failure as soon as the Discharger learns of the exceedance, but no later than 24-hours after receipt of the monitoring results.

**F. WET Testing Reporting Requirements.** The Discharger shall submit the full laboratory report for all toxicity testing as an attachment to CIWQS for the reporting period (e.g., monthly, quarterly, semi-annually or annually) and provide the data (i.e., Pass/Fail) in the PET tool for uploading into CIWQS. The laboratory report shall include:

1. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test all results for effluent parameters monitored concurrently by the lab conducting the toxicity test(s); and progress reports on TRE investigations.

2. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.

3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

**G. Most Sensitive Species Screening.** – Not Applicable.

## VI. LAND DISCHARGE MONITORING REQUIREMENTS

### A. Monitoring Location LND-001 through LND-006

1. The Discharger shall monitor the Log Yard Pond (LND-001), Fire Pond (LND-002), Evaporation Pond 1 (LND-003), Evaporation Pond 2 (LND-004), Substation Pond (LND-005), and Retention Pond (LND-006) in accordance with Table E-3 and the testing requirements described in section VI.A.2 below:

**Table E-3 Land Discharge Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Visual Pond Observations | -- | Visual | 1/Week |
| Freeboard | Feet | Visual | 1/Week |
| Flow | gpd | Meter, Calculation | 1/Month |
| Dissolved Oxygen | mg/L | Grab | 1/Month |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Month |

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| pH | Standard Units | Grab | 1/Month |
| Oxidative-Reduction Potential (ORP as Eh) | milliVolts | Grab | 1/Month |
| Temperature | °C | Grab | 1/Month |
| Aluminum, Total Recoverable | µg/L | Grab | 1/Quarter |
| Aluminum, Filtered | µg/L | Grab | 1/Quarter |
| Chemical Oxygen Demand (COD) | mg/L | Grab | 1/Quarter |
| Color | Standard Units | Grab | 1/Quarter |
| Copper, Total Recoverable | µg/L | Grab | 1/Quarter |
| Copper, Dissolved | µg/L | Grab | 1/Quarter |
| Dissolved Organic Carbon | mg/L | Grab | 1/Quarter |
| Fixed Dissolved Solids (FDS) | mg/L | Grab | 1/Quarter |
| Hardness, Total (as CaCO3) | mg/L | Grab | 1/Quarter |
| Iron, Total Recoverable | µg/L | Grab | 1/Quarter |
| Iron, Filtered | µg/L | Grab | 1/Quarter |
| Manganese, Total Recoverable | µg/L | Grab | 1/Quarter |
| Manganese, Filtered | µg/L | Grab | 1/Quarter |
| Oil and Grease | mg/L | Grab | 1/Quarter |
| Tannins and Lignins | mg/L | Grab | 1/Quarter |
| Total Dissolved Solids (TDS) | mg/L | Grab | 1/Quarter |
| Total Organic Carbon (TOC) | mg/L | Grab | 1/Quarter |
| Zinc, Total Recoverable | µg/L | Grab | 1/Quarter |
| Zinc, Dissolved | µg/L | Grab | 1/Quarter |
| Settled Matter Depth | Feet, inches | Visual | 1/Year prior to rainy season |
| Standard Minerals | µg/L, mg/L | Grab | 1/Year |
| Priority Pollutants and Other Constituents of Concern | Various | Grab | 1/Permit Term |

2. **Table E-3 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-3:

   a. **Flow Measurement.** Hydraulic flow rates are required when discharging to land, at a representative location prior to the point of discharge. In the absence of a functional flow meter, the Discharger shall estimate flow using alternative methods such as pump run time, pond water level changes, or other verifiable means appropriate for the conveyance system

(e.g., open channel flow or pressure pipeline) and the liquid type. The method of measurement or estimation must be clearly specified in monitoring reports. Unless otherwise specified, any operational flow meter shall be equipped with a totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters used shall be calibrated at the frequency recommended by the manufacturer, typically at least once per year, and records of calibration or verification of alternative flow estimation methods shall be maintained for review upon request.

b. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type. Analysis shall be conducted using analytical methods with detection limits sufficiently low to determine compliance with applicable water quality objectives and criteria.

c. **Handheld Field Meter.** A handheld field meter may be used for **dissolved oxygen, electrical conductivity, pH, and temperature** provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

d. **Hardness** samples shall be collected concurrently with metals samples.

e. **Filtered metals.** Metals with secondary maximum contaminant levels **(aluminum, iron, and manganese)** shall be determined from samples that have passed through a **1.5-micron filter** to reduce filterable residue prior to preservation and analysis. Metal constituents will then be analyzed using the acid-soluble procedure described in U.S. EPA-approved test methods as appropriate, or other methods approved by the Central Valley Water Board.

f. **Dissolved Organic Carbon monitoring** shall be conducted concurrently with aluminum, pH, and hardness sampling.

g. **Standard Minerals.** Standard minerals shall include, at a minimum, the following elements/compounds: boron, calcium, iron, magnesium, manganese, potassium, sodium, chloride, phosphorus, sulfate, total alkalinity (including alkalinity series), and hardness, as well as verification that the analysis is complete (i.e., cation/anion balance).

h. **Priority Pollutants.** The Discharger shall conduct a priority pollutant and waste characterization scan (see Table E-10 for required constituents) for the discharge of recirculated sprinkler wastewater (Log Yard Pond) and

the discharge of cogeneration wastewater (Retention Pond) at least once during the permit term to identify any pollutants of concern that may be present in the wastewater discharged to land.

3. **Pond Observations.** In conducting pond monitoring, a log shall be kept of the pond conditions. Attention shall be given to the presence or absence of:

   a. Visible, films, sheens, or coatings;

   b. Odor;

   c. Fungi, slimes, or objectionable growths;

   d. Floating or suspended matter; and

   e. Discoloration.

   Notes on pond conditions shall be summarized in the monitoring report.

4. **Pond Integrity.** The Discharger shall visually inspect the Log Yard Pond (LND-001), Fire Pond LND-002), Evaporation Pond 1 (LND-003), Evaporation Pond 2 (LND-004), Substation Pond (LND-005), and Retention Pond (LND-006) on a monthly basis to check for failure and/or leakage.

## B. Monitoring Location LAA-001

1. **Annual Inspection.** The Discharger shall conduct an annual inspection of the forested Land Application Area (LAA-001) at the start of the wet season (1 October) to check the berms and all runoff control features and storm water conveyances as well as all pumps and meters to ensure proper operation and containment. The results of the annual inspection **shall be included as part of the October monthly monitoring report**.

2. The Discharger shall monitor the forested LAA (LAA-001) for each LAA field area when water is applied in accordance with Table E-4 and the testing requirements described in section VI.B.2 below:

**Table E-4 Forested LAA Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Storm Water Flow from Log Yard Pond | Gallons | Run-Time Reading & Calculation | Daily |
| Storm Water Loading | Inches/Day | Calculation | Daily |
| Water Returned to Log Yard Pond | Gallons | Calculation | Daily |
| Total Acreage Applied | Acres | Report Fields | 1/Month |

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Total Hydraulic Loading | Inches/Acre-Month | Calculation | 1/Month |
| Visual Observations | -- | Visual | 1/Month |

3. **Table E-4 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-4:

   a. **Daily Precipitation (24-hour period cumulative).** Upon approval by the Executive Officer, precipitation data may be obtained from monitoring station(s) not located at the Facility, as long as the alternate precipitation data is representative of the rainfall experienced at the Facility.

   b. **Total Hydraulic Load** calculation shall include both the amount of industrial storm water applied and the amount of precipitation in the forested LAA.

4. **LAA Observations.** The Discharger shall inspect the forested LAA monthly throughout the application season and observations from those inspections shall be documented in a bound logbook and scanned for inclusion in the monthly monitoring reports. The following items shall be documented for each field area:

   a. Evidence of erosion;

   b. Containment berm conditions;

   c. Conditions of above-ground pipes, flow control valves, sprinklers, and/or drip emitters (as applicable);

   d. Soil saturation;

   e. Ponding;

   f. Irrigation supply and potential runoff to offsite areas;

   g. Odors that have the potential to be objectionable at or beyond the property boundary; and;

   h. Insects (e.g., flies, mosquitoes);

   Note any corrective actions taken based on observations made.

## VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

## VIII. RECEIVING WATER MONITORING REQUIREMENTS

### A. Monitoring Location RSW-001 and RSW-002 – HISTORICAL

1. RSW-001 and RSW-002 are receiving water monitoring locations for the historical industrial storm water discharge from the Log Yard Pond at Discharge Point 001 (i.e., monitoring location SW-005).

### B. Monitoring Location RSW-003 and RSW-004

1. The Discharger shall monitor the unnamed tributary to Canyon Creek at RSW-003 and RSW-004 in accordance with Table E-5 and the testing requirements described in section VIII.B.2 below. However, if the only flows at RSW-003 are due to backwater conditions (the discharge backing up), and there are no other upstream flows from other sources, monitoring at RSW-003 is not required.

**Table E-5 Receiving Water Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Visual Observations | -- | Visual | 1/Week |
| Flow | cfs | Calculation | 1/Week |
| Dissolved Oxygen | mg/L | Grab | 1/Week |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Week |
| pH | SU | Grab | 1/Week |
| Temperature | °C | Grab | 1/Week |
| Turbidity | NTU | Grab | 1/Week |
| Aluminum, Total Recoverable | µg/L | Grab | 1/Month |
| Aluminum, Filtered | µg/L | Grab | 1/Month |
| Copper, Total Recoverable | µg/L | Grab | 1/Month |
| Copper, Dissolved | µg/L | Grab | 1/Month |
| Dissolved Organic Carbon | mg/L | Grab | 1/Month |
| Hardness, Total (as CaCO3) | mg/L | Grab | 1/Month |
| Iron, Total Recoverable | µg/L | Grab | 1/Month |
| Iron, Filtered | µg/L | Grab | 1/Month |
| Manganese, Total Recoverable | µg/L | Grab | 1/Month |
| Manganese, Filtered | µg/L | Grab | 1/Month |
| Tannins and Lignins | mg/L | Grab | 1/Month |
| Zinc, Total Recoverable | µg/L | Grab | 1/Month |
| Zinc, Dissolved | µg/L | Grab | 1/Month |
| Priority Pollutants and Other Constituents of Concern | Various | (see section IX.D) | 1/Permit Term |

2. **Table E-5 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-5:

   a. **Applicable to all parameters.** Samples shall be collected during the first 24-hours of the first discharge are the dry season during daytime business hours and according to the sample frequency in Table E-5 thereafter. Receiving water sampling shall be collected concurrently with industrial storm water (effluent) sampling, when applicable.

   b. **Flow Measurement.** Hydraulic flow rates are required when discharging to surface water, at a representative location prior to the point of discharge. In the absence of a functional flow meter, the Discharger shall estimate flow using alternative methods such as other verifiable means appropriate for the conveyance system (e.g., open channel flow) and the liquid type. The method of measurement or estimation must be clearly specified in monitoring reports. Flow meters used shall be calibrated at the frequency recommended by the manufacturer, typically at least once per year, and records of calibration or verification of alternative flow estimation methods shall be maintained for review upon request.

   c. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. Part 136 allowed sample type.

   d. **Sufficiently Sensitive Methods (SSM) Rule.** For all priority pollutant constituents listed in Table E-5 the RL shall be consistent with sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) and the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv).

   e. **Handheld Field Meter.** A handheld field meter may be used for **dissolved oxygen, electrical conductivity, pH, and temperature** provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

   f. **Temperature**, **pH**, **hardness, and dissolved oxygen.** The receiving water samples for temperature, pH, hardness, and dissolved oxygen shall be taken approximately at the same time on the same date as the industrial storm water (effluent) samples for these parameters.

g. **Dissolved Organic Carbon monitoring** shall be conducted concurrently with aluminum, pH, and hardness sampling.

h. **Filtered metals.** Metals with secondary maximum contaminant levels (aluminum, iron, and manganese) shall be determined from samples that have passed through a **1.5-micron filter** to reduce filterable residue prior to preservation and analysis. Metal constituents will then be analyzed using the acid-soluble procedure described in U.S. EPA-approved test methods as appropriate, or other methods approved by the Central Valley Water Board.

i. **Hardness** samples shall be collected concurrently with metals samples.

3. **Receiving Water Observations.** In conducting receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-003 and RSW-004 when discharging to the unnamed tributary to Canyon Creek. Attention shall be given to the presence or absence of:

a. Floating or suspended matter;

b. Discoloration;

c. Bottom deposits;

d. Aquatic life; and

e. Visible films, sheens, or coatings;

f. Fungi, slimes, or objectionable growths;

g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring report.

## C. Monitoring Location MW-001 through MW-008

1. The Discharger shall conduct groundwater monitoring at MW-001, MW-002, MW-004, MW-007, MW-008 and any new groundwater monitoring wells in accordance with Table E-6 and the testing requirements described in section VIII.C.2 below:

**Table E-6. Groundwater Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Depth to Groundwater | ±0.01 feet | Measurement | 1/Quarter |
| Groundwater Elevation | ±0.01 feet | Calculated | 1/Quarter |
| Gradient | feet/feet | Calculated | 1/Quarter |
| Gradient Direction | degrees | Calculated | 1/Quarter |

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Dissolved Oxygen | mg/L | Grab | 1/Quarter |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Quarter |
| Oxidation Reduction Potential (ORP, as Eh) | milliVolts | Grab | 1/Quarter |
| pH | Standard Units | Grab | 1/Quarter |
| Temperature | °C | Grab | 1/Quarter |
| Turbidity | NTU | Grab | 1/Quarter |
| Aluminum, Total Recoverable | µg/L | Grab | 1/Quarter |
| Aluminum, Filtered | µg/L | Grab | 1/Quarter |
| Color | SU | Grab | 1/Quarter |
| Dissolved Organic Carbon (DOC) | mg/L | Grab | 1/Quarter |
| Fixed Dissolved Solids | mg/L | Grab | 1/Quarter |
| Iron, Total Recoverable | µg/L | Grab | 1/Quarter |
| Iron, Filtered | µg/L | Grab | 1/Quarter |
| Manganese, Total Recoverable | µg/L | Grab | 1/Quarter |
| Manganese, Filtered | µg/L | Grab | 1/Quarter |
| Total Dissolved Solids | mg/L | Grab | 1/Quarter |
| Tannins and Lignins | mg/L | Grab | 1/Quarter |
| Total Organic Carbon (TOC) | mg/L | Grab | 1/Quarter |
| Standard Minerals | µg/L, mg/L | Grab | 1/Year |

2. **Table E-6 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-6:

    a. **Prior to construction and/or beginning a sampling program** of any new groundwater monitoring wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for approval. Once installed, all new wells shall be added to the monitoring network (which currently consists of Monitoring Wells MW-001 through MW-008 and shall be sampled and analyzed according to the schedule in Table E-7. All samples shall be collected using approved U.S. EPA methods.

    b. **Groundwater elevation.** Prior to purging or sampling, the groundwater depth shall be measured in each well to the nearest 0.01 feet. Groundwater elevations shall then be based on depth-to-water measurements from a surveyed measuring point elevation on the well. The groundwater elevation shall be used to calculate the direction and gradient of groundwater flow, which must be reported.

    c. **Sampling Methods**. Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged by low flow method by

U.S. EPA Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures EPA/540/s-95/504 until temperature, pH, and electrical conductivity have stabilized.

d. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. Part 136 allowed sample type. Analysis shall be conducted using analytical methods with detection limits sufficiently low to determine compliance with applicable water quality objectives and criteria.

e. **Method Detection and Reporting Limits.** The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For the monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., “trace” or “ND”) in data from background monitoring points for that medium, the analytical method having the lowest method detection limit (MDL) shall be selected from among those methods which would provide valid results in light of any matrix effects or interferences.

f. **Filtered metals.** Metals with secondary maximum contaminant levels (aluminum, iron, and manganese) shall be determined from samples that have passed through a **1.5-micron filter** to reduce filterable residue prior to preservation and analysis. Metal constituents will then be analyzed using the acid-soluble procedure described in U.S. EPA-approved test methods as appropriate, or other methods approved by the Central Valley Water Board.

g. **Standard Minerals.** Standard minerals shall include, at a minimum, the following elements/compounds: boron, calcium, iron, magnesium, manganese, potassium, sodium, phosphorus, chloride, sulfate, total alkalinity (including alkalinity series), and hardness, as well as verification that the analysis is complete (i.e., cation/anion balance).

3. **Groundwater Network.** The Discharger shall maintain the groundwater monitoring well network. If a groundwater monitoring well is dry for more than four consecutive sampling events or is damaged, the Discharger shall submit a work plan and proposed time schedule to replace the well. The well shall be replaced following approval of the work plan.

## IX. OTHER MONITORING REQUIREMENTS

### A. Precipitation Monitoring Location LAA-001

1. The Discharger shall collect precipitation information in accordance with Table E-7 and the testing requirements described in section IX.A.2 below:

**Table E-7 Precipitation Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Precipitation, Cumulative | Inches | Rain Gauge | Daily |

2. **Table E-7 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-7:

   a. **Daily Precipitation (24-hour period cumulative).** Upon approval by the Executive Officer, precipitation data may be obtained from monitoring station(s) not located at the Facility, as long as the alternate precipitation data is representative of the rainfall experienced at the Facility.

## B. Ash and Cooling Tower Solids Monitoring Location ASH-001

1. **Monitoring Location ASH-001.** The Discharger shall monitor the fly ash and bottom ash generated from the wood-fueled cogeneration operations at ASH-001 in accordance with Table E-8 and the testing requirements described in section IX.B.2 below:

**Table E-8. Ash Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|---|---|---|
| Ash Volume Generated | Dry-Tons | Continuous | 1/Month |
| Ash Volume Stored at Facility | Dry-Tons | Continuous | 1/Month |
| Ash Volume Removed from Facility | Dry-Tons | Continuous | 1/Month |
| Ash Liming Capacity | Equiv. % $CaCO_3$ | Composite | 2/Year |
| Ash Total Phosphorous | mg/kg | Composite | 2/Year |
| Moisture Content | % moisture | Composite | 2/Year |
| pH | Standard Units | Composite | 2/Year |
| CAM 17 Metals | mg/kg | Composite | 2/Year |
| TCDD-Equivalents | pg/g | Composite | 1/Year |

2. **Table E-8 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-8:

   a. **Applicable to all parameters.** All analysis on discharge to land shall be made in accordance with the latest edition of:

      i. Test Methods for Evaluating Solid Waste (SW-846-latest edition). The test method may be modified subject to application and approval

of alternate test procedures under the Code of Federal Regulations (40 CFR 136).

ii. Analysis shall be conducted using analytical methods with detection limits sufficiently low to determine compliance with applicable water quality objectives and criteria.

b. **Dry-Tons.** Units may be reported in volume or weight measurement.

c. **Ash Liming Capacity.** The method for neutralizing value for liming materials (or percent calcium carbonate equivalency – CCE) shall be UC Davis Method 440 or Association of Official Analytical Chemists (AOAC) 955.01.

d. **CAM 17 Metals.** California Administrative Manual (i.e., CAM) metals include: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. Monitoring for CAM 17 metals shall be in accordance with CCR Title 22 testing procedures.

e. **Dioxin Equivalents.** Dioxin equivalents, also known as TEQ, is a calculated value that reflects the combined effect of dioxin and furan compounds (congeners). Results for dioxin TEQ shall include all congeners.

3. **Ash Disposal.** The Discharger shall record on a monthly basis the following information about wood ash removed from the Facility and submit in an annual SMR no later than 1 February of each year:

a. Final end user name, address, and disposal location or soil amendment application area (except as described in item c below for intermediate producers), and

b. Volume and/or weight of ash for each location/area (except as described in item c below for intermediate producers).

c. The name, address, and volume and/or weight of ash sold or supplied to an intermediate produced for use in the manufacture of commercial soil amendment products. (Note: Final application area information for end users purchasing commercial soil amendment products is not required.)

d. A statement signed by the Discharger that the most recent available laboratory and applications data have been reviewed and that use as a soil amendment is considered a beneficial use.

## C. Industrial Water Supply Monitoring Location SPL-001

1. **Monitoring Locations (SPL-001).** The Discharger shall collect a representative sample of the groundwater supply (Production Wells PW-1, PW-2, and PW-3) at Monitoring Location SPL-001 in accordance with Table E-9 and the testing requirements described in section IX.C.2. below.

**Table E-9. Industrial Water Supply Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling |
|---|---|---|---|
| Flow | gpd | Continuous | 2/Year |
| pH | Standard Units | Grab | 2/Year |
| Oxidation Reduction Potential (ORP, as Eh) | millivolts | Grab | 2/Year |
| Electrical Conductivity @ 25°Celcius | µmhos/cm | Grab | 2/Year |
| Aluminum, Total Recoverable | µg/L | Grab | 2/Year |
| Aluminum, Filtered | µg/L | Grab | 2/Year |
| Dissolved Organic Carbon | mg/L | Grab | 2/Year |
| Iron, Total Recoverable | µg/L | Grab | 2/Year |
| Iron, Filtered | µg/L | Grab | 2/Year |
| Manganese, Total Recoverable | µg/L | Grab | 2/Year |
| Manganese, Filtered | µg/L | Grab | 2/Year |
| Tannins and Lignin | mg/L | Grab | 2/Year |
| Total Dissolved Solids | mg/L | Grab | 2/Year |
| Metals, Dissolved | µg/L | Grab | 1/Year |
| Standard Minerals | mg/L | Grab | 1/Year |

2. **Table E-9 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-9:

   a. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136; or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. Part 136 allowed sample type.

   b. **Filtered Metals.** Metals with secondary maximum contaminant levels (aluminum, iron, and manganese) shall be determined from samples that have passed through a **1.5-micron filter** to reduce filterable residue prior to preservation and analysis. Metal constituents will then be analyzed using the acid-soluble procedure described in U.S. EPA-approved test methods as appropriate, or other methods approved by the Central Valley Water Board.

c. **Dissolved Metals.** Samples for dissolved metals shall be filtered prior to preservation and digestion using a **0.45-micron filter**. Metals shall include, at a minimum, antimony, arsenic, barium, beryllium, cadmium, chromium (Total and Hexavalent), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

d. **Standard Minerals.** Standard minerals shall include, at a minimum, the following elements/compounds: boron, calcium, iron, magnesium, manganese, potassium, sodium, chloride, phosphorus, sulfate, total alkalinity (including alkalinity series), and hardness, as well as verification that the analysis is complete (i.e., cation/anion balance).

## D. Effluent and Receiving Water Characterization

### 1. Monitoring Frequency

a. **Industrial Storm Water Effluent Sampling.** Samples shall be collected from the industrial storm water (effluent) (Monitoring Location SW-006) once during the permit term, specifically, **once during the first discharge event of the 2027/2028 wet season**, which begins on 1 October 2027. If storm water discharge does not occur during the 2027/2028 wet season, then sample collection shall occur during subsequent wet season(s) until the monitoring requirement is fulfilled.

b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-003) once during the permit term, specifically, **once during the first discharge event of the 2027/2028 wet season**, which begins on 1 October 2027. If storm water discharge does not occur during the 2027/2028 wet season, then sample collection shall occur during subsequent wet season(s) until the monitoring requirement is fulfilled.

2. **Analytical Methods.** Constituents shall be collected and analyzed consistent with the Discharger's Analytical Methods Report (MRP, X.D.2) using sufficiently sensitive analytical methods and Reporting Levels (RLs) per the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). The "Reporting Level" is synonymous with the "Method Minimum Level" described in the SSM Rule. The results of the monitoring shall be submitted to the Central Valley Water Board with the quarterly self-monitoring reports. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water, if receiving water is sampled.

3. **Analytical Methods Report Certification.** Prior to beginning the Effluent and Receiving Water Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent and Receiving Water Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical

Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by Central Valley Water Board staff with the permit's Notice of Adoption that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS submittal by the due date in the Technical Reports Table E-12.

4. The Discharger shall conduct effluent and receiving water characterization monitoring in accordance with Table E-10 and the testing requirements described in section IX.E-5 below.

**Table E-10. Effluent and Receiving Water Characterization Monitoring**

**VOLATILE ORGANICS**

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| 25 | 2-Chloroethyl vinyl Ether | 110-75-8 | µg/L | Grab |
| 17 | Acrolein | 107-02-8 | µg/L | Grab |
| 18 | Acrylonitrile | 107-13-1 | µg/L | Grab |
| 19 | Benzene | 71-43-2 | µg/L | Grab |
| 20 | Bromoform | 75-25-2 | µg/L | Grab |
| 21 | Carbon Tetrachloride | 56-23-5 | µg/L | Grab |
| 22 | Chlorobenzene | 108-90-7 | µg/L | Grab |
| 24 | Chloroethane | 75-00-3 | µg/L | Grab |
| 26 | Chloroform | 67-66-3 | µg/L | Grab |
| 35 | Methyl Chloride | 74-87-3 | µg/L | Grab |
| 23 | Dibromochloromethane | 124-48-1 | µg/L | Grab |
| 27 | Dichlorobromomethane | 75-27-4 | µg/L | Grab |
| 36 | Methylene Chloride | 75-09-2 | µg/L | Grab |
| 33 | Ethylbenzene | 100-41-4 | µg/L | Grab |
| 89 | Hexachlorobutadiene | 87-68-3 | µg/L | Grab |
| 34 | Methyl Bromide (Bromomethane) | 74-83-9 | µg/L | Grab |
| 94 | Naphthalene | 91-20-3 | µg/L | Grab |
| 38 | Tetrachloroethylene (PCE) | 127-18-4 | µg/L | Grab |
| 39 | Toluene | 108-88-3 | µg/L | Grab |
| 40 | trans-1,2-Dichloroethylene | 156-60-5 | µg/L | Grab |
| 43 | Trichloroethylene (TCE) | 79-01-6 | µg/L | Grab |
| 44 | Vinyl Chloride | 75-01-4 | µg/L | Grab |
| -- | Methyl-tert-butyl ether (MTBE) | 1634-04-4 | µg/L | Grab |
| 41 | 1,1,1-Trichloroethane | 71-55-6 | µg/L | Grab |
| 42 | 1,1,2-Trichloroethane | 79-00-5 | µg/L | Grab |
| 28 | 1,1-Dichloroethane | 75-34-3 | µg/L | Grab |
| 30 | 1,1-Dichloroethylene (DCE) | 75-35-4 | µg/L | Grab |
| 31 | 1,2-Dichloropropane | 78-87-5 | µg/L | Grab |
| 32 | 1,3-Dichloropropylene | 542-75-6 | µg/L | Grab |
| 37 | 1,1,2,2-Tetrachloroethane | 79-34-5 | µg/L | Grab |
| 101 | 1,2,4-Trichlorobenzene | 120-82-1 | µg/L | Grab |

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| 29 | 1,2-Dichloroethane | 107-06-2 | µg/L | Grab |
| 75 | 1,2-Dichlorobenzene | 95-50-1 | µg/L | Grab |
| 76 | 1,3-Dichlorobenzene | 541-73-1 | µg/L | Grab |
| 77 | 1,4-Dichlorobenzene | 106-46-7 | µg/L | Grab |

**SEMI-VOLATILE ORGANICS**

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| 60 | Benzo(a)Anthracene | 56-55-3 | µg/L | Grab |
| 85 | 1,2-Diphenylhydrazine | 122-66-7 | µg/L | Grab |
| 45 | 2-Chlorophenol | 95-57-8 | µg/L | Grab |
| 46 | 2,4-Dichlorophenol | 120-83-2 | µg/L | Grab |
| 47 | 2,4-Dimethylphenol | 105-67-9 | µg/L | Grab |
| 49 | 2,4-Dinitrophenol | 51-28-5 | µg/L | Grab |
| 82 | 2,4-Dinitrotoluene | 121-14-2 | µg/L | Grab |
| 55 | 2,4,6-Trichlorophenol | 88-06-2 | µg/L | Grab |
| 83 | 2,6-Dinitrotoluene | 606-20-2 | µg/L | Grab |
| 50 | 2-Nitrophenol | 88-75-5 | µg/L | Grab |
| 71 | 2-Chloronaphthalene | 91-58-7 | µg/L | Grab |
| 78 | 3,3-Dichlorobenzidine | 91-94-1 | µg/L | Grab |
| 62 | Benzo(b)Fluoranthene | 205-99-2 | µg/L | Grab |
| 52 | 4-Chloro-3-methylphenol | 59-50-7 | µg/L | Grab |
| 48 | 2-Methyl-4,6-Dinitrophenol | 534-52-1 | µg/L | Grab |
| 51 | 4-Nitrophenol | 100-02-7 | µg/L | Grab |
| 69 | 4-Bromophenyl Phenyl Ether | 101-55-3 | µg/L | Grab |
| 72 | 4-Chlorophenyl Phenyl Ether | 7005-72-3 | µg/L | Grab |
| 56 | Acenaphthene | 83-32-9 | µg/L | Grab |
| 57 | Acenaphthylene | 208-96-8 | µg/L | Grab |
| 58 | Anthracene | 120-12-7 | µg/L | Grab |
| 59 | Benzidine | 92-87-5 | µg/L | Grab |
| 61 | Benzo(a)Pyrene | 50-32-8 | µg/L | Grab |
| 63 | Benzo(ghi)Perylene | 191-24-2 | µg/L | Grab |
| 64 | Benzo(k)Fluoranthene | 207-08-9 | µg/L | Grab |
| 65 | Bis (2-Chloroethoxy) Methane | 111-91-1 | µg/L | Grab |
| 66 | Bis (2-Chloroethyl) Ether | 111-44-4 | µg/L | Grab |
| 67 | Bis (2-Chloroisopropyl) Ether | 108-60-1 | µg/L | Grab |
| 68 | Bis(2-Ethylhexyl) Phthalate | 117-81-7 | µg/L | Grab |
| 70 | Butylbenzyl Phthalate | 85-68-7 | µg/L | Grab |
| 73 | Chrysene | 218-01-9 | µg/L | Grab |
| 81 | Di-n-butyl Phthalate | 84-74-2 | µg/L | Grab |
| 84 | Di-n-Octyl Phthalate | 117-84-0 | µg/L | Grab |
| 74 | Dibenzo(a,h)anthracene | 53-70-3 | µg/L | Grab |
| 79 | Diethyl Phthalate | 84-66-2 | µg/L | Grab |

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| 80 | Dimethyl Phthalate | 131-11-3 | µg/L | Grab |
| 86 | Fluoranthene | 206-44-0 | µg/L | Grab |
| 87 | Fluorene | 86-73-7 | µg/L | Grab |
| 88 | Hexachlorobenzene | 118-74-1 | µg/L | Grab |
| 90 | Hexachlorocyclopentadiene | 77-47-4 | µg/L | Grab |
| 91 | Hexachloroethane | 67-72-1 | µg/L | Grab |
| 92 | Indeno(1,2,3-cd) Pyrene | 193-39-5 | µg/L | Grab |
| 93 | Isophorone | 78-59-1 | µg/L | Grab |
| 98 | N-Nitrosodiphenylamine | 86-30-6 | µg/L | Grab |
| 96 | N-Nitrosodimethylamine | 62-75-9 | µg/L | Grab |
| 97 | N-Nitrosodi-n-Propylamine | 621-64-7 | µg/L | Grab |
| 95 | Nitrobenzene | 98-95-3 | µg/L | Grab |
| 53 | Pentachlorophenol (PCP) | 87-86-5 | µg/L | Grab |
| 99 | Phenanthrene | 85-01-8 | µg/L | Grab |
| 54 | Phenol | 108-95-2 | µg/L | Grab |
| 100 | Pyrene | 129-00-0 | µg/L | Grab |

**INORGANICS**

| CTR Number | Inorganic Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| NL | Aluminum | 7429-90-5 | µg/L | Grab |
| 1 | Antimony, Total | 7440-36-0 | µg/L | Grab |
| 2 | Arsenic, Total | 7440-38-2 | µg/L | Grab |
| 15 | Asbestos | 1332-21-4 | µg/L | Grab |
| 3 | Beryllium, Total | 7440-41-7 | µg/L | Grab |
| 4 | Cadmium, Total | 7440-43-9 | µg/L | Grab |
| 5a | Chromium, Total | 7440-47-3 | µg/L | Grab |
| 6 | Copper, Total | 7440-50-8 | µg/L | Grab |
| | Iron, Total | 7439-89-6 | µg/L | Grab |
| 7 | Lead, Total | 7439-92-1 | µg/L | Grab |
| 8 | Mercury, Total | 7439-97-6 | µg/L | Grab |
| NL | Mercury, Methyl | 22967-92-6 | µg/L | Grab |
| NL | Manganese, Total | 7439-96-5 | µg/L | Grab |
| 9 | Nickel, Total | 7440-02-0 | µg/L | Grab |
| 10 | Selenium, Total | 7782-49-2 | µg/L | Grab |
| 11 | Silver, Total | 7440-22-4 | µg/L | Grab |
| 12 | Thallium, Total | 7440-28-0 | µg/L | Grab |
| 13 | Zinc, Total | 7440-66-6 | µg/L | Grab |

**NON-METALS/MINERALS**

| CTR Number | Non-Metal/Mineral Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| NL | Boron | 7440-42-8 | µg/L | Grab |
| NL | Chloride | 16887-00-6 | mg/L | Grab |
| 14 | Cyanide, Total (as CN) | 57-12-5 | µg/L | Grab |
| NL | Sulfate | 14808-79-8 | mg/L | Grab |
| NL | Sulfide (as S) | 5651-88-7 | mg/L | Grab |

**PESTICIDES/PCBs/DIOXINS**

| CTR Number | Pesticide/PCB/Dioxin Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| 110 | 4,4-DDD | 72-54-8 | µg/L | Grab |
| 109 | 4,4-DDE | 72-55-9 | µg/L | Grab |
| 108 | 4,4-DDT | 50-29-3 | µg/L | Grab |
| 112 | alpha-Endosulfan | 959-98-8 | µg/L | Grab |
| 103 | alpha-BHC (Benzene hexachloride) | 319-84-6 | µg/L | Grab |
| 102 | Aldrin | 309-00-2 | µg/L | Grab |
| 113 | beta-Endosulfan | 33213-65-9 | µg/L | Grab |
| 104 | beta-BHC (Benzene hexachloride) | 319-85-7 | µg/L | Grab |
| 107 | Chlordane | 57-74-9 | µg/L | Grab |
| 106 | delta-BHC (Benzene hexachloride) | 319-86-8 | µg/L | Grab |
| 111 | Dieldrin | 60-57-1 | µg/L | Grab |
| 114 | Endosulfan Sulfate | 1031-07-8 | µg/L | Grab |
| 115 | Endrin | 72-20-8 | µg/L | Grab |
| 116 | Endrin Aldehyde | 7421-93-4 | µg/L | Grab |
| 117 | Heptachlor | 76-44-8 | µg/L | Grab |
| 118 | Heptachlor Epoxide | 1024-57-3 | µg/L | Grab |
| 105 | gamma-BHC (Benzene hexachloride or Lindane) | 58-89-9 | µg/L | Grab |
| 119 | Polychlorinated Biphenyl (PCB) 1016 | 12674-11-2 | µg/L | Grab |
| 120 | PCB 1221 | 11104-28-2 | µg/L | Grab |
| 121 | PCB 1232 | 11141-16-5 | µg/L | Grab |
| 122 | PCB 1242 | 53469-21-9 | µg/L | Grab |
| 123 | PCB 1248 | 12672-29-6 | µg/L | Grab |
| 124 | PCB 1254 | 11097-69-1 | µg/L | Grab |
| 125 | PCB 1260 | 11096-82-5 | µg/L | Grab |
| 126 | Toxaphene | 8001-35-2 | µg/L | Grab |
| 16 | 2,3,7,8-TCDD (Dioxin) | 1746-01-6 | mg/L | Grab |

**CONVENTIONAL PARAMETERS**

| CTR Number | Conventional Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| NL | pH | -- | SU | Grab |
| NL | Temperature | -- | ºC | Grab |

**NON-CONVENTIONAL PARAMETERS**

| CTR Number | Nonconventional Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| NL | Foaming Agents (MBAS) | MBAS | mg/L | Grab |
| NL | Hardness (as CaCO3) | 471-34-1 | mg/L | Grab |
| NL | Specific Conductance (Electrical Conductivity or EC) | EC | µmhos /cm | Grab |
| NL | Total Dissolved Solids (TDS) | TDS | mg/L | Grab |
| NL | Dissolved Organic Carbon (DOC) | DOC | mg/L | Grab |

**NUTRIENTS**

| CTR Number | Nutrient Parameters | CAS Number | Units | Effluent Sample Type |
|---|---|---|---|---|
| NL | Ammonia (as N) | 7664-41-7 | mg/L | Grab |
| NL | Nitrate (as N) | 14797-55-8 | mg/L | Grab |
| NL | Nitrite (as N) | 14797-65-0 | mg/L | Grab |
| NL | Phosphorus, Total (as P) | 7723-14-0 | mg/L | Grab |

5. **Table E-10 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-10:

   a. **Applicable to All Parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

   b. **Grab Samples.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

   c. **Redundant Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table E-2 with the exception of hardness which shall be sampled concurrently with the hardness-dependent metals (cadmium, chromium III, lead, nickel, silver, and zinc).

   d. **Concurrent Sampling.** Effluent and receiving water sampling shall be performed at approximately the same time, on the same date.

   e. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table E-10.

f. **Bis (2-ethylhexyl) phthalate.** In order to verify if bis (2-ethylhexyl) phthalate is truly present, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.

g. **Total Mercury and Methyl Mercury.** Unfiltered methyl mercury and total mercury samples shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2). The analysis of methyl mercury and total mercury shall be by U.S. EPA method 1630 and1631 (Revision E), respectively, with a reporting limit of 0.05 ng/L for methyl mercury and 0.5 ng/L for total mercury.

## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

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

2. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s).

3. **Compliance Time Schedules.** For compliance time schedules included in the Order, the Discharger shall submit to the Central Valley Water Board, on or before each compliance due date, the specified document or a written report detailing compliance or noncompliance with the specific date and task. If noncompliance is reported, the Discharger shall state the reasons for noncompliance and include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the compliance time schedule.

4. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the “Emergency Planning and Community Right to Know Act” of 1986.

### B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly,

quarterly, semiannual, annual SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR. Monthly SMRs are required even if there is no discharge. If no discharge occurs during the month, the monitoring report must be submitted stating that there has been no discharge.

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

**Table E-11. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On | Monitoring Period | SMR Due Date |
|---|---|---|---|
| Continuous | Permit effective date | All | Submit with monthly SMR |
| 1/Day | Permit effective date | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | Submit with monthly SMR |
| 1/Week | Permit effective date | Sunday through Saturday | Submit with monthly SMR |
| 1/Month | Permit effective date | 1st day of calendar month through last day of calendar month | First day of second calendar month following month of sampling |
| 1/Quarter | Permit effective date | 1 January through 31 March<br>1 April through 30 June<br>1 July through 30 September<br>1 October through 31 December | 1 May<br>1 August<br>1 November<br>1 February of following year |
| 2/Year | Permit effective date | 1 January through 30 June<br>1 July through 31 December | 1 August<br>1 February of following year |
| 1/Year | Permit effective date | 1 January through 31 December | 1 February of following year |
| 1/Permit Term | Permit effective date | Permit effective date through ROWD due date | 1 year prior to permit expiration |

4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current laboratory's Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. Part 136.

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

a. 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).

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

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

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

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

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

   a. 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.

   b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the

points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

6. **The Discharger shall submit SMRs** in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. The Discharger shall attach all final laboratory reports from all contracted commercial laboratories, including quality assurance/quality control information, with all its SMRs for which sample analyses were performed.

7. The Discharger shall submit in the SMRs calculations and reports in accordance with the following requirements:

   a. **The Discharger shall report BMPs** that are maintained or implemented at the facility including documentation of conditions prior to implementation, a description of the BMPs, and period of implementation. The monthly Storm Water Pollution Prevention Plan (SWPPP) Observation Report shall include, at a minimum, an evaluation of the primary BMPs (source control), drainage area and secondary BMPs (separation control), and tertiary BMPs (treatment). The SWPPP Observation Report shall note, if necessary, any BMP improvements and/or corrective actions that occurred during that monitoring period.

   b. **Dissolved Oxygen Receiving Water Concentrations.** The Discharger shall report in the **monthly SMR** the dissolved oxygen concentrations in the industrial storm water discharge (SW-006) and the receiving water (RSW-003 and RSW-004).

   c. **Turbidity Receiving Water Concentrations.** The Discharger shall calculate and report in the **monthly SMR** the turbidity increase in the

receiving water applicable to the natural turbidity condition (i.e., RSW-003).

d. **Temperature Receiving Water Calculations.** The Discharger shall calculate and report in the **monthly SMR** the temperature increase in the receiving water based on the difference in temperature at Monitoring Locations RSW-003 and RSW-004.

e. **Log Yard Sprinkling.** The Discharger shall report in the **monthly SMR** the dates on which log yard sprinkling occurred.

f. **First Flush Collection and Pond Capacity.** The Discharger shall report when the first flush BMP as specified in this WDR section VI.C.3.c was collected in the **monthly SMR**, the total volume of the recirculated sprinkler wastewater that was transferred, which ponds the wastewater was transferred to, and an estimate of the total available pond capacity at the start of the wet season (i.e., by 1 October) as specified in this WDR section IV.B.1.f.

g. **Land Discharge and Pond Monitoring.** The Discharger shall report in the **monthly SMR** for all land discharge and onsite pond systems as specified in this MRP section VI.A (above), a summary of monitoring results, field observations, and any associated calculations necessary to demonstrate compliance with water quality objectives, and monitoring requirements must be submitted. The summary shall identify sampling dates, analytical results, and a discussion of observed conditions (e.g., odors, algae growth, freeboard, and structural integrity).

h. **Forested LAA Monitoring.** The Discharger shall report in the **monthly SMR** for each month that industrial storm water was used for sprinkler irrigation of the forested LAA as specified in this MRP section VI.B (above), the results of monitoring, calculations of industrial storm water applied, and calculations of the total hydraulic load and precipitation to the forested LAA fields in gallons and/or acre-ft. A summary of the notations made in the observation logbook during the month regarding evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., burrows, odors, ponding, etc.) shall be reported.

   For the **October SMR**, provide the results of the annual pre-wet season inspection of the forested LAA. The report shall include details regarding evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., burrows, odors, ponding, etc.) and a time schedule to implement any repairs, if required.

i. **Groundwater Monitoring.** The results of the groundwater monitoring specified in this MRP section VIII.C shall be submitted with the **quarterly SMR**, whereas as specified in this WDR section VI.C.2.f the

groundwater results shall be **analyzed in an annual report** (due by the date in the Technical Reports Table E-12) prepared by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities, and shall bear the professional's signature and stamp.

j. **Industrial Supply Water Monitoring.** The results of the supply well monitoring specified in this MRP section IX.C (above) shall be submitted with the **semiannual SMR**.

## C. Discharge Monitoring Reports (DMRs)

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

## D. Other Reports

1. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date shown in the Technical Reports Table E-12. The Analytical Methods Report shall include the following for each constituent to be monitored in accordance with this Order: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule per 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The "Reporting Level or RL" is synonymous with the "Method Minimum Level" described in the SSM Rule. If an RL is not less than or equal to the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule as outlined above in Attachment E, section I.F. Central Valley Water Board staff will provide a tool with the permit's Notice of Adoption to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

2. **Annual Industrial Storm Water Report.** For constituents with annual average numeric storm water action levels (aluminum, chemical oxygen demand, electrical conductivity, iron, manganese, oil and grease, settleable solids, tannins and lignins, total suspended solids, and zinc) as specified in this WDR section VI.C.2.a, the Discharger shall report the reporting year annual average by the due date in the Technical Reports Table E-12. The reporting year annual average shall be calculated as the average of the samples gathered within the

reporting year, which is designated in Attachment A as beginning July 1 through June 30.

3. **Annual Operations Report.** The Discharger shall submit a written report to the Central Valley Water Board, electronically via CIWQS submittal, containing the following by the due date in the Technical Reports Table E-12:

   a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.

   b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

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

   d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

   e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

4. **Report of Waste Discharge (ROWD) NPDES.** For the 5-year permit renewal, the Discharger shall submit a written report to the Central Valley Water Board, electronically via CIWQS submittal, containing, at minimum, the following by the due date in the Technical Reports Table E-12:

   a. Report of Waste Discharge (Form 200);

   b. NPDES Form 1 (not needed if submitting Form 2A);

   c. NPDES Form 2C;

   d. NPDES Form 2F;

   e. **Storm Water Pollution Prevention Plan (SWPPP) and Salinity Evaluation and Minimization Plan (SEMP).** The Discharger shall evaluate the effectiveness of the SWPPP and SEMP, along with BMPs implemented at the Facility, at reducing pollutants in the industrial storm water discharge and provide a summary with the ROWD.

5. **Report of Waste Discharge (ROWD) WDR Non-15.** For the 5-year permit renewal, the Discharger shall submit a complete ROWD in accordance with California Code of Regulations, Title 23, Section 355, for the purposes of evaluating and regulating the discharge of industrial storm water and wastewater to land. The report shall be submitted to the Central Valley Water Board, electronically via CIWQS submittal, containing, at minimum, the following by the due date in the Technical Reports Table E-12:

    a. Report of Waste Discharge (Form 200).

    b. **Project Description and Design.** A narrative description of the facility, process operations, storm water and wastewater sources, wastewater flow rates, and treatment, storage, and disposal methods.

    c. **Engineering Reports.** Scaled site maps, facility and process flow diagrams, pond design drawings, and a capacity analysis and water balance demonstrating adequate containment and disposal capacity under design storm conditions.

    d. **Wastewater and Storm Water Characterization.** Analytical data for wastewater, storm water, and any other waste streams proposed for land discharge, including flow rates, pH, electrical conductivity, total dissolved solids, nutrients, and metals.

    e. **Groundwater and Surface Water Data.** Existing water quality data for upgradient and downgradient monitoring wells and nearby surface waters, or a work plan to collect such data.

    f. **Water Quality and Beneficial Use Assessment.** An evaluation of the potential for the proposed discharge to impact beneficial uses, including anti-degradation analysis in accordance with State Water Board Resolution 68-16.

    g. **California Environmental Quality Act (CEQA).** Documentation of CEQA compliance, including a copy of the final CEQA document and Notice of Determination, or evidence of exemption.

    h. **Other Required Information.** Any additional technical reports, operational plans, or financial assurances as determined necessary by the Executive Officer to evaluate the discharge and ensure compliance with applicable water quality objectives.

6. **Technical Report Submittals.** This Order includes requirements to submit a ROWD, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as “technical reports”). The Technical Reports Table E-12 and subsequent table notes below summarize all technical reports required by this Order and the due dates for submittal. All technical reports shall be submitted electronically via CIWQS

submittal. Technical reports should be uploaded as a PDF, Microsoft Word, or Microsoft Excel file attachment.

**Table E-12. Technical Reports**

| Report # | Technical Report | Due Date | CIWQS Report Name |
|---|---|---|---|
| Intentionally left blank | Standard Reporting Requirements | Intentionally left blank | Intentionally left blank |
| 1 | Report of Waste Discharge | <1 YEAR PRIOR TO PERMIT EXPIRATION DATE> | ROWD |
| 2 | Analytical Methods Report | <WITHIN 60 DAYS OF PERMIT EFFECTIVE DATE> | MRP X.D.1 |
| 3 | Analytical Methods Report Certification | <3 MONTHS PRIOR TO START OF CHARACTERIZATION MONITORING> | MRP IX.E.3. |
| 4 | Annual Operations Report 2026 | 1 February 2027 | MRP X.D.3 |
| 5 | Annual Operations Report 2027 | 1 February 2028 | MRP X.D.3 |
| 6 | Annual Operations Report 2028 | 1 February 2029 | MRP X.D.3 |
| 7 | Annual Operations Report 2029 | 1 February 2030 | MRP X.D.3 |
| 8 | Annual Operations Report 2030 | 1 February 2031 | MRP X.D.3 |
| Intentionally left blank | Other Reports | Intentionally left blank | Intentionally left blank |
| 9 | Best Management Practice (BMP Improvement Evaluation | Within 60 days following storm water action level exceedance | WDR VI.C.2.a |
| 10 | Method of Compliance Report | <WITHIN 12 MONTHS OF PERMIT EFFECTIVE DATE> | WDR VI.C.2.b |
| 11 | Background Well Work Plan | <WITHIN 6 MONTHS OF PERMIT EFFECTIVE DATE> | WDR VI.C.2.c |
| 12 | Storm Water Pollution Prevention Plan and Salinity Evaluation Minimization Plan | <WITHIN 3 MONTHS OF PERMIT EFFECTIVE DATE> | WDR VI.C.3.a-b |
| 13 | Ash Management and Disposal Plan | <WITHIN 3 MONTHS OF PERMIT EFFECTIVE DATE> | WDR VI.C.6.a.ii |
| 14 | Groundwater Monitoring Annual Report | 1 February 2027 | WDR VI.C.2.d |
| 15 | Groundwater Monitoring Annual Report | 1 February 2028 | WDR VI.C.2.d |
| 16 | Groundwater Monitoring Annual Report | 1 February 2029 | WDR VI.C.2.d |

| Report # | Technical Report | Due Date | CIWQS Report Name |
|---|---|---|---|
| 17 | Groundwater Monitoring Annual Report | 1 February 2030 | WDR VI.C.2.d |
| 18 | Groundwater Monitoring Annual Report | 1 February 2031 | WDR VI.C.2.d |
| 19 | Ash Disposal Annual Report | 1 February 2027 | MRP IX.B.3 |
| 20 | Ash Disposal Annual Report | 1 February 2028 | MRP IX.B.3 |
| 21 | Ash Disposal Annual Report | 1 February 2029 | MRP IX.B.3 |
| 22 | Ash Disposal Annual Report | 1 February 2030 | MRP IX.B.3 |
| 23 | Ash Disposal Annual Report | 1 February 2031 | MRP IX.B.3 |
| 24 | Industrial Storm Water Annual Report | 1 August 2026 | MRP X.D.2 |
| 25 | Industrial Storm Water Annual Report | 1 August 2027 | MRP X.D.2 |
| 26 | Industrial Storm Water Annual Report | 1 August 2028 | MRP X.D.2 |
| 27 | Industrial Storm Water Annual Report | 1 August 2029 | MRP X.D.2 |
| 28 | Industrial Storm Water Annual Report | 1 August 2030 | MRP X.D.2 |

# ATTACHMENT F – FACT SHEET

## Table of Contents

**Tables**

# ATTACHMENT F – FACT SHEET

As described in section II.C of this Order, the Central Valley Water Board incorporates this Fact Sheet as findings of the Central Valley Water Board supporting the issuance of this Order. This Fact Sheet discusses the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

## I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

**Table F-1 Facility Information**

| | |
|---|---|
| **Waste Discharge ID:** | 5A452015001 |
| **CIWQS Facility Place ID:** | 256964 |
| **Discharger:** | Sierra Pacific Industries |
| **Name of Facility:** | Burney Division |
| **Facility Address:** | 36336 Highway 299 East |
| **Facility City, State Zip:** | Burney, CA 96013 |
| **Facility County:** | Shasta County |
| **Facility Contact, Title and Phone Number:** | Robert Terras, Division Manager, (530) 335-3681 |
| **Authorized Person to Sign and Submit Reports:** | Robert Terras, Division Manager, (530) 335-3681 |
| **Mailing Address:** | PO Box 2677<br>Burney, CA 96013 |
| **Billing Address:** | Same as Mailing Address |
| **Type of Facility:** | Sawmill and Planing Mill (SIC 2421) and Electric Services (SIC 4911) |
| **Major or Minor Facility:** | Minor |
| **Threat to Water Quality:** | 2 |
| **Complexity:** | A |
| **Pretreatment Program:** | Not Applicable |
| **Recycling Requirements:** | Not Applicable |
| **Facility Permitted Flow:** | Not Applicable |
| **Facility Design Flow:** | 18.5 MGD |
| **Watershed:** | Pit River Hydrologic Unit 526.00 |
| **Receiving Water:** | Unnamed tributary to Canyon Creek |
| **Receiving Water Type:** | Inland Surface Water |

**A.** Sierra Pacific Industries (hereinafter Discharger) is the owner and operator of the Burney Division (hereinafter Facility), a sawmill and planing mill and biomass (i.e., wood-burning) cogeneration facility.

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

**B.** The Facility discharges wastewater to an unnamed tributary to Canyon Creek, a water of the United States, tributary to Burney Creek and the Pit River within the Pit River Hydrologic Unit (526.00). The Discharger was previously regulated by Order R5-2020-0017 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0003981 adopted on 16 April 2020 with an expiration date of 31 May 2025. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

**C.** The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on 31 May 2024. Supplemental information was requested on 28 June 2024 and received on 2 August 2024. The application was deemed complete on 29 August 2024. A site visit was conducted on 29 January 2025, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

**D.** Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. Under 40 C.F.R. section 122.6(d), States authorized to administer the NPDES program may administratively continue State-issued permits beyond their expiration dates until the effective date of the new permits, if State law allows it. Pursuant to California Code of Regulations (CCR), title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits.

## II. FACILITY DESCRIPTION

The Facility is a sawmill/planing mill and wood-burning cogeneration facility located in Burney, CA. The Facility is bounded to the north by a utility easement and timber lands, to the east by Goose Valley Road, to the West by the Fruit Grower's Pond, and to the south by U.S. Highway 299 (see Attachment B, Facility Map). Approximately 75% of the 216 acres, including areas of industrial truck traffic and the log yard, is asphalt paved. The remaining acreage of the site is covered by vegetation.

The Facility is split into two storm water management sections: the total approximate 61 acre drainage areas regulated under this individual NPDES industrial storm water permit (NPDES 1-1 through 1-3 and NPDES 2-1 through 2-5), mostly encompass the western portion of the Facility, and the total approximate 67 acre drainage areas regulated under the Industrial General Permit (Drainage Areas 1 through 5), mostly

encompass the eastern portion of the Facility. The Facility Storm Water Drainage Map (Attachment C-1) shows the Facility boundary and storm water drainage areas including the general storm water flow directions within the Facility, nearby water bodies, locations of storm water collection and conveyance systems including outfalls, and locations and descriptions of all industrial activities and materials.

The design flow capacity of the industrial storm water outfall SW-006 is 18.5 MGD.

## A. Description of Storm Water, Wastewater, and Solids Treatment and Controls

1. **Sawmill.** The Facility can process up to approximately 260 million board feet of construction grade lumber annually. The sawmill operations at the Facility consist of the following activities required to manufacture lumber products from logs: truck unloading, log scaling, log sorting, log storage, log sprinkling, mechanical log debarking, rough sawing and handling, air and kiln lumber drying, planer operations, lumber anti-stain surface protection, finished lumber storage and shipping, above ground petroleum storage, equipment fueling and maintenance, paved and unpaved roadways, a truck shop, and an office. Wood byproduct (i.e., boiler fuel) from the sawmill operations is delivered to the cogeneration plant by a covered conveyor system.

2. **Cogeneration Plant.** The cogeneration plant produces 20 megawatts of electrical power and consists of a wood byproduct storage area, a two-celled 200,000 pound per hour steam generating biomass fired (wood byproduct fueled) boiler, a steam turbine, a water treatment system, a cooling tower, oil and chemical storage, and ash storage. Steam generated by the boiler heats onsite kilns for the lumber drying process.

   The primary fuel source for the cogeneration plant is wood byproduct from the sawmill operations which includes bark, hog fuel, wood chips, planner shavings and wood waste from offsite sources. The wood byproduct is carried by covered conveyor belts to the boiler fuel shed, chip bin, hog fuel bin, boiler house, and/or outdoor storage area. Additionally, natural gas is used as a supplementary fuel for startup and flame stabilization for the cogeneration plant’s boilers.

   The cogeneration plant requires feed water to supply the boiler and cooling tower systems. Supply groundwater is treated through reverse osmosis and chemical treatment for supplying boiler feed water. The Discharger has submitted a list of chemicals used to treat the cogeneration plant’s water and to maintain the boiler and cooling tower operations.

   The cogeneration plant wastes include boiler blowdown, cooling tower blowdown, cooling tower treatment sludge, bottom and fly ash, and used petroleum products.

3. **Storm Water Drainage Areas.** Industrial storm water runoff from the drainage areas listed below is regulated under this individual NPDES storm water permit.

The industrial storm water is conveyed through a series of storm drain drop inlets, drainage ditches, and culverts to three primary collection points: the Log Yard Pond (LND-001), the Fire Pond (LND-002), and a vegetated infiltration area.

a. **NPDES 1-1.** The approximate 13-acre NPDES 1-1 drainage area is predominantly pervious and includes the paved outdoor wood byproduct (i.e., boiler fuel) storage area (approximately 3 acres), the paved outdoor three sided bermed ash storage area (approximately 0.7 acres), the earthen lined Retention Pond (LND-006), and unpaved areas in the southern portion of the Facility. Storm water sheet flows to drainage channels that direct water to a vegetated infiltration area, where it accumulates and infiltrates, and does not discharge to surface water. Storm water in the Ash Storage Area is contained by berms and allowed to infiltrate; however, during heavy rainstorm events, water will eventually flow to the drainage channel for discharge into the vegetated infiltration area. Storm water in the outdoor wood byproduct storage area sheet flows to a storm water sump pump that is pumped to combine with the ash storage area flow in a drainage channel that discharges into the vegetated infiltration area.

b. **NPDES 1-2.** The approximate 8-acre NPDES 1-2 drainage area is predominantly paved and includes the following industrial facilities the wood byproduct fired cogeneration plant, wood byproduct fuel house, maintenance and welding shops, cooling towers, portions of the old sawmill (including hog) and sorter, and the Fire Pond (LND-002). Storm water is collected in a storm drain system that discharges to the Fire Pond. Storm water from the Fire Pond is pumped to the Log Yard Pond (LND-001) and ultimately pumped to the Land Application Area (LAA-001).

c. **NPDES 1-3.** The approximate 11-acre NPDES 1-3 drainage area is predominantly paved and includes the west portion of the old sawmill, the east portion of the new sawmill, and new sawmill sorter, fueling area, truck wash, rolling stock shop, a portion of the drying kilns, lumber storage yards, and various oil and chemical storage areas. Storm water is collected in the old sawmill sump that includes an oil/water separator. Storm water from the sawmill sump is transferred via underground piping to the Fire Pond (LND-002). Storm water from the Fire Pond is pumped to the Log Yard Pond (LND-001) and ultimately pumped to the Land Application Area (LAA-001).

d. **NPDES 2-1.** The approximate 5-acre NPDES 2-1 drainage area is predominantly paved and includes the most southern end of the Log Yard. Storm water flows towards a gate valve-controlled collection point at the southern end of the Log Yard Pond (LND-001). During high flow rainstorms, storm water from the southeast corner of the log deck accumulates and sheet flows towards the scale house and into the

Industrial General Permit-regulated Drainage Area 1. The NPDES 2-1 storm water overflow is captured at the Drainage Area 1 sump pump station and discharged into the Log Yard Pond.

e. **NPDES 2-2.** The predominantly paved NPDES 2-2 drainage area (approximately 4 acres) is used for log scaling and storage and encompasses the Log Yard Pond to the western boundary of the wood byproduct storage area. Storm water runoff from this area will enter the bark separator at the north end of the Log Yard Pond.

f. **NPDES 2-3.** The predominantly paved NPDES 2-3 drainage area (approximately 13 acres) is mainly used for log storage, sawmill infeed, and the western portion of the new sawmill. Storm water from this area flows to the k-rail network on the west side of the log yard where it enters either a sediment trap or the Log Yard Ditch and then travels through a bark separator prior to discharge into the Log Yard Pond.

g. **NPDES 2-4.** The predominantly paved NPDES 2-4 drainage area (approximately 2 acres) is used for log storage at the most northern end of the log yard. Storm water from this drainage area flows southwest along the k-rail network through a sediment trap prior to entry into the Log Yard Ditch. Storm water that does not flow into the Log Yard Ditch runs along the k-rail network and into NPDES 2-3, where it can enter another sediment trap and bark separator prior to discharge into the Log Yard Pond.

h. **NPDES 2-5.** The predominantly paved NPDES 2-5 drainage area (approximately 5 acres) is used for limited log storage at the northern end of the log yard. Storm water in this area sheet flows and can include tailwater returning from the forested Land Application Area. The comingled runoff and treated storm water drain via a ditch that intersects with a three gated vault that either directs storm water further down the Log Yard Ditch to the Log Yard Pond or discharges to surface water at Discharge Point 002 (SW-006).

i. **Drainage Areas 1 through 5.** The Industrial General Permit regulated drainage areas 1 through 5 include the lumber planer, drying kilns, maintenance area, lumber storage and shipping area, Truck Shop, and adjacent non-industrial areas. Storm water in these areas is conveyed through a series of storm drain drop inlets, drainage ditches, culverts that discharge to surface water at the Industrial General Permit regulated discharge locations SW-1, SW-2, SW-3, SW-4, and SW-4A.

4. **Ponds.** The Facility includes a 2.2-million-gallon (MG) Log Yard Pond (LND-001), a 2.96 MG Fire Pond (LND-002), a 0.94 MG and a 1.17 MG terminal Evaporation Ponds 1 and 2 (LND-003 and LND-004, respectively), a 1.18 MG Substation Pond (LND-005), and a 2.62 MG Retention Pond (LND-006). Water stored in one pond can ultimately be conveyed to other

ponds for use, except for the two evaporation ponds, where stored water cannot be drawn down (see Attachment C, Flow Schematic). All ponds are unlined and allow discharge to groundwater.

a. **Sprinkler Recirculation Operations.** Stored pond water is recirculated and used to sprinkle stacked logs (i.e., wet decking operations) on the 25-acre paved log deck area during the dry season (approximately June through September) or during any extended dry period throughout the year when the air temperature is above 50°F. The sprinkler runoff is returned through the earthen Log Yard Ditch (NPDES 2-1 through NPDES 2-5). If needed the Log Yard Pond (LND-001) can be supplemented with water from the Fire Pond (LND-002) and Substation Pond (LND-005). The recirculated log deck sprinkler water accumulates pollutants that include wood fibers, bark, other dissolved organic matter (e.g. tannins and lignins), and settleable and suspended solids (e.g., sediment) that get flushed off the log deck. The recirculated log deck sprinkler water is considered wastewater.

   Upon ceasing log deck sprinkling, typically in late October or early November, the sprinkler system is transferred to the forested LAA. As a site-specific BMP, the first 2 inches of precipitation (i.e., first flush) on the log deck drainage areas (NPDES 2-1 through NPDES 2-5) is collected in the Log Yard Pond (LND-001). Then the Log Yard Pond is pumped, until drained, either directly to the evaporation ponds (LND-003 and LND-004), the Retention Pond (LND-006), and/or the Substation Pond (LND-005). The log deck wastewater consists of a blend of recirculated log deck sprinkler wastewater and first flush wastewater runoff. Discharges to surface water of recirculated sprinkler wastewater and first flush are prohibited.

b. **Post-First Flush Industrial Storm Water Operations.** After being drained, the Log Yard Pond (LND-001) is ready for collection of post-first flush industrial storm water runoff from the log deck, which after adequate treatment is permitted to discharge to surface water. Specifically, the post-first flush industrial storm water runoff from drainage areas NPDES 2-1 through NPDES 2-5 is returned through the Log Yard Ditch to the Log Yard Pond (LND-001), where it is treated by aeration and then pumped to the sprinkler system in the forested LAA for additional treatment. Any excess water that does not infiltrate in the forested LAA is captured at the southwest corner of the forested LAA and allowed to return to the Log Yard Ditch via an existing underground conduit. Water also exfiltrates from the forested LAA. The treated industrial storm water that has passed through the forested LAA advanced storm water BMP discharges from the Log Yard Ditch to an unnamed tributary of Canyon Creek at Discharge Point 002 (i.e., SW-006).

c. **Fire Pond Operations.** Industrial storm water runoff from the sawmill drainage area (NPDES 1-3) and the cogeneration plant drainage area

(NPDES 1-2) is discharged into the Fire Pond (LND-002), which can be pumped to the Log Yard Pond (LND-001) and ultimately applied to the forested LAA prior to surface water discharge at Discharge Point 002 (i.e., SW-006).

d. **Cogeneration Wastewater Operations.** Cogeneration wastewater (boiler blowdown, cooling tower blowdown, and ROS reject water) is directly pumped into the Retention Pond (LND-006). The Retention Pond is prevented from being pumped into the Log Yard Pond (LND-001) by a closed valve. Retention Pond water is drawn and chemically treated to control biological growth and reduce heat transfer for use in the cooling tower system. Cogeneration wastewater is prohibited from discharge to surface water.

5. **Land Application Area.** An approximate 50-acre undeveloped forested Land Application Area (LAA) is located in the northeastern portion of the property, and where post-first flush industrial storm water from the Log Yard Pond is applied via a portable sprinkler irrigation system. The sprinkler irrigation system is managed to maximize infiltration on the LAA by visual monitoring and adjusting the application rate and/or application area. Any excess water that does not infiltrate in the LAA is captured at the toe of the LAA and allowed to return to the Log Yard Ditch via an existing underground conduit. Water also exfiltrates from the LAA. The treated industrial storm water that has passed through the LAA storm water BMP discharges from the Log Yard Ditch to an unnamed tributary to Canyon Creek at Discharge Point 002 (i.e., SW-006).

6. **Infiltration Area.** Storm water runoff in the NPDES 1-1 drainage area sheet flows towards drainage channels that channel the storm water to a vegetated partially bermed infiltration area. Storm water runoff from Wood Byproduct Storage area sheet flows to a sump that pumps the water into a drainage channel that discharges to the infiltration area. During intense rain events, storm water runoff from the Ash Storage area flows to the drainage channel that discharges to the infiltration area. Storm water captured within the infiltration area infiltrates and does not discharge to surface water.

7. **Wood Byproduct Management.** Wood byproduct from the sawmill that includes bark, hog fuel, wood chips, planner shavings and wood waste from offsite sources. The wood byproduct is carried by covered conveyor belts to the boiler fuel shed, chip bin, hog fuel bin, boiler house, and/or outdoor storage area (approximately 3 acres). The main wood byproduct/boiler fuel pile, located in the uncovered outdoor storage area, is managed such that older wood byproducts are mixed with newer wood byproducts to help get a consistent boiler fuel mixture to burn (i.e., a more uniform fuel moisture content for a consistent burn).

8. **Ash Management.** Ash generated by the boilers is collected in a concrete ash bunker and cooled with water. Once a reasonable quantity of ash has accumulated in the bunker and sufficiently cooled, the ash is transported to the

three sided bermed outdoor ash storage area (approximately 0.7 acres) and retained onsite until delivery to the agricultural customers. Ash is licensed by the California Department of Food and Agriculture (CDFA) for sale as a byproduct for reuse as a soil amendment and is certified as an organic input material by CDFA.

9. **Groundwater Monitoring Well Network.** The Burney Basin, regional aquifer, lies between the Cascade and Modoc Plateau geological provinces. The regional aquifer occurs in basalt units and is generally unconfined. Depth to regional groundwater in the Burney Basin is about 100 feet to 150 feet, and the direction of regional groundwater movement is towards Burney Falls in the north, which is the main discharge point for the Burney Basin. The depth to regional groundwater decreases as the land slopes towards Burney Falls and the Pit River. Regional groundwater levels are closely connected to precipitation amounts within the basin.

   Groundwater monitoring wells MW-1 through MW-5 were installed in May 2016 and MW-6 through MW-8 were installed in September 2022, ranging in depth from 15 to 21 feet below ground surface (bgs), some with refusal on volcanic bedrock. MW-1, MW-2, and MW-6 located to the north, or upgradient of the ponds, have been listed as background monitoring wells and monitoring wells MW-3, MW-4, MW-5, MW-7, and MW-8 located to the south, or downgradient of the ponds, have been listed as compliance monitoring wells. Approximately two-thirds of a mile separate the upgradient background monitoring wells from the downgradient compliance wells. The monitoring well network is shown on Attachment C-1.

   Drill logs report that the Facility overlies both volcanic and sedimentary deposits, with the uppermost stratigraphy generally consisting of silt or silty clay mixed with volcanic boulders. There is some variation, likely caused by the presence of anthropogenic log ponds (seen with MW-3) and/or historic drainages (seen with MW-4).

   The groundwater monitoring well network is in a shallow perched aquifer, of limited areal extent, with low permeability andesite or other hard volcanic rock, overlying fractured volcanic bedrock. Several of the monitoring wells in the shallow zone are routinely dry (MW-1, MW-2, MW-5, and MW-6). The perched groundwater layer is seasonally recharged by percolation from rain, snowmelt, creeks that feed into the Fruit Growers Pond, and the Fruit Growers Pond located west of the Facility.

   The direction of local groundwater flow at the Facility has been reported as south-southwest at a gradient of 0.01 to 0.03 feet/foot towards Burney Creek. Eventually, the shallowest groundwater beneath the site is likely to discharge into Canyon and Burney Creeks, located to the south and southwest of the Facility, respectively.

## B. Discharge Points and Receiving Waters

1. The Facility is located in section 24, T35N, R2E, MDB&M, as shown in Attachment B, a part of this Order.

2. Industrial storm water from the Log Yard Pond can no longer be discharged at Discharge Point 001 to Canyon Creek, a water of the United States and a tributary to Burney Creek and Pit River at a point latitude 40.875505° N and longitude 121.704986° W. Discharge Point 001 has been permanently removed by the Discharger (i.e., designated historical).

3. Industrial storm water from the Log Yard Pond that has passed through the forested Land Application Area is collected in a conveyance ditch then piped underground and discharged at Discharge Point 002 to an unnamed tributary to Canyon Creek, a water of the United States and a tributary to Burney Creek and Pit River at a point latitude 40.880475° N and longitude 121.705003° W.

4. Recirculated sprinkler wastewater from the log deck operations during the dry season is discharged at Discharge Point 003 to the unlined Log Yard Pond at a point latitude 40.876389° N and longitude 121.704722° W.

5. Wastewater from the sawmill and cogeneration operations is discharged at Discharge Point 004 to the unlined Retention Pond at a point latitude 40.873611° N and longitude 121.701667° W.

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

**1. Effluent Limitations.** Effluent limitations contained in Order R5-2020-0017 for discharges from Discharge Points 001 and 002 (Monitoring Location SW-005 and SW-006, respectively). There was no discharge from SW-005 during the term of the permit. Representative monitoring data for SW-006 from 9 January 2023 (first discharge of Order R5-2020-0017) through 28 February 2025 are as follows in Table F-2 below:

**Table F-2 Historic Storm Water Effluent Limitations and Monitoring Data**

| Parameter | Units | Historic Effluent Limitations | Highest Daily Discharge |
|---|---|---|---|
| pH | SU | Instantaneous Max 9.0<br>Instantaneous Min 6.0 | 7.58 (03/27/2024)<br>5.62 (01/15/2025) |
| Acute Toxicity | % Survival | Minimum % Survival 70<br>Median % Survival 90 | 100 (12/11/2024)<br>100 (03/04/2024) |

**Table F-2 Notes:**

1. Minimum percent survival for any one bioassay.
2. Median percent survival of three consecutive acute bioassays.

2. **Storm Water Action Levels.** In addition to the parameters with effluent limitations, the industrial storm water discharges from Discharge Points 001 and 002 (Monitoring Locations SW-005 and SW-006, respectively) were subject to numeric Storm Water Action Levels contained in Order R5-2020-0017. There was no discharge from SW-005 during the term of the permit. Representative monitoring data for SW-006 from January 2023 (first discharge of the permit) through February 2025 are as follows in Table F-3 below:

**Table F-3 Historic Industrial Storm Water Data**

| Parameter | Units | Historic SWAL | Highest Annual Average Discharge | Highest Daily Discharge |
|---|---|---|---|---|
| Aluminum, Total Recoverable | µg/L | -- | 1642 (2023) | 11,300 (03/08/2023) |
| Aluminum, Dissolved | µg/L | -- | 129 (2023) | 278 (03/08/2023) |
| Chemical Oxygen Demand | mg/L | 120 | 27.4 (2024) | 51 (11/21/2024) |
| Copper, Total Recoverable | µg/L | -- | -- | 0.71 (02/01/2023) |
| Dissolved Organic Carbon | mg/L | -- | -- | 3.5 (02/01/2023) |
| Electrical Conductivity | µmhos/cm | -- | 198 (2025) | 233 (11/27/2024) |
| Hardness, Total as CaCO3 | mg/L | -- | Min.: 52 (03/15/2023) | Max.: 86 (02/28/2025) |
| Iron, Total Recoverable | µg/L | 1,000 | 2,042 (2023) | 11,500 (03/08/2023) |
| Iron, Dissolved | µg/L | -- | 365 (2025) | 500 (05/02/2023) |
| Manganese, Total Recoverable | µg/L | -- | 392 (2023) | 803 (05/16/2024) |
| Manganese, Dissolved | µg/L | -- | 350 (2025) | 806 (05/16/2024) |
| Oil and Grease (O&G) | mg/L | 15 | DNQ ~1.0 (2024) | DNQ ~1.0 (05/01/2024) |
| Settleable Solids | mL/L | -- | ND <0.1 (2023) | 0.1 (03/08/2023) |
| Tannins and Lignins | mg/L | 30 | 1.22 (2024) | 3.59 (12/18/2024) |
| Temperature | °C | -- | 8.76 (2024) | 18.9 (05/16/2024) |
| Total Dissolved Solids (TDS) | mg/L | -- | -- | 115 (02/01/2023) |

| Parameter | Units | Historic SWAL | Highest Annual Average Discharge | Highest Daily Discharge |
|---|---|---|---|---|
| Total Suspended Solids (TSS) | mg/L | 100 Avg.<br>400 Max. | 21.6 (2023) | 169 (03/08/2023) |
| Turbidity | NTU | -- | 28.5 (2023) | 298 (03/08/2023) |
| Zinc, Total Recoverable | µg/L | -- | -- | 5.4 (02/01/2023) |

During the term of the previous Order, the Facility discharged industrial storm water at Discharge Point 002 (i.e., SW-006) from 9 January 2023 through 15 May 2023 (127 days), from 22 January 2024 through 22 May 2024 (122 days), and from 21 November through 27 May 2025 (188 days). However, the reported flow measurements contained inconsistencies. Therefore, no flow data summary had been provided. Annual (1 October – 30 September) precipitation totals for the Facility are 17.5 (2021), 28.3 inches (2022), 42.6 inches (2023), 35.5 inches (2024) and 49.2 inches (2025).

3. **Land Discharge Requirements.** The Monitoring and Reporting Program contained in Order R5-2020-0017 required monitoring for land discharges to the Log Yard Pond (LND-001), Fire Pond (LND-002), Evaporation Pond 1 (LND-003), Evaporation Pond 2 (LND-004), Substation Pond (LND-005) and Retention Pond (LND-006). Representative pond water quality data are summarized as average values for June 2020 through February 2025 period in Table F-4 below:

**Table F-4 Historic Pond Water Quality Data**

| Parameter | Units | WQO | LND-001 | LND-002 | LND-003 | LND-004 | LND-005 | LND-006 |
|---|---|---|---|---|---|---|---|---|
| Arsenic, Tot. | µg/L | 10 | 3.1 | 1.1 | -- | -- | 2.5 | 5.4 |
| Arsenic, Dis. | µg/L | -- | 2.8 | 0.8 | -- | -- | 2.1 | 5.3 |
| COD | mg/L | -- | 496 | 35 | -- | -- | 271 | 21 |
| DO | mg/L | -- | 5.4 | 6.1 | 7.9 | 7.8 | 5.9 | 6.7 |
| EC | µmhos /cm | 900 | 361 | 381 | 474 | 469 | 385 | 525 |
| FDS | mg/L | -- | 202 | 181 | -- | -- | 184 | 323 |
| Iron, Tot. | µg/L | 300 | 5,259 | 1,451 | -- | -- | 4,476 | 136 |
| Iron, Dis. | µg/L | -- | 2,086 | 578 | -- | -- | 2,559 | 35 |
| Manganese, Tot. | µg/L | 50 | 904 | 498 | -- | -- | 786 | 32 |
| Manganese, Dis. | µg/L | -- | 817 | 441 | -- | -- | 599 | 31 |
| Nitrate, Tot. | mg/L | 10 | ND <0.1 | 0.2 | -- | -- | ND <0.2 | DNQ ~0.02 |

| Parameter | Units | WQO | LND-001 | LND-002 | LND-003 | LND-004 | LND-005 | LND-006 |
|---|---|---|---|---|---|---|---|---|
| Nitrogen, Tot. | mg/L | -- | 3.6 | 1.0 | -- | -- | 2.9 | 0.4 |
| pH | SU | 6.0-9.0 | 7.3 | 7.7 | 8.2 | 8.3 | 7.6 | 8.6 |
| TDS | mg/L | 500 | 420 | 249 | -- | -- | 355 | 398 |
| TKN | mg/L | -- | 3.6 | 0.9 | -- | -- | 2.8 | 0.4 |

4. **Groundwater Limitations.** All Facility ponds are unlined and allow discharge to groundwater. Groundwater Limitations contained in Order R5-2020-0017 for discharges to groundwater are monitored by a monitoring well network at Monitoring Locations MW-1 through MW-8.

   Order R5-2020-0017 required an evaluation of the existing downgradient monitoring wells (MW-3, MW-4, and MW-5) at the Facility, which resulted in the installation of three new monitoring wells in September 2022, MW-6 through MW-8. Compliance MW-3 located within the footprint of former log ponds was replaced by a new downgradient well MW-8 that is located off property (across Highway 299), compliance MW-5 that was historically dry was replaced by the new downgradient MW-7, and MW-6 has been dry since installation was to replace background MW-1 that is now located within the LAA. Representative groundwater quality data are summarized as average values for quarterly monitoring conducted during the term of the permit in Table F-5 below:

**Table F-5 Historic Groundwater Quality Data**

| Parameter | Units | WQO | MW-1 | MW-2 | MW-3 | MW-4 | MW-7 | MW-8 |
|---|---|---|---|---|---|---|---|---|
| GW Elevation | ft-msl | -- | 3300.43 | 3264.93 | 3208.43 | 3196.64 | 3197.79 | 3227.3 |
| Arsenic, Dis. | µg/L | 10 | ND <0.89 | ND <1.1 | 4.8 | ND <0.42 | ND <1.1 | DNQ ~0.54 |
| DO | mg/L | -- | 1.2 | 2.5 | 1.8 | 3.7 | 1.9 | 2.3 |
| Chloride | mg/L | 250 | 4.7 | 2.2 | 8.6 | 6.5 | 4.6 | 2.5 |
| EC | µmhos/cm | 900 | 135.1 | 108.9 | 768.2 | 319.9 | 124.1 | 247.2 |
| FDS | mg/L | -- | 74.8 | 99.8 | 377 | 175 | 70.5 | 150 |
| Iron, Dis. | µg/L | 300 | 821 | 3,493 | 91,182 | DNQ ~45 | ND <24 | DNQ ~14.9 |
| Manganese, Dis. | µg/L | 50 | 585 | 204 | 3,154 | 0.66 | DNQ ~13 | ND <7.3 |
| Nitrate, Tot. | mg/L | 10 | ND <0.05 | ND <0.05 | ND <0.05 | 3.8 | 0.10 | 0.95 |
| Nitrite, Tot. | mg/L | 1.0 | ND <0.02 | ND <0.02 | ND <0.02 | ND <0.02 | ND <0.02 | ND <0.02 |
| Nitrogen, Tot. | mg/L | -- | DNQ ~0.97 | DNQ ~0.2 | 1.2 | 3.9 | ND <0.26 | 1.0 |
| ORP | mV | -- | 146 | 159.3 | 26.5 | 123.9 | 109.7 | 139.6 |
| Sodium | mg/L | 20 | 4.1 | 3.4 | 16.7 | 12.2 | 6.0 | 5.8 |

| Parameter | Units | WQO | MW-1 | MW-2 | MW-3 | MW-4 | MW-7 | MW-8 |
|---|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 250 | 2.9 | ND <0.25 | ND <0.25 | 9.0 | 1.5 | 5.3 |
| pH | SU | 6.5-8.5 | 5.6 | 5.7 | 6.1 | 6.1 | 6.2 | 6.1 |
| TDS | mg/L | 500 | 103 | 124 | 482 | 221 | 104 | 182 |
| TKN | mg/L | -- | ND <0.26 | DNQ ~0.083 | 1.1 | DNQ ~0.13 | ND <0.24 | ND <0.26 |
| Turbidity | NTU | 1.0 | 15 | 111 | 38.2 | 10.9 | 24.7 | 18.5 |

**Table F-5 Notes:**

1. MW-1, MW-2, and MW-4 data represent quarterly monitoring conducted between June 2020 and December 2024.
2. MW-3 represents quarterly monitoring conducted between June 2020 and March 2023.
3. MW-7 and MW-8 represent quarterly monitoring conducted between October 2022 and December 2024.

**5. Facility Water Balance Evaluation Study.** Order R5-2020-0017 required a Facility Water Balance Evaluation Study. The purpose of the study was to measure the volume of runoff from the log deck area, the fuel storage pile area, and the fly ash storage area to determine if the Facility has adequate pond storage (see Table F-6 below for pond dimensions) for each runoff area to ensure wastewater is not discharged to surface water. The October 2023 technical report concluded that the storm water and wastewater storage capacities are insufficient for retaining the facilities first flush site-specific BMP for the total annual precipitation with a 100-year recurrence interval or a storm event with an intensity greater than a 25-year, 24-hour storm event.

In response, the Discharger completed Facility updates to allow the Log Yard Pond to directly transfer first flush wastewater to the two Evaporation Ponds without having to first pump to the Retention Pond and then to the Evaporation Ponds. This operational flow change would help to keep the first flush volume to a minimum by increasing the rate of the Log Yard Pond drainage at the beginning of the wet season. In addition, the ROWD included investigation into adding a 45 acre-ft pond that would be used to provide additional aeration treatment to the industrial storm water prior to sprinkler irrigation on the forested LAA.

**Table F-6 Facility Pond Dimensions**

| Pond Name | Surface Area (square feet) | Depth (feet) | Total Volume (acre-feet) | Volume at 2-ft Freeboard (acre-feet) |
|---|---|---|---|---|
| Log Yard Pond (LND-001) | 32,208 | 10 | 6.7 | 5.7 |
| Fire Pond (LND-002) | 41,570 | 9 | 8.1 | 6.5 |
| Evaporation Pond 1 (LND-003) | 15,186 | 10 | 3.2 | 2.7 |

| Pond Name | Surface Area (square feet) | Depth (feet) | Total Volume (acre-feet) | Volume at 2-ft Freeboard (acre-feet) |
|---|---|---|---|---|
| Evaporation Pond 2 (LND-004) | 15,186 | 10 | 3.2 | 2.7 |
| Substation Pond (LND-005) | 15,797 | 10 | 3.4 | 2.8 |
| Retention Pond (LND-006) | 41,104 | 9 | 8.2 | 6.5 |

**Table F-6 Notes:**

1. Storage capacities are from the 2023 Facility Water Balance Evaluation Report. The numeric values are based on measurements from aerial imagery and field measurements made by the Discharger. Pond capacities may, therefore, differ from previously reported pond volumes.

## D. Compliance Summary

1. **Unauthorized Discharge.** The Central Valley Water Board issued a Notice of Violation for violations of the previous Order's Discharge Prohibitions III.A, III.B, III.E, and III.F and the minimum 2 feet of freeboard for pond Construction, Operation and Maintenance Specification (section IV.A.4.a.iv), resulting from the unauthorized discharge from the Fire Pond and Infiltration Area, which discharged to Canyon Creek from 3 February 2025 through 5 February 2025.

2. **Effluent Limitation Violation.** The industrial storm water discharge to an unnamed tributary to Canyon Creek exceeded the instantaneous minimum pH effluent limitation of 6.0 on 15 January 2025.

3. **Storm Water Action Level Exceedance.** The industrial storm water discharge to an unnamed tributary to Canyon Creek exceeded the annual average SWAL for total recoverable iron in 2023. SWALs are not effluent limitations on the industrial storm water discharge. An exceedance of an action level does not constitute a violation of the Order, instead the previous permit required the Discharger to submit a BMP Improvement Evaluation if any SWALs or any receiving water limitations were exceeded. The Discharger submitted BMP Improvements with the updated SWPPP (December 2024) and included descriptions of Facility improvements with the ROWD as required by the previous permit.

4. **Minimum Freeboard Exceedances.** The freeboard shall never be less than 2-feet. This Construction, Operation and Maintenance Specifications for the Facility ponds was exceeded five (5) times for the Log Yard Pond (LND-001), fifteen (15) times for the Fire Pond (LND-002), forty-five (45) times for Evaporation Pond 2 (LND-004), three (3) times for the Substation Pond (LND-005), and seven times for the Retention Pond (LND-006) between June 2020 and February 2025.

### E. Planned Changes

Due to the water storage capacity issues at the Facility, the ROWD proposed the addition of a new land discharge impoundment (i.e., 45 acre-feet pond) that would receive post-first flush industrial storm water runoff from the existing Log Yard Pond (LND-001). The retention time in the new 45 acre-feet pond would allow for approximately 60-days of settling and aeration treatment prior to being applied to the forested LAA, and discharge to surface water at SW-006. The ROWD included four proposed locations for the new pond (1) near the substation pond (LND-005), (2) west of the log deck near SW-006, (3) in the footprint of the Fruit Growers Pond located west of the log deck, and (4) in the footprint of the current Retention Pond (LND-006). The Discharger's preferred location is option 3, which may have additional California Environmental Quality Act (CEQA) requirements with rezoning and potential environmental impacts associated with the established wetlands. On 25 July 2024, the Discharger met with Shasta County Planning Division regarding the necessary permitting and environmental impact analysis for the four proposed locations of the new pond. Currently, the Discharger has not submitted final specifications with a clear construction timeline for the new land discharge (i.e., the proposed aeration pond).

## III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

### A. 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 for point source discharges from this Facility to surface waters.

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

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA (Pub. Res Code, § 21100 et seq.). Additionally, the adoption of land discharge requirements for the Facility constitutes permitting of an existing facility that is categorically exempt from the provisions of CEQA pursuant to CCR, title 14, section 15301. This Order contains receiving water limitations for toxicity which are based solely on state law. The imposition of these requirements is exempt from the procedural requirements of CEQA pursuant to 14 CCR section 15061(b)(3) because it can be seen with certainty that there is no possibility that these requirements may have a significant effect on the environment.

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

1. **Water Quality Control Plans.** Requirements of this Order specifically implement the applicable Water Quality Control Plans.

   a. Basin Plan. The Central Valley Water Board adopted a Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan.

   The Basin Plan at section 2.1 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan in Table 2-1, section 2, does not specifically identify beneficial uses for Canyon Creek, but does identify present and potential uses for Pit River from the mouth of Hat Creek to Shasta Lake, to which Canyon Creek, via Burney Creek, is tributary. 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. Thus, beneficial uses applicable to Canyon Creek are as follows:

**Table F-7 Basin Plan Beneficial Uses**

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|---|---|---|
| 002 | Canyon Creek | Existing:<br>Municipal and domestic water supply (MUN), agricultural irrigation and stock watering (AGR), hydropower generation (POW), contact recreation, including canoeing and rafting (REC-1), other non-contact water recreation (REC-2), cold freshwater habitat (COLD), warm and cold spawning (SPWN), and wildlife habitat (WILD).<br><br>Potential:<br>Warm freshwater habitat (WARM) |
| 003<br>004 | Underlying Groundwater | Existing:<br>Municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO). |

   b. **Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California.** The Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan) was adopted by the State Water Resources Control Board (State Water Board) on 1 December 2020, under authority provided by Water Code sections 13140 and 13170. Except as otherwise indicated,

this ISWEBE Plan establishes provisions 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.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About forty criteria in the NTR applied in California. On 18 May 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 13 February 2001. These rules contain federal water quality criteria for priority pollutants.

3. **State Implementation Policy.** On 2 March 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 28 April 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the NTR and to the priority pollutant objectives established by the Central Valley Water Board in the Basin Plan. The SIP became effective on 18 May 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 24 February 2005, that became effective on 13 July 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.

   The SIP states in footnote 1, *"This Policy does not apply to regulation of storm water discharges. The SWRCB has adopted precedential decisions addressing regulation of municipal storm water discharges in Orders WQ 91-03, 91-04, 96-13, 98-01, and 99-05. The SWRCB has also adopted two statewide general permits regulating the discharge of pollutants contained in storm water from industrial and construction activities."* This Order regulates the discharge of storm water from industrial activity to surface water. Therefore, the SIP provisions for establishment of effluent limitations are not applicable and effluent limitations for priority pollutants have not been established. However, numeric storm water action levels and best management practices (BMPs) ensure that beneficial uses of the receiving water are protected, and water quality standards are not exceeded.

4. **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") (State Anti-Degradation Policy). The State Anti-Degradation Policy is deemed to incorporate the federal antidegradation policy where the federal

policy applies under federal law. The State Anti-Degradation Policy requires that existing water quality be maintained unless degradation is justified based on specific findings. The Central Valley 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 the State Anti-Degradation Policy. The Board finds this order is consistent with the Federal and State Water Board antidegradation regulations and policy.

5. **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.

6. **Domestic Water Quality.** In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels (MCLs) designed to protect human health and ensure that water is safe for domestic use.

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

8. **Storm Water Requirements.** U.S. EPA promulgated federal regulations for storm water on 16 November 1990 in 40 C.F.R. parts 122, 123, and 124. The NPDES Industrial Storm Water Program regulates storm water discharges from Sawmills and Planing Mills (SIC 2421) and Steam Electric Power Generating (SIC 4911) facilities, which are applicable industries under the storm water program and are obligated to comply with the federal regulations.

   The discharge of industrial storm water from the log yard could be regulated under the existing State Board Water Quality Order 2014-0057-DWQ, as amended in 2015 and 2018, General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES General Permit No. CAS000001) (Industrial General Permit). However, due to the complexity of the Facility operations and unique threats to water quality, the Central Valley Water Board has elected to regulate these discharges with an individual NPDES industrial storm water permit. Therefore, the discharges of industrial storm water from the approximate 61-acre western portion of the Facility (i.e., NPDES 1-1 through

NPDES 1-3 and NPDES 2-1 through NPDES 2-5 drainage areas) are not covered under the Industrial General Permit and are covered under this Order.

9. **Findings on Water Quality Impacts in Disadvantaged or Tribal Communities and Environmental Justice Concerns.** Consistent with Water Code section 13149.2, the Central Valley Water Board has taken into account environmental justice, tribal impact, and racial equity considerations in issuing this Order. The discharges regulated by this Order may impact one or more disadvantaged communities or tribal communities. The Facility regulated by this Order discharges treated industrial storm water to an unnamed tributary to Canyon Creek and industrial wastewater to land. The discharge is subject to discharge limitations and industrial storm water numeric action levels given its potential to cause or contribute to exceedances of water quality objectives for certain constituents, including aluminum, chemical oxygen demand, electrical conductivity, iron, manganese, oil and grease, pH, tannins and lignins, total suspended solids, and zinc. This Order addresses potential adverse impacts to water quality from the Facility's discharge by setting prohibitions and limits on the discharge of industrial storm water, requiring ongoing monitoring and reporting of the discharged industrial storm water and wastewater, and receiving water, and imposing other specifications on the facility's industrial storm water treatment operations.

10. **Water Code sections 13263 and 13241.** Water Code section 13263 requires that, in establishing waste discharge requirements, regional water quality control boards consider beneficial uses to be protected, water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of section 13241. The Central Valley Water Board considered these factors with respect to the requirements of this Order that are based solely in state law.

## D. Impaired Water Bodies on CWA 303(d) List

1. Under section 303(d) of the 1972 CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On 11 May 2022 U.S. EPA gave final approval to California's 2020 – 2022 section 303(d) List of Water Quality Limited Segments. The Basin Plan references this list of Water Quality Limited Segments (WQLSs), which are defined as "…those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 C.F.R. part 130, et seq.)." The Basin Plan also states, "Additional treatment beyond minimum federal standards will be imposed on dischargers to [WQLSs]. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment." Canyon Creek is not listed as an impaired water body on the 2022 303(d) list. However, Canyon Creek is tributary to the Pit River and the

Pit River (from confluence of N and S Forks to Shasta Lake) and the Pit River is listed as impaired for: aluminum, iron, nutrients, organic enrichment/low dissolved oxygen, and dissolved oxygen.

2. **Total Maximum Daily Loads (TMDLs).** Table F-8, below, identifies the 303(d) listings and any applicable TMDLs. At the time of this permit renewal, there are no approved TMDLs with waste load allocations (WLAs) that apply to this Facility.

**Table F-8 303 (d) List for Pit River (from confluence of N and S Forks to Shasta Lake**

| Pollutant | Potential Sources | TMDL Status |
|---|---|---|
| Nutrients | Unknown | 2013 |
| Organic Enrichment/Low Dissolved Oxygen | Unknown | 2013 |
| Dissolved Oxygen | Unknown | 2035 |
| Aluminum | Unknown | 2025 |
| Iron | Unknown | 2035 |

3. The 303(d) listings and TMDLs have been considered in the development of the Order.

## E. Other Plans, Polices and Regulations

1. **Title 27.** Title 27 of the CCR (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. However, Title 27 exempts certain activities from its provisions. The discharges authorized herein are exempt from the requirements of CCR, Title 27, section 20090(b) contains an exemption for discharges of wastewater to land where the discharge is covered by WDRs, the discharge is in compliance with the Basin Plan, and the discharge does not need to be managed as hazardous waste.

   Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields, authorized herein are exempt from the requirements of CCR, Title 27, section 20005 et seq. (hereafter Title 27). The exemption, pursuant to CCR, Title 27, section 20090(b), is based on the following:

   a. The Central Valley Water Boards is issuing WDRs;

   b. The discharge is in compliance with the Basin Plan; and

   c. The wastewater effluent discharge to the ponds does not need to be managed as hazardous waste.

2. **Wood Ash.** Pursuant to state and federal regulations wood ash, classified as non-hazardous solid waste, may be beneficially reused as an agricultural soil amendment, or other appropriate use. This Order does not authorize storage,

transportation, or disposal of ash or other wastes characterized as hazardous waste. Appropriate separate regulatory coverage must be secured for such activities.

3. **Toxicity Provisions.** Pursuant On December 1, 2020, the State Water Board adopted State Policy for Water Quality Control: Toxicity Provisions (Toxicity Provisions) which established statewide numeric water quality objectives for both acute and chronic toxicity, using the TST, and a program of implementation to control toxicity. On October 5, 2021, the State Water Board adopted a resolution confirming that the Toxicity Provisions were adopted as a State Policy for Water Quality Control, for all inland surface waters, enclosed bays, estuaries, and coastal lagoons of the state, regardless of their status as waters of the United States. The Toxicity Provisions establish a uniform regulatory approach to provide consistent protection of aquatic life beneficial uses and protect aquatic habitats and life from the effects of known and unknown toxicants. The Toxicity Provisions were approved by OAL on April 25, 2022, and by U.S.EPA on May 1, 2023.

   On December 14, 2023, the State Water Board applied for U.S. EPA Region IX review and approval of a limited-use alternative test procedure (ATP), for the use of one-effluent concentration when conducting whole effluent toxicity (WET) testing, pursuant to 40 Code of Federal Regulations section 136.5 (Aug. 28, 2017). The application is specific to acute or chronic WET tests in Table 1 of the application when using the Test of Significant Toxicity (TST) statistical approach (U.S. EPA, 2010) for analyzing the data. The application is being sought for all dischargers or facilities in the State of California and their associated laboratories. The ATP application is still pending with U.S. EPA.

   The use of the TST has been the subject of litigation. In December 2024, the Second District Court of Appeal upheld the use of the TST in an NPDES permit in the case *Camarillo Sanitary District v. California Regional Water Quality Control Board - Los Angeles Region*.

   A separate legal challenge to the State Water Board's adoption of the Toxicity Provisions originated in Fresno County Superior Court on July 18, 2022, through a petition for writ of mandate filed by Camarillo Sanitary District, City of Simi Valley, City of Thousand Oaks, Central Valley Clean Water Association, and Clean Water SoCal (formerly known as Southern California Alliance of Publicly Owned Treatment Works) (Petitioners). One of the claims was that the Toxicity Provisions were inconsistent with the Clean Water Act. On October 9, 2023, the superior court denied the petition in its entirety.

   On December 19, 2023, three of the Petitioners filed a notice of appeal of the Fresno Superior Court's decision upholding the Toxicity Provisions. On August 5, 2025, the Fifth District Court of Appeal issued a published opinion holding that the TST statistical approach, which is an integral component of the Toxicity Provisions, cannot be utilized in NPDES permitting to evaluate WET data because the TST is not an approved method under 40 Code of Federal

Regulations Part 136. The Court of Appeal did not, however, disturb the Toxicity Provisions' use of the TST as a part of its water quality objectives. The State Water Board prevailed on all other claims in the litigation. The Court of Appeal's decision became final on September 4, 2025.

On September 15, 2025, the State Water Board filed a petition for review of the Fifth Circuit Court of Appeal's decision with the California Supreme Court. On November 12, 2025, the California Supreme Court granted review. The issues to be briefed and argued are limited to the issues raised in the State Water Board's petition for review.

Pending the California Supreme Court's review, the opinion of the Fifth Circuit Court of Appeal is not binding on the Water Boards. However, the opinion may be cited, not only for its persuasive value, but also for the limited purpose of establishing the existence of a conflict in authority.

In accordance with Water Code sections 13146 and 13247, the Regional Board must fully implement the water quality objectives and their implementation procedures in the Toxicity Provisions. The numeric water quality objectives for chronic and acute toxicity established by the Toxicity Provisions, which are based on the TST, were approved by U.S. EPA and remain in effect. As such, the numeric water quality objectives continue to serve as the applicable federal water quality standards in California.

The Water Boards must also continue to comply with federal Clean Water Act NPDES regulations for determining reasonable potential and establishing applicable water quality-based effluent limitations (WQBELs). NPDES regulations (40 CFR § 122.44(d)(1)(vii)(A)) require that all WQBELs be derived from and comply with all applicable water quality standards. Moreover, although the Toxicity Provisions left in place narrative water quality objectives for aquatic toxicity in regional water board water quality control plans (basin plans), the Toxicity Provisions did supersede basin plan provisions and portions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) for implementing narrative water quality objectives. As such, there are currently no basin plan or SIP procedures in effect for implementing narrative water quality objectives to determine reasonable potential as required by 40 CFR § 122.44(d)(1)(ii). As a result, the Regional Board must fully implement all of the Toxicity Provisions.

## IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Effluent limitations and toxic and pretreatment effluent standards established pursuant to section 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the CWA and amendments thereto are applicable to the discharge.

The CWA mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state or federal law

[33 U.S.C., section 131(b)(1)(C); 40 C.F.R. section 122.44(d)(1)]. NPDES permits must incorporate discharge limitations necessary to ensure that water quality standards are met. The requirement applies to narrative criteria as well as criteria specifying maximum amounts of particular pollutants. Pursuant to federal regulations, 40 C.F.R. section 122.44(d)(1)(i), NPDES permits must contain limitations that control all pollutants that "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Federal regulations, 40 C.F.R. section 122.44(d)(1)(vi), further provide that "[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits."

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 where numeric water quality objectives have not been established. The Basin Plan at page 4-27, contains an implementation policy, "Policy for Application of Water Quality Objectives", that specifies that the Central Valley Water Board "will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives." This policy complies with 40 C.F.R. section 122.44(d)(1). With respect to narrative objectives, the Central Valley Water Board must establish effluent limitations using one or more of three specified sources, including: (1) U.S. EPA's published water quality criteria, (2) a proposed state criterion (i.e., water quality objective) or an explicit state policy interpreting its narrative water quality criteria (i.e., the Central Valley Water Board's "Policy for Application of Water Quality Objectives") (40 C.F.R. section 122.44(d)(1)(vi)(A), (B) or (C)), or (3) an indicator parameter.

The Basin Plan includes numeric site-specific water quality objectives and narrative objectives for surface and/or ground waters for toxicity, chemical constituents, discoloration, radionuclides, and taste and odors. The narrative toxicity objective states: "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." (Basin Plan at section 3.1.20). The Basin Plan states that material and relevant information, including numeric criteria, and recommendations from other agencies and scientific literature will be utilized in evaluating compliance with the narrative toxicity objective. The narrative chemical constituents objective states that waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At minimum, "…water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs)" in Title 22 CCR. The Basin Plan further states that, to protect all beneficial uses, the Central Valley Water Board may apply limits more stringent than MCLs. The narrative tastes and odors

objective states: “Water shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products or aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.”

### A. Discharge Prohibitions

1. **Prohibition III.A (No discharge or application of waste other than that described in this Order).** This prohibition is based on Water Code sections 13260 and 13376, which require filing of a ROWD before discharges can occur. The Discharger submitted a ROWD for the discharges described in this Order; therefore, discharges not described in this Order are prohibited.

2. **Prohibition III.B (No bypasses or overflow of untreated wastes, except under the conditions at C.F.R. section 122.41(m)(4)).** As stated in section I.G of Attachment D, Standard Provisions, this Order prohibits bypass from any portion of the treatment facility. Federal regulations, 40 C.F.R. section 122.41(m), define “bypass” as the intentional diversion of waste streams from any portion of a treatment facility. This section of the federal regulations, 40 C.F.R. section 122.41(m)(4), prohibits bypass unless it is unavoidable to prevent loss of life, personal injury, or severe property damage. In considering the Regional Water Board’s prohibition of bypasses, the State Water Board adopted a precedential decision, Order No. WQO 2002-0015, which cites the federal regulations, 40 C.F.R. section 122.41(m), as allowing bypass only for essential maintenance to ensure efficient operation.

3. **Prohibition III.C (No controllable condition shall create a nuisance**). This prohibition is based on Water Code section 13050 that requires water quality objectives established for the prevention of nuisance within a specific area. The Basin Plan prohibits conditions that create a nuisance.

4. **Prohibition III.D (No discharge of recirculated wastewater from log yard sprinkling, commingled recirculated sprinkler wastewater and storm water, cooling tower blowdown, boiler blowdown, cooling tower and boiler water treatment system effluent, or other waste of recognizable sawmill or cogeneration origin).** Consistent with Order R5-2020-0017, this Order prohibits the discharges of recirculated wastewater from log yard sprinkling, commingled recirculated sprinkler wastewater and storm water, cooling tower blowdown, boiler blowdown, cooling tower and boiler water treatment system effluent, or other waste of recognizable sawmill or cogeneration origin to surface waters or surface water drainage courses. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

5. **Prohibition III.E (No discharge of leachate from wood byproduct stockpiles and ash stockpiles to surface waters or surface water drainage courses).** Consistent with Order R5-2020-0017, this Order prohibits discharges of storm water leachate from wood byproduct stockpiles and ash stockpiles to

surface waters or surface water drainage courses. 40 CFR 122.26(b)(14) states industrial storm water discharges include the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to the manufacturing, processing or raw material storage areas at an industrial facility. Consistently, the effluent limitation guidelines (ELG) for Timber Products Point Source Category, 40 CFR 429.11(c), excludes material storage yard runoff (either raw or processed wood storage) from the definition of "process wastewater." Nevertheless, the Central Valley Water Board has determined that these waste streams pose a higher threat to water quality than typical timber operation industrial storm water. Specifically, scientific studies have demonstrated that leachate from wood chips can degrade receiving water quality and may be toxic to aquatic life. Elevated concentrations of chemical oxygen demand and organic compounds, such as acidic resins and phenols (including tannins and lignins) have been shown to be directly toxic to aquatic organisms. In addition, elevated concentrations of organic acids in leachate material can result in an acidic pH which is harmful to aquatic life. During the combustion of wood chips, the volatilized inorganics concentrate on the fly ash particles as different chemical species (e.g., metal oxides, hydroxides, and carbonates). Leachates from ash produced from biomass combustion can have a basic pH as well as elevated concentrations of inorganic constituents such as alkali and alkaline earth metals, heavy metals, carbonates, silica, and sulfur. The alkaline and enhanced mineral properties make wood ash a candidate for beneficial reuse in agriculture as a soil amendment; however, if improperly managed ash stockpiles can pose a threat to water quality. In addition, depending on the boiler combustion conditions, the incomplete combustion of organic compounds in the flue system can lead to chemical precursors that bind to the fly ash particles where they are converted into toxic organic compounds such as dioxins. Therefore, as a matter of state law pursuant to Water Code sections 13263 and 13243, this permit prohibits the discharge of these waste streams to surface water. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge. In addition, this Order requires that the Discharger implement BMPs, including but not limited to, good housekeeping practices that minimize or prevent material tracking and mobilization by contact with storm water in order to prevent these discharges.

6. **Prohibition III.F (No discharge of ash, cooling tower solids, or any other solids recognizable as originating from cogeneration operations).** Consistent with Order R5-2020-0017, the Order prohibits the discharge of ash, cooling tower solids, or any other solids recognized as originating from cogeneration operations to surface waters or surface water drainage courses. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

7. **Prohibition III.G (No discharge of wastewater from the Log Yard Pond, Retention Pond, Substation Pond, and Evaporation Ponds offsite).** Consistent with Order R5-2020-0017, the Order prohibits discharges of wastewater from the log yard pond, retention pond, substation pond, or

evaporation ponds offsite (e.g., to surface water or surface water drainage courses), except to a suitable treatment plant or for reclamation purposes approved by the Executive Officer. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

8. **Prohibition III.H (No discharge of debris recognized as originating from the sawmill operations at the Facility).** Effluent limitation guidelines (ELGs) were established in 40 C.F.R. part 429, subpart I for the Wet Storage Subcategory of the Timber Products Point Source Category, which applies to the discharges from the storage of logs or roundwood on land during which water is sprayed or deposited intentionally on the logs (i.e., wet decking). The Discharger stacks logs on a paved log yard and keeps them wet by a sprinkler system to prevent checking and blue staining, and thus the requirements of 40 C.F.R. part 429, subpart I are applicable to the Facility. 40 C.F.R. sections 429.101 and 429.103 require that existing point sources subject to subpart I achieve effluent limitations representing the degree of effluent reduction attainable by the application of best practicable control technology currently available (BPT) and best available technology economically achievable (BAT), respectively. For wet storage operations, 40 C.F.R. sections 429.101 and 429.103 both require that there shall be no debris discharged. Debris is defined as 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. Consistent with 40 C.F.R. sections 429.101 and 429.103, this Order prohibits discharges of debris recognized as originating from the Facility to surface waters or surface water drainage courses. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

9. **Prohibition III.I (No discharge of wastewater from barking, sawmill, and planing operations).** ELG's were established at 40 C.F.R. part 429, subpart A for the Barking Subcategory of the Timber Products Point Source Category, which applies to discharges from the barking of logs, and at subpart K for the Sawmills and Planing Mills Subcategory, which applies to discharges from timber products processing procedures that include bark removal, sawing, resawing, edging, trimming, planing, and machining. The Discharger operates barking, sawmill and planing mill operations, and thus the requirements of 40 C.F.R. part 429, subparts A and K are applicable to the Facility. 40 C.F.R. section 429.21(a) requires that existing point sources subject to subpart A achieve effluent limitations representing the degree of effluent reduction attainable by the application of BPT. For mechanical barking operations, 40 C.F.R. section 429.21(a) requires that there shall be no discharge of process wastewater pollutants into navigable waters. 40 C.F.R. sections 429.121 and 429.123 require that existing point sources subject to subpart K achieve effluent limitations representing the degree of effluent reduction attainable by the application of BPT and BAT, respectively. For sawmill and planing mill operations, 40 C.F.R. sections 429.121 and 429.123 require that

there shall be no discharge or process wastewater pollutants into navigable waters. Consistent with 40 C.F.R. sections 429.21(a), 429.121, and 429.123, this Order prohibits discharges of process wastewater from barking, sawmill, and planing operations. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

10. **Prohibition III.J (No discharge of hazardous waste or toxic substances).** This prohibition is based on CCR, title 22, section 66261.1 et seq, that prohibits discharge of hazardous waste. The Basin Plan also provides that all waters shall be maintained free of toxic substances. Water treatment chemicals used in maintaining the water quality within the boiler and cooling tower may cause toxicity to aquatic life. This Order prohibits the discharge of boiler and cooling tower blowdown, hazardous, or toxic substances (including water treatment chemicals) to surface waters or surface water drainage courses. In addition, the Basin Plan states that surface waters shall not contain oils, greases, or other materials in concentrations that cause nuisance or results in a visible film or coating on the surface of the water. This Order prohibits the discharge of petroleum products, including oil, grease, and diesel, to surface waters or surface water drainage courses. This prohibition is consistent with the industrial storm water discharge characterization provided in the Report of Waste Discharge.

11. **Prohibition III.K (No discharge of "hazardous" or "designated" waste to the ponds).** Consistent with Order R5-2020-0017, this Order prohibits the discharge of hazardous waste according to CCR, Title 23, section 2521(a), CCR, section 2510, et seq., or of designated waste according to sections 13173 of the Water Code.

12. **Prohibition III.L (No waste constituents shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order)** This prohibition ensures that waste constituents from facility operations do not degrade or violate groundwater quality standards. It implements the State Water Board's antidegradation policy (Resolution 68-16), which requires that high-quality groundwater be protected unless a lowering of water quality is justified and beneficial uses are maintained. Because groundwater restoration is difficult and often infeasible, prevention is essential. The prohibition ensures that all discharges under the Order are controlled and monitored so that infiltration, seepage, or percolation from ponds or land application areas do not cause exceedances of groundwater limitations or background quality thresholds.

## B. Technology-Based Effluent Limitations

### 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 Effluent Limitations Guidelines and Standards for the Timber Products Processing Category in 40 C.F.R. part 429, specifically, subpart A (Barking Subcategory), subpart I (Wet Storage), and subpart K (Sawmills and Planing Mills), and 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:

a. 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.

b. 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.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including $BOD_5$, 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.

d. 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 Central Valley Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

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

The Discharger operates a “wet deck” log storage operation, a “barking” operation, and a “sawmill and planing mill” operation. Therefore, ELGs established in the Timber Products Processing Point Source Category (40 C.F.R. Part 429), specifically, subpart A (Barking Subcategory), subpart I (Wet Storage Subcategory), and subpart K (Sawmills and Planing Mills Subcategory) are applicable.

Except as provided in 40 C.F.R. section 125.30 through 125.32, any existing point source subject to these subparts must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT. The following effluent limitations apply to Discharge Point 002 (i.e., Monitoring Location SW-006):

a. **Barking Operations.** As discussed in section IV.A.9 of this Fact Sheet, ELGs established at 40 C.F.R. part 429, subpart A for the Barking Subcategory of the Timber Products Point Source Category are applicable to the Facility. Consistent with 40 C.F.R. section 429.21(a), this Order establishes prohibition of discharges of process wastewater from barking operations to surface waters or surface water drainage courses.

b. **Wet Storage Operations.** As discussed in section IV.A.8 of this Fact Sheet, ELGs established at 40 C.F.R. part 429, subpart I for the Wet Storage Subcategory of the Timber Products Point Source Category are applicable to the Facility. Consistent with 40 C.F.R. section 429.101 and 429.103, this Order prohibits discharges of debris recognized as originating from the Facility to surface waters or surface water drainage courses.

   40 C.F.R. sections 429.101 and 429.103 also require that the pH be within the range of 6.0 and 9.0. The ELGs for the Wet Storage Subcategory at 40 C.F.R. section 429.101 and 429.103 are not directly applicable to discharges of industrial storm water (i.e., subsequent to the first flush) from the log yard. However, if an instantaneous minimum and maximum pH of 6.0 and 9.0, respectively, must be achieved for discharges of process wastewater from the log yard area, the Central Valley Water Board finds that it should also be achievable for subsequent discharges of industrial storm water. Therefore, the Order includes instantaneous minimum and maximum effluent limitations for pH of 6.0 and 9.0, respectively, for discharges of industrial storm water at Discharge Point 002 (i.e., Monitoring Location SW-006) based on BPJ.

c. **Sawmill and Planing Mill Operations.** As discussed in section IV.A.9 of this Fact Sheet, ELGs established at 40 C.F.R. part 429, subpart K for the Sawmills and Planing Mills Subcategory of the Timber Products Point Source Category are applicable to the Facility. Consistent with 40 C.F.R. sections 429.121 and 429.123, this Order establishes a prohibition of

discharges of process wastewater from sawmill and planing mill operations.

**Summary of Technology-based Effluent Limitations**
**Discharge Point 002**

**Table F-9 Summary of Technology-based Effluent Limitations**

| Parameter | Units | Effluent Limitations |
|---|---|---|
| pH | Standard Units | Instantaneous Max 9.0<br>Instantaneous Min 6.0 |

## C. Water Quality-Based Effluent Limitations and Storm Water Action Levels

### 1. Scope and Authority

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

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

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated beneficial 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.

Finally, 40 C.F.R. section 122(d)(1)(vii) requires effluent limits to be developed consistent with any available waste load allocations (WLAs) developed and approved for the discharge.

As specified in 40 C.F.R. section 122.44(k), BMPs may be used in lieu of numeric effluent limitations when:

a. Authorized under section 304(e) of the CWA for control of toxic pollutants and hazardous substances for ancillary industrial activities;

b. Authorized under section 402(p) of the CWA for the control of storm water discharges;

c. Numeric effluent limitations are infeasible; or

d. The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purpose and intent of the CWA.

Section 402(p) of the CWA authorizes regulation of storm water discharges associated with industrial activities. Therefore, a combination of BMPs and numeric storm water action levels (SWALs) are utilized in this Order to regulate the discharge of pollutants in discharges of industrial storm water.

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

The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

The Basin Plan on page 2-1 states: “Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning…” and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.”

The federal CWA section 101(a)(2), states: “it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water be achieved by July 1, 1983.” Federal Regulations, developed to implement the requirements of the CWA, create a rebuttable presumption that all waters be designated as fishable and swimmable. Federal Regulations, 40 C.F.R. sections 131.2 and 131.10, require that all waters of the State regulated to protect the beneficial uses of public water supply, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial and other purposes including navigation. 40 C.F.R. section 131.3(e) defines existing beneficial uses as those uses actually attained after 28 November 1975, whether or not they are included in the water quality standards. Federal Regulation, 40 C.F.R. section 131.10 requires that uses be obtained by implementing effluent limitations, requires that all downstream uses be protected and states that in no case shall a state adopt waste transport or waste assimilation as a beneficial use for any waters of the United States.

a. **Receiving Water and Beneficial Uses.** The Facility discharges industrial storm water to Canyon Creek, a tributary of Burney Creek, within the Pit River Hydrologic Unit (526.00). The Burney Creek watershed supports

valuable commercial timberland and high-quality sport fishing for resident rainbow trout. The majority of Burney Creek watershed is privately owned and managed for commercial timber production. The watershed also encompasses several large ranches with irrigated land use for pasture, hay, and wild rice. Refer to III.C.1. above for a complete description of the receiving water and beneficial uses.

b. **Effluent and Ambient Background Data.** The evaluation of compliance with receiving water objectives, as described in section IV.C.3 of this Fact Sheet, was based on data from January 2023 (first discharge) through February 2025, which includes industrial storm water (effluent) and ambient background data submitted in SMRs.

c. **Assimilative Capacity/Mixing Zone.** The Discharger has not submitted a mixing zone/dilution study requesting dilution credits. Available flow data indicates that, at times, Canyon Creek is dominated by industrial storm water (effluent) from the Facility downstream of the discharge. Although the industrial storm water discharge, at times, maintains the aquatic habitat, constituents that may cause harm to aquatic life may not be discharged.

Thus, consistent with the assumption used for Order R5-2020-0017, the worst-case dilution for Canyon Creek is assumed to be zero to provide protection of the receiving water beneficial uses. The impact of assuming zero assimilative capacity within the receiving water is that effluent limitations are applied end-of-pipe with no allowance for dilution within the receiving water.

d. **Conversion Factors.** The CTR contains aquatic life criteria for arsenic, cadmium, chromium III, chromium VI, copper, lead, nickel, silver, and zinc which are presented in dissolved concentrations. U.S. EPA recommends conversion factors to translate dissolved concentrations into total concentrations. The default U.S. EPA conversion factors contained in Appendix 3 of the SIP were used to convert the applicable dissolved criteria to total recoverable criteria.

e. **Hardness-Dependent CTR Metals Criteria.** 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 metals with hardness-dependent criteria include cadmium, copper, chromium III, lead, nickel, silver, and zinc.

Based on 15 paired samples collected between January 2023 (first discharge) and February 2025, the effluent hardness ranged from 52 mg/L to 86 mg/L. Based on 13 paired samples collected between January 2023 (first discharge) and February 2025, the upstream receiving water hardness ranged from 21 mg/L to 60 mg/L and downstream receiving water hardness ranged from 33 mg/L to 78 mg/L. The average hardness

of both the upstream and downstream receiving water was approximately 38 mg/L. Actual observed ambient hardness was used for evaluating compliance with water quality objectives for the industrial storm water discharge.

### 3. Determining the Need for Storm Water Action Levels

This Order regulates the discharge of storm water from industrial activity to surface water. The surface water discharge is industrial storm water; therefore, the SIP provisions for establishment of effluent limitations for CTR constituents are not applicable to the discharge. However, due to the complexity of the Facility and unique threats to water quality, the Central Valley Water Board has elected to regulate this Facility with an individual NPDES storm water permit. In accordance with 40 C.F.R. section 122.44(d)(1)(i), the Central Valley Water Board has conducted a review of the industrial storm water (effluent) and upstream and downstream receiving water data collected during the term of Order R5-2020-0017 for comparison with applicable water quality objectives and/or criteria to determine if the discharge is causing exceedances of the applicable water quality objectives in the downstream receiving water. In addition, the industrial storm water discharge data has been compared to applicable storm water numeric action levels (NALs) from the General Permit for Storm Water Associated with Industrial Activities Order 2014-0057-DWQ, as amended in 2015 and 2018, NPDES Order No. CAS000001 (Industrial General Permit or IGP) and benchmark thresholds from the U.S. EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) to assess whether the storm water discharge could potentially impair or contribute to impairing water quality or affect human health from ingestion of water or fish.

In accordance with 40 C.F.R. section 122.44(k), in lieu of Water Quality-Based Effluent Limitations (WQBELs), this Order includes numeric storm water action levels (SWALs) for applicable pollutants required under the Industrial General Permit Table 1 and Table 2 which are based on the applicable SIC codes for Sawmills and Planing Mills (SIC 2421) and Steam Electric Power Generating Facilities (SIC 4911), as well as for additional pollutants that are present in the discharge at concentrations that exceed applicable storm water NALs/benchmark thresholds (Industrial General Permit Table 2) or have the potential to cause or contribute to an exceedance of applicable water quality objectives in the downstream receiving water. The SWALs are not effluent limitations and should not be interpreted as such; they are merely levels that the Central Valley Water Board has used to determine if industrial storm water discharges from the Facility merit further monitoring to ensure that the Facility has been successful in implementing BMPs identified in the Storm Water Pollution Prevention Plan (SWPPP).

a. **Constituents with No SWAL.** Central Valley Water Board staff conducted a review of the industrial storm water data collected during the term of Order R5-2020-0017. All industrial storm water analyses are included in

the administrative record and a summary of the constituents of concern is provided in Attachment G. SWALs are not included in this Order for constituents that do not demonstrate a potential to cause or contribute to an instream excursion of an applicable water quality objective; however, monitoring for these pollutants is established in this Order.

Most constituents are not discussed in this Order, as industrial storm water discharge is well below the pollutant NALs and/or water quality objectives/criteria for these constituents. This section only provides the rational for the constituents of concern that were found to have no potential for a SWAL after assessment of the industrial storm water discharge data.

i. **pH**

(a) **WQO.** The Basin Plan includes a water quality objective for surface waters (except for Goose Lake) that the "pH shall not be depressed below 6.5 nor raised above 8.5." Table 2 of the Industrial General Permit includes instantaneous NALs for pH, an indicator parameter, of less than 6.0 and greater than 9.0 for storm water discharges applicable to all industries. Order R5-2020-0017 has technology-based minimum and maximum effluent limitations of 6.0 SU and 9.0 SU, respectively, for the industrial storm water discharge.

(b) **Storm Water Analysis.** The industrial storm water (effluent) pH ranged from 5.62 SU to 7.58 SU for 50 samples collected between January 2023 (first discharge) and February 2025, the upstream receiving water pH ranged from 6.16 SU to 8.2 SU for 50 samples collected between January 2023 and February 2025, and the downstream receiving water pH ranged from 6.10 SU to 8.03 SU for 45 samples collected between January 2023 and February 2025.

Based on the monitoring data indicating that both the upstream and downstream receiving water are below the lower pH water quality objective of 6.5 SU, the Central Valley Water Board finds that the discharge does not exhibit a potential to cause or contribute to an exceedance of the applicable water quality objectives in the downstream receiving water for pH. Therefore, this Order does not include a storm water action level for pH. However, as discussed in section IV.B.2 of this Fact Sheet, this Order includes technology-based minimum and maximum effluent limitations of 6.0 SU and 9.0 SU, respectively, based on BPJ for discharges of industrial storm water for Sawmills and Planing Mills (SIC 2421).

b. **Constituents with No Data or Insufficient Data.** – Not Applicable

c. **Constituents with SWAL.** The Central Valley Water Board finds that the industrial storm water discharge has a potential to cause or contribute to an instream excursion above a water quality standard for aluminum, chemical oxygen demand, electrical conductivity, iron, manganese, oil and grease, settleable solids, tannins and lignins, total suspended solids, and zinc. SWALs for these constituents are included in this Order. A summary of the industrial storm water discharge data, downstream receiving water monitoring data, applicable water quality objectives/criteria, and storm water action levels have been provided in Attachment G, and a detailed discussion of the industrial storm water analysis for each constituent is provided below.

i. **Aluminum**

(a) **WQO.** The State Water Board Division of Drinking Water (DDW) has established Secondary Maximum Contaminant Levels (MCLs) to assist public drinking water systems in managing their drinking water for public welfare considerations (e.g., as taste, color, and odor), not for toxicity. The Secondary MCL for aluminum is 200 µg/L for protection of the MUN beneficial use. The Basin Plan incorporates and requires compliance with these standards on an annual average basis with samples that have been passed through a 1.5-micron filter. DDW has also established Primary MCLs to address health-related effects of drinking water. The Primary MCL for aluminum is 1,000 µg/L for the protection of the MUN beneficial use, expressed as a total recoverable fraction.

The 2018 U.S. EPA National Recommended Ambient Water Quality Criteria (NAWQC) for protection of freshwater aquatic life for aluminum recommends acute (1-hour average; criteria maximum concentration or CMC) and chronic (4-day average; criteria continuous concentration or CCC) standards based upon Multiple Linear Regression (MLR) models for vertebrate and invertebrate species that use pH, dissolved organic carbon (DOC), and total hardness to quantify the effects of these water chemistry parameters on the bioavailability and resultant toxicity of aluminum to aquatic organisms. The U.S. EPA aluminum criteria have been used to implement the Basin Plan's narrative toxicity objective.

A site-specific CMC of 392 µg/L and CCC of 221 µg/L were calculated considering pH, hardness, and DOC representative of the receiving water and industrial storm water (effluent) conditions. Industrial storm water (effluent) and receiving water sampling results for pH, DOC, and hardness from January 2023 (first discharge) to February 2025 were used in the evaluation.

Order R5-2020-0017 did not include a site-specific annual average storm water action level of 750 µg/L for total recoverable aluminum from Table 2 of the Industrial General Permit, which is based on the 1988 national recommended acute freshwater aquatic life criteria. The total recoverable aluminum benchmark threshold was updated to 1,100 µg/L in the 2021 MSGP. This update reflects the 2018 U.S. EPA recommended changes that aluminum criteria include the effects of water chemistry (i.e., pH, hardness, and DOC) on the bioavailability of aluminum and affect toxicity to aquatic organisms. To generate the updated aluminum benchmark value in the 2021 MSGP, the U.S. EPA calculated a nationally representative acute water aquatic criteria value using water quality data reported in the USGS National Water Information System (NWIS) database that was collected from surface waters across the conterminous U.S. between 1984 and 2018.

(b) **Storm Water Analysis.** Total recoverable aluminum concentrations in the industrial storm water (effluent) ranged from 47.2 µg/L to 11,300 µg/L, with a maximum calendar annual average of 1,642 µg/L, based on 26 samples collected between January 2023 (first discharge) and February 2025. Dissolved (0.45-micron filtered) aluminum concentrations in the industrial storm water (effluent) ranged from 14.1 µg/L to 278 µg/L, with a maximum calendar annual average of 129 µg/L, based on 25 samples collected between January 2023 (first discharge) and February 2025. Whereas a single concurrent sampling event in the upstream and downstream receiving water in April 2023, the total recoverable aluminum concentrations in the upstream receiving water was 80.1 µg/L and the downstream receiving water was 72 µg/L; whereas the dissolved (0.45-micron filtered) aluminum in the upstream receiving water was 71.2 µg/L and the downstream receiving water was 44.6 µg/L.

Based on the available data, the maximum annual average concentration of total recoverable aluminum in the industrial storm water discharge at the Facility exceeded both the 750 µg/L IGP numeric action level and the 1,100 µg/L MSGP benchmark. In addition, the maximum annual average total recoverable aluminum concentration in the industrial storm water discharge exceeded the Secondary MCL, whereas the maximum annual average dissolved aluminum concentration in the industrial storm water discharge did not exceed the Secondary MCL. Furthermore, there is limited downstream receiving water monitoring data available to determine compliance with the Secondary MCL. Therefore, the industrial

storm water discharge has the potential to cause or contribute to an instream excursion above the Secondary MCL.

(c) **SWAL.** This Order includes an annual average storm water action level for aluminum of 1,100 µg/L based on the updated U.S. EPA NAWQC in the 2021 MSGP. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce aluminum concentrations in the storm water discharge.

ii. **Chemical Oxygen Demand (COD)**

(a) **WQO.** COD is the amount of dissolved oxygen in water consumed by the chemical breakdown of organic and inorganic matter (i.e., COD is not a specific component in a discharge). A high COD value indicates elevated quantities of pollutants in industrial storm water runoff, especially carbon. Table 1 of the Industrial General Permit and Table 8.A-2 of the 2021 MSGP includes COD as an additional industry specific analytical parameter for Sawmills and Planing Mills (SIC 2421), which is applicable to the Facility. Thus, Order R5-2020-0017 included an industry-specific annual average storm water action level of 120 mg/L for COD from Table 2 of the Industrial General Permit.

(b) **Storm Water Analysis.** The Industrial storm water (effluent) COD ranged from ND (<5 mg/L) to 51 mg/L, with a maximum annual average of 27.4 mg/L, for 14 samples collected between January 2023 (first discharge) and February 2025. Upstream and downstream receiving water monitoring data for COD is not available. Analysis of the industrial storm water (effluent) data shows that the concentration of COD in the storm water discharge at the Facility did not exceed 120 mg/L storm water action level during the term of the permit.

(c) **SWAL.** Based on the nature of the industrial runoff from the sawmill operations, this Order maintains the annual average storm water action level of 120 mg/L for COD based on the NAL in the Industrial General Permit that is applicable to Sawmills and Planing Mills (SIC 2421). If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the COD in the storm water discharge.

iii. **Iron**

(a) **WQO.** U.S. EPA developed NAWQC for the protection of freshwater aquatic life for iron. The recommended 4-day average (chronic) criteria is 1,000 µg/L. In addition, DDW has

established Secondary MCLs to assist public drinking water systems in managing their drinking water for public welfare considerations, such as taste, color, and odor. The Secondary MCL for iron is 300 µg/L for protection of the MUN beneficial use. The Basin Plan requires compliance with Secondary MCLs on an annual average basis with samples that have been passed through a 1.5-micron filter.

Table 1 of the Industrial General Permit includes iron as an additional analytical parameter for Steam Electric Power Generating Facilities (SIC 4911), which is applicable due to the cogeneration operations at the Facility. Table 2 of the Industrial General Permit states that the annual NAL for total iron is 1,000 µg/L, which is based on the U.S. EPA NAWQC. Thus, Order R5-2020-0017 included an industry-specific annual average storm water action level of 1,000 µg/L for iron. However, the iron benchmark was suspended in the 2021 MSGP, based on the lack of documented acute toxicity.

(b) **Storm Water Analysis.** Total recoverable iron concentration in the industrial storm water (effluent) ranged from 352 µg/L to 11,500 µg/L, with a maximum calendar annual average of 2,042 µg/L, based on 26 samples collected between January 2023 (first discharge) and February 2025. Whereas the dissolved (0.45-micron filtered) iron concentration in the industrial storm water (effluent) ranged from 166 µg/L to 500 µg/L, with a maximum calendar annual average of 365 µg/L, based on 25 samples collected between January 2023 (first discharge) and February 2025.

For 24 samples collected concurrently in the upstream and downstream receiving water between January 2023 and February 2025 the total recoverable iron concentration in the upstream receiving water ranged from 19.9 µg/L to 691 µg/L, with a maximum calendar annual average of 172 µg/L, and the total recoverable iron concentration in the downstream receiving water ranged from 105 µg/L to 1,830 µg/L, with a maximum calendar average of 598 µg/L. In addition, the dissolved (0.45-micron filtered) iron concentration in the upstream receiving water ranged from 12.4 µg/L to 324 µg/L, with a maximum calendar annual average of 91 µg/L, and the dissolved (0.45-micron) iron concentration in the downstream receiving water ranged from 50.9 µg/L to 467 µg/L, with a maximum calendar annual average of 156 µg/L for 24 concurrent samples collected between January 2023 and February 2025.

Based on the available date, the maximum annual average concentration of total recoverable iron in the industrial storm water discharge at the Facility exceeded the 1,000 µg/L IGP numeric action level. In addition, both the maximum annual average concentration for total recoverable and dissolved iron in the industrial storm water discharge exceeded the Secondary MCL. Furthermore, the maximum annual average total recoverable iron in the downstream receiving water exceeded the Secondary MCL, whereas the maximum annual average dissolved iron in the downstream receiving water did not exceed the Secondary MCL. Therefore, the industrial storm water discharge has the potential to cause or contribute to an instream excursion above the Secondary MCL.

(c) **SWAL.** Based on the nature of the industrial runoff from the cogeneration operations, this Order maintains the annual average storm water action level of 1,000 µg/L for total recoverable iron based on the NAL in the Industrial General Permit that is applicable to Steam Electric Power Generating Facilities (SIC 4911). If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the iron in the storm water discharge.

iv. **Manganese**

(a) **WQO.** DDW has established Secondary MCLs to assist public drinking water systems in managing their drinking water for public welfare considerations, such as taste, color, and odor. The Secondary MCL for manganese is 50 µg/L for protection of the MUN beneficial use. The Basin Plan requires compliance with secondary MCLs on an annual average basis with samples that have been passed through a 1.5-micron filter.

Order R5-2020-0017 did not include a site-specific annual average storm water action level of 1,000 µg/L for manganese based on the benchmark threshold in Table 3 of the 2000 MSGP. However, the 2008 MSGP removed the benchmark for manganese because there were no U.S. EPA established criteria for this parameter.

(b) **Storm Water Analysis.** Total recoverable manganese concentration in the industrial storm water (effluent) ranged from 79.6 µg/L to 803 µg/L, with a maximum calendar annual average of 392 µg/L, based on 26 samples collected between January 2023 (first discharge) and February 2025. Whereas the dissolved (0.45-micron filtered) manganese concentration in the industrial storm water (effluent) ranged from 64.4 µg/L to 806 µg/L, with a maximum calendar annual average of

350 µg/L, based on 25 samples collected between January 2023 (first discharge) and February 2025.

For 24 samples collected concurrently in the upstream and downstream receiving water between January 2023 and February 2025 the total recoverable manganese concentration in the upstream receiving water ranged from 0.53 µg/L to 20.8 µg/L, with a maximum calendar annual average of 5.3 µg/L, and the total recoverable manganese concentration in the downstream receiving water ranged from 9.88 µg/L to 315 µg/L, with a maximum calendar annual average of 100 µg/L. In addition, the dissolved (0.45-micron filtered) manganese concentration in the upstream receiving water ranged from 0.28 µg/L to 9.74 µg/L, with a maximum calendar annual average of 2.0 µg/L, and the dissolved (0.45-micron) manganese concentration in the downstream receiving water ranged from 9.03 µg/L to 305 µg/L, with a maximum calendar annual average of 91 µg/L for 24 concurrent samples collected between January 2023 and February 2025.

Based on the available date, the maximum annual average concentration of total recoverable manganese in the industrial storm water discharge at the Facility did not exceed the 1,000 µg/L IGP numeric action level. However, both the maximum annual average concentration for total recoverable and dissolved manganese in the industrial storm water discharge exceeded the Secondary MCL. Furthermore, both the maximum annual average total recoverable and dissolved manganese in the downstream receiving water exceeded the Secondary MCL. Therefore, the industrial storm water discharge has the potential to cause or contribute to an instream excursion above the Secondary MCL.

(c) **SWAL.** Based on the nature of the industrial runoff from the sawmill operations, this Order includes an annual average storm water action level of 1,000 µg/L for total recoverable manganese based on the benchmark value in the 2000 MSGP. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the manganese in the storm water discharge.

v. **Oil and Grease**

(a) **WQO.** The Basin Plan contains a narrative water quality objective for oil and grease in surface waters, which states: "[w]aters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a

visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses."

The Industrial General Permit includes oil and grease as an indicator parameter for the amount of petroleum hydrocarbons in the storm water discharge which is applicable to all industries. At very low concentrations, oil and grease can cause sheens on the surface of water. Oil and grease can adversely affect aquatic life, cause unsightly floating material and make water undrinkable. Thus, Order R5-2020-0017 included an annual average storm water action level of 15 mg/L for oil and grease from Table 2 of the Industrial General Permit. Table 2 of the Industrial General Permit also includes an instantaneous maximum storm water action level of 25 mg/L for oil and grease.

(b) **Storm Water Analysis.** Based on 3 industrial storm water (effluent) samples collected between January 2023 (first discharge) and February 2025, the concentration of oil and grease ranged from ND (<0.86 mg/L) to DNQ (~1 mg/L), with a maximum calendar annual average of DNQ (~1 mg/L). However, no upstream or downstream receiving water samples were collected during the term of the permit.

Furthermore, potential significant sources of oil and grease include, but are not limited to, maintenance shops, vehicles, machines and roadways, which are present at the Facility. Therefore, the Central Valley Water Board finds that SWALs for oil and grease are required due to the industrial nature of the runoff from the sawmill and cogeneration operations at the Facility.

(c) **SWAL.** This Order maintains the annual average storm water action level and includes an instantaneous maximum storm water action level for oil and grease of 15 mg/L and 25 mg/L, respectively, based on the numeric action level values in Table 2 of the Industrial General Permit. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce oil and grease in the storm water discharge.

vi. **Salinity (Electrical Conductivity and Total Dissolved Solids)**

(a) **WQO.** The Basin Plan contains a chemical constituent objective that incorporates state MCLs, contains a narrative objective, and contains numeric water quality objectives for certain specified water bodies for electrical conductivity, total dissolved solids, sulfate, and chloride. The U.S. EPA Ambient Water

Quality Criteria for Chloride recommends acute and chronic criteria for the protection of aquatic life. There are no U.S. EPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulfate. Additionally, there are no U.S. EPA numeric water quality criteria for the protection of agricultural, livestock, and industrial uses. Numeric values for the protection of these uses are typically based on site specific conditions and evaluations to determine the appropriate constituent threshold necessary to interpret the narrative chemical constituent Basin Plan objective. The Central Valley Water Board must determine the applicable numeric limit to implement the narrative objective for the protection of agricultural supply. Order R5-2020-0017 did not include a storm water action level of 700 µmhos/cm for electrical conductivity based on CV-SALTS recommended level for protection of the agricultural supply beneficial use.
Table F-10, below, contains various recommended levels for EC or TDS, sulfate, and chloride.

**Table F-10 Salinity Water Quality Criteria/Objectives**

| Parameters | Secondary MCL Recommended Level. | Secondary MCL Upper Level | Secondary MCL Short-term Maximum | U.S. EPA NAWQC | Maximum Calendar Annual Average Effluent Conc. | Maximum Daily Effluent Conc. |
|---|---|---|---|---|---|---|
| EC (µmhos/cm) | 900 | 1,600 | 2,200 | N/A | 198 (2025) | 233 (11/27/2024) |
| TDS (mg/L) | 500 | 1,000 | 1,500 | N/A | -- | 115 (02/01/2023) |
| Sulfate (mg/L) | 250 | 500 | 600 | N/A | -- | 11.5 (02/01/2023) |
| Chloride (mg/L) | 250 | 500 | 600 | 860 1-hour / 230 4-day | -- | 7.79 (02/01/2023) |

**Table F-10 Notes:**

1. **Agricultural Water Quality Objectives.** Applicable agricultural water quality objectives vary. Procedures for establishing the applicable numeric limitation to implement the narrative chemical constituent objective can be found in the Policy for Application of Water Quality Objectives, section 4.2.2.1.9 of the Basin Plan. However, the Basin Plan does not require improvement over naturally occurring background concentrations. In cases where the natural background concentration of a particular constituent exceeds an applicable water quality objective, the natural background concentration will be considered to comply with the objective.

2. **Secondary MCLs.** Secondary MCLs are for protection of public welfare and are stated as a recommended level, upper level, and a short-term maximum level.

3. **Chloride.** The Secondary MCL for chloride is 250 mg/L, as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum.

4. **Electrical Conductivity or Total Dissolved Solids.** The Secondary MCL for EC is 900 µmhos/cm as a recommended level, 1600 µmhos/cm as an upper level, and 2200 µmhos/cm as a short-term maximum, or when expressed as TDS is 500 mg/L as a recommended level, 1000 mg/L as an upper level, and 1500 mg/L as a short-term maximum.

5. **Sulfate.** The Secondary MCL for sulfate is 250 mg/L as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum.

(b) **Storm Water Analysis.**

(1) **Chloride.** Chloride concentration in the industrial storm water (effluent) was 7.79 mg/L for one sample collected by the Discharger in February 2023. These levels do not exceed the Secondary MCL recommended level (250 mg/L). Background concentration in Canyon Creek was 1.26 mg/L for one sample collected by the Discharger in February 2023.

(2) **Electrical Conductivity.** A review of the Discharger's monitoring reports shows a maximum calendar annual average industrial storm water (effluent) EC of 198 µmhos/cm, with a range from 133 µmhos/cm to 233 µmhos/cm for 52 samples collected between January 2023 (first discharge) and February 2025. These levels do not exceed the Secondary MCL recommended level (900 µmhos/cm). Based on 46 concurrent samples collected in the upstream and downstream receiving water between January 2023 and February 2025, the upstream receiving water maximum calendar annual average EC was 113 µmhos/cm, with a range of 51.9 µmhos/cm to 476.2 µmhos/cm, and the downstream receiving water maximum calendar annual average EC was 157 µmhos/cm, with a range of 79 µmhos/cm to 396 µmhos/cm.

The EC in freshwater streams typically range from 100 µmhos/cm to 2,000 µmhos/cm whereas pure rainwater typically has a very low EC value (i.e., less than 10 µmhos/cm). The EC measurements in the Facility's industrial storm water discharge exceed the value for what would generally be expected for pollutant-free storm water runoff; however, the industrial storm water discharge EC

measurements did not exceed the observed range of the receiving water. Therefore, the industrial storm water discharge from the Facility does not cause or contribute to an instream excursion above the Secondary MCLs for EC.

(3) **Sulfate.** Sulfate concentration in the industrial storm water (effluent) were 11.5 mg/L for one sample collected by the Discharger in February 2023. These levels do not exceed the Secondary MCL recommended level (250 mg/L). Background concentrations in Canyon Creek was 1.77 mg/L for one sample collected by the Discharger in February 2023.

(4) **Total Dissolved Solids.** The maximum calendar annual average TDS industrial storm water (effluent) concentration was 115 mg/L based on one sample collected in February 2023. These levels do not exceed the Secondary MCL recommended level (500 mg/L). The background receiving water TDS was 55 mg/L based on one sample collected in February 2023.

(c) **SWAL.** As discussed above, the industrial storm water discharge does not have the potential to cause or contribute to an instream excursion above water quality objectives for salinity. However, the Discharger submitted a Notice of Intent for the Salinity Control Program indicating its intent to meet the Alternative Salinity Permitting Approach. Consistent with Alternative Salinity Permitting Approach, this Order requires the Discharger to participate in the Salinity P&O Study, to continue to implement a Salinity Evaluation and Minimization Plan (SEMP) to identify and address sources of salinity discharges from the Facility and establishes an annual average storm water action level for EC of 700 µmhos/cm for the protection of the agricultural supply (AGR) beneficial use.

vii. **Settleable Solids**

(a) **WQO.** For inland surface waters, the Basin Plan states that "[w]ater shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses."

The Industrial General Permit and the MSGP do not include settleable solids as a pollutant of concern for the applicable industries at the Facility, i.e., Sawmills and Planing Mills (SIC 2421) and Steam Electric Power Generating Facilities (SIC 4911). Thus, Order R5-2020-0017 did not include a site-specific annual average storm water action level for

settleable solids. However, Order R5-2015-0071 included an average monthly effluent limitation (AMEL) of 0.1 ml/L and a maximum daily effluent limitation (MDEL) of 0.2 ml/L for settleable solids.

(b) **Storm Water Analysis.** Settleable solids ranged from ND (<0.1 ml/L) to 0.1 ml/L, with a maximum calendar annual average of ND (<0.1 ml/L), for 50 industrial storm water (effluent) samples collected between January 2023 (first discharge) and February 2025. Therefore, the industrial storm water discharge does not exhibit a potential to cause or contribute to an excursion above the Basin Plan's narrative objective for settleable solids in the downstream receiving water. However, this Order does not include Receiving Water Limitations for settleable material.

Due to the nature of the industrial storm water discharge from the LAA and conveyance through earthen ditches, there is a potential for sediment from erosion and dirt from impervious (i.e., paved) areas to be present in the discharge. Furthermore, many pollutants can adhere to sediment particles; thus, reducing sediment will reduce the amount of these pollutants in the storm water discharge. The presence of sediment in the industrial storm water discharge is minimized through the implementation of BMPs.

(c) **SWAL.** Thus, to ensure protection of receiving water beneficial uses, this Order establishes an annual average storm water action level of 0.2 ml/L for settleable solids for what can be reasonably achieved in a well-designed, constructed, and operated settling basin for the types of contaminants encountered in the timber industry (wood debris and soil particles). If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the settleable solids in the storm water discharge.

viii. **Tannins and Lignins**

(a) **WQO.** For inland surface waters, the Basin Plan states that "[w]ater shall be free of discoloration that causes nuisance to adversely affects beneficial uses." No numeric criteria or objectives for tannins and lignins have been developed. Tannins and lignins are generated from wood products and could cause discoloration or a pH shift of the industrial storm water (effluent) or receiving water. Some studies have indicated that elevated levels of tannins and lignins are harmful to aquatic life. Due to the nature of the Sawmills and Planing Mills (SIC 2421) industrial activities at the Facility, Order

R5-2020-0017 included an annual average storm water action level for tannins and lignins of 30 mg/L.

(b) **Storm Water Analysis.** Based on 14 industrial storm water (effluent) samples collected between January 2023 (first discharge) and February 2025, the concentration of tannins and lignins ranged from DNQ (~0.27 mg/L) to 3.59 mg/L, with a maximum calendar annual average of 1.22 mg/L. However, no upstream or downstream receiving water samples for tannins and lignins were collected during the term of the permit.

Elevated concentrations of tannins and lignins in the industrial storm water discharge positively correlate with elevated COD measurements. For example, the maximum industrial storm water (effluent) concentrations of tannins and lignins (3.59 mg/L) correlates with the second highest measurement for COD (48 mg/L), which occurred with the 18 December 2024 discharge sample. Additionally, the likely sources of tannins and lignins in the industrial storm water include bark, sawdust, wood, and wood waste at the Facility, as well as wood leachates from the sawmill and cogeneration operations.

(c) **SWAL.** Based on the nature of the industrial storm water runoff from sawmill operations, the annual average storm water action level of 30 mg/L for tannins and lignins is maintained in this Order. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce tannins and lignins in the storm water discharge.

ix. **Total Suspended Solids (TSS)**

(a) **WQO.** For inland surface waters, the Basin Plan states, "[w]aters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses." The Industrial General Permit includes TSS as an indicator parameter for BMP sediment controls that are applicable to all industries. TSS monitors the industrial storm water discharge for the presence of sediment particles that might also contain bound pollutants that could settle in the receiving water streambed. Thus, Order R5-2020-0017 included annual average and instantaneous maximum storm water action levels of 100 mg/L and 400 mg/L for TSS, respectively, from Table 2 of the Industrial General Permit.

(b) **Storm Water Analysis.** TSS concentrations in the industrial storm water (effluent) ranged from DNQ (~1.1 mg/L) to 169 mg/L, with a maximum calendar annual average of 21.6 mg/L, based on 50 samples collected from January 2023

(first discharge) through February 2025. Upstream and downstream receiving water data for TSS is not available.

Furthermore, the Industrial General Permit uses TSS as an indicator parameter for sediment from erosion and dirt from impervious (i.e., paved) areas and sediment bound pollutants. Many pollutants adhere to sediment particles; therefore, reducing sediment will reduce the amount of these pollutants in storm water discharge.

(c) **SWAL.** Due to the nature of the storm water runoff from the land application area and sawmill operations, this Order maintains the annual average and instantaneous maximum storm water action levels for TSS of 100 mg/L and 400 mg/L, respectively, based on Table 2 of the Industrial General Permit. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce TSS in the storm water discharge.

x. **Zinc**

(a) **WQO.** The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for zinc. These criteria for zinc are present in dissolved concentrations, as 1-hour acute criteria and 3-day chronic criteria. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. Default U.S. EPA translators were used for the industrial storm water (effluent) and receiving water. The Basin Plan also includes hardness-dependent criteria for zinc for the Sacramento River and its tributaries above the State Highway 32 bridge at Hamilton City, expressed in dissolved concentrations.

As described in section IV.C.2.e of this Fact Sheet, the applicable criteria for evaluation of compliance with the water quality objectives for hardness-dependent metals were calculated using an ambient receiving water hardness of 21 mg/L, the applicable CTR acute and chronic criteria for zinc in the industrial storm water (effluent) are 32 µg/L and 32 µg/L, respectively, as total concentrations. Additionally, using a design hardness of 21 mg/L, the applicable Basin Plan objective for total recoverable zinc is 9.6 µg/L.

Table 1 of the Industrial General Permit includes zinc as an additional industry specific analytical parameter for Sawmills and Planing Mills (SIC 2421), which is applicable to the Facility. Table 2 of the Industrial General Permit states that the hardness-dependent annual numeric action level for Zinc,

Total (H) is 260 µg/L, based on the highest hardness value in the U.S. EPA hardness Table 8.A-1 in the 2008 MSGP.

(b) **Storm Water Analysis.** Based on concurrent samples collected in February 2023, the total zinc concentration was 5.4 µg/L in the industrial storm water discharge, whereas the total zinc concentration was ND (<0.8 µg/L) in the upstream receiving water. However, no downstream receiving water samples were analyzed for zinc during the term of the permit.

The concentration of total zinc in the Facility's industrial storm water discharge exceeds the observed background receiving water concentration and what would generally be expected in pollutant-free storm water runoff. However, the total concentration of zinc in the industrial storm water discharge did not exceed the applicable water quality objectives.

(c) **SWAL.** Due to the nature of the industrial storm water discharge from sawmill operations, this Order includes an annual average storm water action level of 260 µg/L for total recoverable zinc, based on the Timber Products sector-specific numeric action level in Table 2 the Industrial General Permit that is applicable to Sawmills and Planing Mills (SIC 2421). If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce zinc in the industrial storm water discharge.

**Summary of Final Storm Water Action Levels (SWALs)**
**Discharge Point 002**

**Table F-11 Summary of Final Storm Water Action Levels**

| Parameter | Units | Average Annual SWAL | Maximum Daily SWAL | Basis |
|---|---|---|---|---|
| Aluminum, Total Recoverable | µg/L | 1,100 | -- | NAWQC, MSGP 2021 |
| Chemical Oxygen Demand | mg/L | 120 | -- | IGP |
| Electrical Conductivity | µmhos/cm | 700 | -- | BP |
| Iron, Total Recoverable | µg/L | 1,000 | -- | IGP |
| Oil and Grease | mg/L | 15 | 25 | IGP |
| Manganese, Total Recoverable | µg/L | 1,000 | -- | MSGP 2000 |
| Settleable Solids | ml/L | 0.2 | -- | BP |
| Tannins and Lignins | mg/L | 30 | -- | BP |
| Total Suspended Solids | mg/L | 100 | 400 | IGP |
| Zinc, Total Recoverable | µg/L | 260 | -- | IGP |

**Table F-11 Notes:**

1. NAWQC – Based on U.S. EPA National Ambient Water Quality Criteria for the protection of freshwater aquatic life.
2. MSGP – Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP) for General Sawmills and Planing Mills (SIC 2421) and Steam Electric Generating Facilities (SIC 4911)
3. IGP – Industrial General Permit
4. BP – Based on water quality objectives contained in the Basin Plan.

### 4. WQBEL Calculations

This Order does not include WQBELs for individual pollutants.

### 5. Whole Effluent Toxicity (WET)

The State Water Board's toxicity provisions are applicable to the industrial storm water discharge and are hereafter referred to as the Toxicity Provisions.

To evaluate compliance with the Statewide Toxicity Provisions aquatic toxicity numeric objectives, whole effluent toxicity testing data has been evaluated in the development of this Order.

#### a. Acute Toxicity

i. **WQO.** The acute aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.80, where the following null hypothesis, Ho, shall be used:

Ho: Mean response (ambient water) ≤ 0.80 • mean response (control)

And where the following alternative hypothesis, Ha, shall be used:

Ha: Mean response (ambient water) > 0.80 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting acute aquatic toxicity testing and rejecting this null hypothesis in accordance with the TST statistical approach. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the acute aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a "fail") is equivalent to an exceedance of the acute aquatic toxicity water quality objective.

ii. **RPA.** No dilution has been granted for acute whole effluent toxicity. Therefore, acute toxicity testing has been conducted at an instream waste concentration (IWC) of 100 percent industrial storm water (effluent). There was no discharge at SW-005 during the term of the previous permit (WDR Order R5-2020-0017). The acute WET testing was performed by the Discharger on the industrial storm water discharge at SW-006 from January 2023 through May 2025 is in Table F-12 below:

**Table F-12 Acute Whole Effluent Toxicity Testing Results**

| **Date** | **Rainbow Trout (*Oncorhynchus mykiss*) Survival** |
|---|---|
| | Percent Survival |
| 01/17/2023 | 100% |
| 03/04/2024 | 100% |
| 12/11/2024 | 100% |
| 05/12/2025 | 100% |

Due to the site-specific conditions of the discharge, the Central Valley Water Board has used professional judgement in determining the appropriate method for conducting the RPA. U.S. EPA's September 2010 NPDES permit Writer's Manual, page 6-30, states, "State implementation procedures might allow, or even require, a permit writer to determine reasonable potential through a qualitative assessment process without using available facility-specific effluent monitoring data or when such data are not available…A permitting authority might also determine that WQBELs are required for specific pollutants for all facilities that exhibit certain operational or discharge characteristics (e.g., WQBELs for pathogens in all permits for POTWs discharging to contact recreational waters)."

Based on acute toxicity tests conducted between January 2023 and May 2025, the industrial storm water discharge did not exceed the acute toxicity effluent limitation in Order R5-2020-0017. These acute toxicity results represent the industrial storm water quality obtainable from the implementation of BMPs to minimize the amount of bark and debris in the log deck runoff that enters the industrial storm water treatment ponds, aeration of the industrial storm water that has collected in the treatment ponds, and land application of the industrial storm water by sprinkler irrigation of a forested LAA, prior to discharge to the unnamed tributary of Canyon Creek (receiving water). In addition, the site specific First Flush collection and Discharge Prohibitions on the discharge of wastewater to surface water and surface water drainage courses help protect against the discharge of pollutants that can be toxic to aquatic life. Therefore, acute toxicity effluent limitations are not required in this Order.

However, in order to continue to evaluate if the discharge has a reasonable potential to cause or contribute to an exceedance of the acute toxicity water quality objective, this Order maintains acute toxicity testing at 100 percent effluent for rainbow trout, *Oncorhynchus mykiss*, as discussed in section VII.E of this Fact Sheet.

b. **Chronic Toxicity**

i. **WQO.** The chronic aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.75, where the following null hypothesis, Ho, shall be used

Ho: Mean response (ambient water) ≤ 0.75 • mean response (control)

And where the following alternative hypothesis, Ha, shall be used:

Ha: Mean response (ambient water) > 0.75 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing and rejecting this null hypothesis in accordance with the Test of Significant Toxicity (TST) statistical approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 (Chronic Freshwater and East Coast Methods) and Appendix B, Table B-1. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the chronic aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the chronic aquatic toxicity water quality objective.

ii. **RPA.** No dilution has been granted for chronic whole effluent toxicity. Therefore, chronic toxicity testing has been conducted at an instream waste concentration (IWC) of 100 percent industrial storm water (effluent). There was no discharge at SW-005 during the term of the previous permit (WDR Order R5-2020-0017). The chronic WET testing was performed by the Discharger on the industrial storm water discharge at SW-006 on 4 April 2023 for fathead minnow and green algae and 10 May 2023 for water flea is in Table F-13 below:

**Table F-13 Chronic WET Testing Results at the IWC (100 Percent Effluent)**

| **Organism** | **Survival** (Percent Survival) | **Reproduction** (Percent Effect) | **Growth** (Percent Effect) |
|---|---|---|---|
| Water Flea (*Ceriodaphnia dubia*) | 100% | -5.01% | -- |
| Fathead Minnow (*Pimephales promelas*) | 100% | -- | 1.27% |
| Green Algae (*Selenastrum capricornutum*) | -- | -- | -43.75% |

The industrial storm water (effluent) is discharged consistently during the wet season; therefore, in order to evaluate if the discharge has a reasonable potential to cause or contribute to an exceedance of the chronic aquatic toxicity water quality objective, this Order requires chronic toxicity testing at an instream waste concentration of 100 percent effluent for water flea *Ceriodaphnia dubia* (survival and reproduction), fathead minnow, *Pimephales promelas* (larval survival and growth), and green algae, *Selenastrum capriocornutum* (growth) as discussed in section VII.E. of this Fact Sheet.

## D. Final Effluent Limitation Considerations

### 1. Mass-based Effluent Limitations

40 C.F.R section 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 C.F.R. section 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order does not include effluent limitations expressed in terms of mass. Pursuant to the exceptions to mass limitations provided in 40 CF.R. section 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

### 2. Averaging Periods for Effluent Limitations

40 C.F.R. section 122.45 (d) requires maximum daily and average monthly discharge limitations for all dischargers other than POTWs unless impracticable. For pH, AMELs and MDELs have been replaced or supplemented with effluent limitations utilizing shorter averaging periods. The rationale for using alternative averaging periods for pH is discussed in section IV.C.3 of this Fact Sheet.

### 3. Satisfaction of Anti-Backsliding Requirements

The CWA specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation

is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l).

The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for acute toxicity. The effluent limitations for these pollutants are less stringent than those in Order R5-2020-0017. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

a. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits "except in compliance with section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.

   i. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other WLA may be revised only if the cumulative effect of all such revised effluent limits based on such TMDLs or WLAs will assure the attainment of such water quality standards.

   ii. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

   The unnamed tributary to Canyon Creek is considered an attainment water for acute toxicity because the receiving water is not listed as impaired on the 303(d) list for this constituent. The exceptions in section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list. As discussed in section IV.D.4, below, relaxation or removal of the effluent limits complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for acute toxicity from Order R5-2020-0017 meets the exception in CWA section 303(d)(4)(B).

b. **CWA section 402(o)(2).** CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

   As described further in section IV.C.3.b of this Fact Sheet, updated information that was not available at the time Order R5-2020-0017 was

issued indicates that acute toxicity does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. The updated information that supports the relaxation of effluent limitations for these constituents includes the following:

i. **Acute Toxicity.** Effluent monitoring data collected from January 2023 through May 2025 indicates that acute toxicity in the industrial storm water discharge does not exhibit a reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water.

**4. Antidegradation Policies**

a. **Surface Water.** This Order does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. This Order requires compliance with applicable federal technology-based standards and WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted surface water discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy. Compliance with these requirements will result in the use of BPTC of the discharge. The impact on existing water quality will be insignificant.

b. **Groundwater.** The Discharger utilizes five unlined ponds to store, treat, and/or dispose of wastewater (i.e., Log Yard Pond, Retention Pond, two Evaporation Ponds, and Substation Pond). Additionally, the unlined Fire Pond is used to store industrial storm water runoff from the sawmill drainage area NPDES 1-3 and the cogeneration plant drainage area NPDES 1-2. Wastewater from the sawmill operations may contain constituents such as oxygen demanding substances (COD), dissolved organics, metals, oil and grease, tannins and lignins, and settleable and suspended solids (e.g., bark, sawdust, sediment). Wastewater from the cogeneration operations may contain constituents such as chemical additives that prevent scaling and facilitate boiler operation (e.g., sodium hydroxide, a water-soluble polymer, and calcium hypochlorite), oil and grease, metals, total dissolved solids, and settleable and suspended solids (e.g., wood byproducts and ash). Percolation from the ponds may result in an increase in the concentration of these constituents in groundwater. The State Antidegradation Policy generally prohibits the Central Valley Water Board from authorizing activities that will result in the degradation of high-quality waters unless it has been shown that:

i. The degradation will not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives;

ii. The degradation will not unreasonably affect present and anticipated future beneficial uses;

iii. The discharger will employ Best Practicable Treatment or Control (BPTC) to minimize degradation; and

iv. The degradation is consistent with the maximum benefit to the people of the state.

This Order, specifically through Best Management Practices and Pollution Prevention measures required in section VI.C.3, will require the Discharger to implement BPTC.

Evaluation of existing groundwater monitoring data in the 2023 Antidegradation Re-Evaluation showed that some constituents were statistically higher in downgradient wells compared with the mean background concentrations suggesting degradation of water quality. However, no well constituent pairs exceeded water quality objectives. Thus, the limited groundwater degradation that may occur from pond seepage under this Order is unlikely to result in exceedances of any applicable groundwater water quality objectives or in any impacts to beneficial uses. Therefore, the Central Valley Water Board concludes that pollution or nuisance is unlikely to occur under this Order.

Furthermore, the limited degradation that may occur under this Order is consistent with the maximum benefit of the people of the State because it will occur due to the operation of a biomass power generation facility that (1) is an important economic driver to the region, and (2) helps utilities meet State-mandated requirements for energy production from a renewable resource.

In addition, groundwater limitations have been included in this order (at or below) the water quality objective for protection of the domestic or municipal supply (MUN) beneficial use of groundwater.

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

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on pH. Restrictions on pH are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

WQBELs have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

**Summary of Final Effluent Limitations**
**Discharge Point 002**

**Table F-14 Summary of Final Effluent Limitations**

| Parameter | Units | Effluent Limitations | Basis |
|---|---|---|---|
| pH | SU | Instantaneous Max 9.0<br>Instantaneous Min 6.0 | ELG |

**Table F-14 Notes:**

1. **ELG** – Based on Effluent Limitation Guidelines.

## E. Interim Effluent Limitations – Not Applicable

## F. Land Discharge Specifications

Land discharge specifications are included in this Order to ensure that discharges to land are managed in a manner that protects groundwater quality and complies with State Water Board and Central Valley Water Board policies.

### 1. Pond Discharge Specifications

The Facility utilizes a system of unlined ponds for storm water and wastewater storage, settling and aeration treatment, and disposal. Because these discharges have the potential to percolate to groundwater, land discharge requirements are necessary to minimize degradation and to ensure compliance with the Basin Plan, Title 27, and the State Antidegradation Policy). This subsection discusses the rationale for the land discharge specifications (and any interim requirements) contained in the Order. Portions of this discussion that pertain to numeric requirements will be similar to the discussion of effluent limitations above.

a. **Protection of Beneficial Uses.** The land discharge specifications are necessary to protect the beneficial uses of groundwater. Discharges from the Facility consist primarily of storm water runoff from the log deck and processing areas, recirculated log deck sprinkler wastewater, as well as cogeneration wastewater. These waste streams may contain pollutants such as suspended solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD), and metals (e.g., zinc, manganese, aluminum) that could impact groundwater quality if uncontrolled. Specifications are necessary to ensure that these constituents do not cause exceedance of water quality objectives or adversely impact beneficial uses of groundwater.

b. **Antidegradation Considerations.** All Facility ponds (Log Yard Pond, Fire Pond, two Evaporation Ponds, Substation Pond, and Retention Pond) are unlined, and percolation has the potential to degrade underlying groundwater. Pursuant to Resolution 68-16, degradation may only be allowed if it is consistent with the maximum benefit of the people of the

State, will not reasonably affect present and anticipated beneficial uses, will not result in water quality less than prescribed in the State and regional policies, and the discharger employs Best Practicable Treatment or Control (BPTC). Land discharge specifications are included to ensure that discharges are consistent with these antidegradation requirements.

c. **Groundwater Protections.** Existing groundwater monitoring wells at the Facility monitor conditions near gradient of the ponds (i.e., MW-3, MW-4, MW-5) and recently installed monitoring wells (MW-7 and MW-8) monitor conditions that are farther downgradient of the ponds, and MW-1 monitors conditions within the LAA discharge area. However, additional groundwater monitoring is required to characterize background water quality (i.e., upgradient) since MW-1 is now located within the LAA and the replacement well, MW-6, has been dry since installation in September 2022. Land discharge specifications are therefore supported by groundwater monitoring and reporting requirements designed to evaluate potential impacts and demonstrate long-term compliance with groundwater limitations.

d. **Operational Controls.** Land discharge specifications are also established to require the Discharger to operate, maintain, and monitor all ponds in a manner that prevents nuisance conditions (e.g., odors, insect vectors, or ponding outside of the bermed areas), ensures sufficient freeboard is maintained, and prevents unauthorized discharges to surface waters.

### 2. Land Application Area Specifications

LAA specifications are included in this Order to ensure that discharges to land are managed in a manner that protects groundwater quality and complies with State Water Board and Central Valley Water Board policies. The Facility utilizes a storm water BMP treatment sequence for log deck runoff that is comprised of debris screening, settling and aeration in an unlined treatment pond, followed by sprinkler irrigation of a forested LAA prior to surface water discharge. Because these treatment units have the potential to percolate to groundwater, degradation of groundwater may occur with some of the typical waste constituents associated with the discharges from a sawmill operation, after effective source control, treatment, and control measures are implemented. Therefore, land discharge requirements and LAA requirements are necessary to minimize degradation and to ensure compliance with the Basin Plan, CCR Title 27, and the State Antidegradation Policy (i.e., Resolution 68-16).

### 3. Solids Disposal Specifications

Solids management and disposal specifications are necessary in this Order to ensure proper management of the temporary onsite storage and final disposal of collected screenings, sludges, wood ash (fly and bottom), wood byproducts, and other solids removed from liquid wastes, ponds, or other sources in a

manner that is consistent with Title 27, CCR, Division 2, subdivision 1, Section 20005, et seq., and approved by the Executive Officer.

### G. Recycling Specifications – Not Applicable

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

### A. Surface Water

On 4 March 2025, the U.S. Supreme Court issued a decision in the case of the City and County of San Francisco vs. U.S. Environmental Protection Agency (2025) 145 U.S. 704, which challenged some of the limitations in NPDES permits. The Court rules that “end result” provisions (e.g., receiving water limitations) are not allowed by the federal Clean Water Act (CWA) and that NPDES permits must have specific requirements to meet water quality objectives and protect beneficial uses.

As a matter of state law only, this Order includes receiving water limitations for chronic and acute WET. These are state law requirements imposed pursuant to Water Code section 13263, which requires that WDRs orders implement the applicable Basin Plan, including its numeric and narrative water quality objectives for WET. The U.S. Supreme Court’s decision in City and County of San Francisco vs. U.S. Environmental Protection Agency 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. Other receiving water limitations were removed from this permit as discussed below

The CWA and implementing regulations specify that effluent limitations (if applicable) are required when there is reasonable potential for a discharge to cause or contribute to an exceedance of any applicable water quality standard. A Storm Water Analysis is a key step taken by permit writers to determine if an industrial storm water discharge has the potential to exceed water quality standards. The Storm Water Analysis includes characterization of the water quality of the industrial storm water (effluent) and receiving water, and an assessment of the water quality standards to see if the downstream concentrations in the unnamed tributary to Canyon Creek (receiving water) and nearby surface waters after mixing with the industrial storm water discharge (effluent) have the potential to exceed any applicable water quality criteria. Consistent with the Industrial General Permit, TBELs for the industrial storm water (effluent) discharge are based on ELGs for the applicable industrial SIC codes; whereas WQBELs for the industrial storm water discharge, numeric storm water action levels for the industrial storm water discharge (i.e., SWALs), and other permit conditions are prescribed based on an evaluation of this information.

This Order also requires regular industrial storm water (effluent) and receiving water sampling to document any potential effects to the unnamed tributary to Canyon Creek (receiving water) and nearby surface waters. In addition, this Order requires characterization monitoring of priority pollutants in the upstream receiving water and the industrial storm water (effluent) discharge during the permit term. All Central

Valley NPDES permits contain a general re-opener provision that allows the Central Valley Water Board to amend the permit and include conditions, effluent limitations (if applicable), provisions, or prohibitions. This would include scenarios where monitoring data indicates the need for new effluent limitations (if applicable) to ensure the unnamed tributary to Canyon Creek and nearby surface waters water quality objectives are met. As an additional assurance, this Order prohibits operational changes that would significantly impact the character of the industrial storm water discharge.

Nonetheless, the question remains as to whether an NPDES permit is adequately protective of water quality when the unnamed tributary to Canyon Creek (receiving water) and nearby surface waters limitations are removed; or alternatively, whether additional conditions should be considered when removing receiving water limitations.

### 1. Receiving Water Limitation Considerations

Below is a summary of the specific considerations for the removal of receiving water limitations. These considerations include associated effluent limitations, numeric storm water action levels (i.e., SWALs), best management practices (BMPs), and/or water quality monitoring requirements for the industrial storm water discharge (effluent) and upstream and downstream receiving water.

a. **Bacteria Requirements.** On 7 August 2018 the State Water Board adopted Resolution No. 2018-0038 establishing Bacteria Provisions, which are specifically titled “Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California — Bacteria Provisions and a Water Quality Standards Variance Policy” and amended the Water Quality Control Plan for Ocean Waters of California. These provisions updated the water quality objectives for bacteria to protect the water contact recreation (REC-1) beneficial use. The Bacteria Provisions supersede any numeric water quality objective for bacteria for the REC-1 beneficial use contained in a water quality control plan before the effective date of the Bacteria Provisions.

Under the Industrial General Permit, discharges of storm water associated with industrial activities must not cause or contribute to an exceedance of applicable water quality standards, including bacteria-related objectives where REC-1 is a designated beneficial use of the receiving water. However, the Industrial General Permit does not establish specific numeric effluent limitations for bacteria. Instead, it relies on narrative standards, implementation of Best Management Practices (BMPs), and the tiered Exceedance Response Action (ERA) process to address potential bacterial contamination. The Bacteria Water Quality Objectives correspond with the risk protection level of 32 illnesses per 1,000 recreators and use E. coli as the indicator of pathogens in freshwaters and enterococci as the indicator of pathogens in estuarine waters and ocean waters.

Based on the sawmill and cogeneration operations at the Facility, the industrial storm water discharge is subject to the ELGs for Sawmills and Planing Mills (SIC 2421) and Steam Electric Power Generating Facilities (SIC 4911), consistent with the Industrial General Permit. Thus, the Facility is required to implement BMPs, such as storm water segregation, proper material storage, and containment practices, to minimize the potential for bacteria in the industrial storm water discharge. Since this Order requires implementation of effective storm water pollution control measures, regular effluent and receiving water monitoring, and corrective actions in accordance with the Industrial General Permit framework, and no monitoring data indicates bacterial exceedances or concern, additional receiving water limitations for bacteria are not necessary, at this time, to ensure protection of the receiving water quality and REC-1 beneficial use.

b. **Biostimulatory Substances and Dissolved Oxygen Requirements.** The Basin Plan contains biostimulatory narrative water quality objectives and dissolved oxygen numeric water quality objectives that have been incorporated into previous permits as receiving water limitations. Biostimulatory substances can cause eutrophication and low dissolved oxygen due to excessive algal growth in the receiving water along with other water quality issues related to taste, odor, color, and toxicity. Discharges with high Biological Oxygen Demand (BOD) and/or Chemical Oxygen Demand (COD) may contribute to dissolved oxygen problems in the receiving water downstream of the discharge.

Under the Industrial General Permit, COD is included as an industry specific analytical parameter for Sawmills and Planing Mills (SIC 2421), which is applicable to the Facility. Thus, this Order includes monthly monitoring of the industrial storm water discharge (effluent) for COD and an annual average numeric action level for COD from Table 2 of the Industrial General Permit. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the COD in the industrial storm water discharge. Current Facility BMPs include minimizing the amount of bark and debris in the log deck runoff that enters the industrial storm water treatment ponds, aeration of the industrial storm water that has collected in the treatment ponds, and land application of the industrial storm water by sprinkler irrigation of a forested LAA, prior to discharge to the unnamed tributary of Canyon Creek (receiving water).

Furthermore, this Order includes new monthly requirements for dissolved organic carbon (DOC) monitoring for both the industrial storm water discharge and the receiving water. Because there is a potential for the industrial storm water discharge to cause or contribute to an exceedance of the downstream receiving water dissolved oxygen water quality objective, this Order requires regular receiving water dissolved oxygen monitoring and visual observations for biostimulatory indicators (e.g., algae, slimes, or objectionable growths). The permit also contains a

reopener provision (WDR section VI.C.1) should future data indicate the need for additional controls.

Based on the combination of the numeric storm water action level for COD on the industrial storm water discharge (effluent) and the adaptive nature of the implementation of effective BMPs, this Order is protective of the receiving water quality and beneficial uses. Therefore, at this time, it is not necessary to include receiving water limitations for biostimulatory substances or dissolved oxygen in this Order.

c. **Chemical Constituents, Oil and Grease, Pesticides, and Radioactive Requirements.** The Basin Plan contains narrative and numeric water quality objectives for chemicals, oil and grease, pesticides, and radionucleotides to protect the beneficial uses of surface waters. These objectives have historically been incorporated into NPDES permits as receiving water limitations. Although the Facility is regulated under an individual NPDES industrial storm water permit rather than the Industrial General Permit, the permit development considers relevant pollutant categories identified in both the Industrial General Permit and the U.S. EPA MSGP for the Timber Products (Sector A) and Steam Electric Power Generating (Sector O) industrial activities, as well as characterization of the industrial storm water discharge (effluent) from the Facility, as guidance to identify potential pollutants of concern at the Facility.

Attachment G and Fact Sheet section IV.C.3 provide details regarding the specific constituents of concern that may cause or contribute to an exceedance of water quality objectives in the receiving water. Specifically, this Order includes numeric action levels on the industrial storm water discharge (effluent) from the log deck drainage areas for the following constituents aluminum, iron, manganese, oil and grease, tannins and lignins, and zinc. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce the concentration of the pollutant in the industrial storm water discharge. Thus, to ensure protection of the receiving water quality and beneficial uses, especially aquatic life and municipal, this Order requires implementation of effective storm water pollution control measures, regular industrial storm water (effluent) and receiving water monitoring, and corrective actions in accordance with the Industrial General Permit. Therefore, at this time, it is not necessary to include receiving water limitations for these constituents in this Order.

Based on available industrial storm water (effluent) and receiving water data, there is no reasonable potential for pesticides or radioactive constituents listed in the characterization monitoring list to cause or contribute to an exceedance of applicable water quality objectives. In addition, this Order maintains the required characterization of the industrial storm water discharge and upstream receiving water.

Furthermore, the Facility is prohibited from discharging wastewater from the sawmill and cogeneration operations to surface waters or surface water drainage course (WDR section III.D, E, G, and I). Therefore, this Order does not include effluent limitations or receiving water limitations for these constituents.

d. **Color, Taste, and Odors Requirements.** The Basin Plan includes narrative water quality objectives for color and for taste and odor that protect the aesthetic and municipal beneficial uses of receiving waters. These objectives have been incorporated into previous permits for similar facilities as receiving water limitations. While surface water discharges from the Facility consist of industrial storm water (i.e., wastewater is prohibited from surface water discharge by this Order, WDR section III.D, E, G, and I), potential nuisance conditions (e.g., discoloration, foul odors) may still arise from industrial operations due to the presence of tannins and lignins, wood byproducts, or process-related constituents in the storm water runoff from the log deck drainage areas and in the industrial storm water storage, treatment, and disposal ponds.

Although effluent limitations for color, taste, and odor are not required in this Order due to the low potential for exceedances based on facility operations (e.g., aeration of log deck storm water runoff in treatment ponds), the permit does include numeric action levels on the industrial storm water runoff (e.g., tannins and lignins, electrical conductivity, aluminum, iron, and manganese) as well as evaluation and implementation of effective BMPs (Attachment G and Fact Sheet section IV.C.3). In addition, this Order requires regular visual monitoring of the receiving water for signs of discoloration and other indicators of nuisance conditions, consistent with the Industrial General Permit and the U.S. EPA MSGP expectations for narrative objectives and good housekeeping practices. Therefore, to ensure protection of the receiving water quality and beneficial uses, at this time, it is not necessary for this Order to include receiving water limitations for these parameters.

e. **pH Requirements.** The Basin Plan has narrative water quality objectives for pH that have been used as receiving water limitations in previous permits. A pH that is too high or too low can influence the solubility of metals and nutrients in the receiving water and impact the overall health of aquatic life. Consistent with the Industrial General Permit, this Order includes effluent limitations for pH based on the TBELs set forth in the ELGs for Sawmill and Planing Mills (SIC 2421). Specifically, the presence of tannins and lignins in the log deck runoff contributes to the potential for an acidic pH of the industrial storm water discharge (Attachment G and Fact Sheet section IV.C.3). Thus, this Order includes a numeric action level for tannins and lignins in the industrial storm water (effluent) and requires iterative evaluations and implementation of effective BMPs (WDR section VI.C.2.a). Current Facility BMPs include minimizing the amount of bark and debris in the log deck runoff that enters the industrial storm water

treatment ponds, aeration of the industrial storm water that has collected in the treatment ponds, and land application of the industrial storm water by sprinkler irrigation of a forested LAA, prior to discharge to the unnamed tributary of Canyon Creek (receiving water).

Thus, to ensure protection of the downstream receiving water quality and beneficial uses, this Order requires implementation of effective storm water pollution control measures, regular industrial storm water (effluent) and receiving water monitoring, and corrective actions in accordance with the Industrial General Permit. Therefore, it is not necessary for this Order to include receiving water limitations.

f. **Temperature Requirements.** The previous permit included receiving water limitations for temperature. Additionally, consistent with the previous permit, this Order prohibits the discharge of wastewater from the cogeneration operations to surface waters or surface water drainage courses (WDRs Section III.D and G). Analysis of the existing temperature data for the industrial storm water discharge and receiving water (Fact Sheet section II.C.2) do not indicate a potential for the industrial storm water discharge (effluent) to cause or contribute to a change in temperature in the downstream receiving water that exceeds the Basin Plan temperature objectives.

This Order requires frequent monitoring of temperature in the industrial storm water treatment ponds, the industrial storm water discharge (effluent) at Discharge Point (D-002), and upstream and downstream receiving water. The temperature monitoring will be used to further evaluate whether the industrial storm water may cause an increase in the natural temperature of the unnamed tributary to Canyon Creek (receiving water) by more than 5 degrees Fahrenheit on an annual average basis (i.e., the Basin Plan temperature objective).

Furthermore, this Order requires routine treatment pond monitoring (temperature, dissolved oxygen, pH and electrical conductivity) to verify that the industrial storm water is properly managed prior to surface water discharge. These provisions ensure that the industrial storm water (effluent) temperature is controlled to levels that are protective of aquatic life and other beneficial uses of the unnamed tributary to Canyon Creek (receiving water). Therefore, it is not necessary to include receiving water limitations for temperature in this Order.

g. **Floating Material, Suspended Material, Suspended Sediments, Settleable Substances, and Turbidity Requirements.** Prior permits contained receiving water limitations based on narrative Basin Plan objectives for floating and suspended materials, suspended sediments, and settleable substances. Additionally, previous permits included numeric receiving water limitations for Basin Plan turbidity objectives that are based on increases over background receiving water conditions.

These constituents degrade water quality by reducing clarity, affecting light penetration, and contributing to eutrophication.

Attachment G and Fact Sheet section IV.C.3 provides a review of monitoring data for settleable solids, suspended solids, and turbidity in the industrial storm water discharge. The water quality of the industrial storm water discharge as well as settled matter depth in the storm water storage, treatment, and disposal ponds do not indicate a potential for concentrations of solids in the industrial storm discharge (effluent) to cause or contribute to impacts to the water quality and beneficial uses in the unnamed tributary to Canyon Creek (receiving water).

Consistent with the Industrial General Permit, this Order requires the discharger to evaluate and implement effective BMPs for the industrial storm water discharge from the log deck drainage areas (WDR section VI.C.3.b). Current BMPs at the Facility include minimizing the amount of bark and debris in the log deck runoff that enters the industrial storm water treatment ponds, aeration of the industrial storm water that has collected in the treatment ponds, and land application of the industrial storm water by sprinkler irrigation of a forested LAA, prior to discharge to the unnamed tributary of Canyon Creek (receiving water). To evaluate the effectiveness of existing BMPs, this Order includes numeric action levels for settleable solids and total suspended solids, where exceedances require investigations into pollutant control improvements (WDR section VI.C.2.a).

In addition, this Order includes discharge prohibitions for solids generated from the sawmill and cogeneration operations (e.g., ash and wood byproducts such as bark, sawdust, shavings, etc.) from being discharged to surface waters or surface water drainage courses (WDR Section III. F and H). Furthermore, this Order requires regular monitoring of the industrial storm water discharge for settleable solids, suspended solids and turbidity, and the upstream and downstream receiving water turbidity monitoring, as well as solids management practices to control settleable and suspended material (WDR section VI.C.3.b). Therefore, receiving water limitations for these constituents are not necessary in this Order since the above requirements are protective of the receiving water quality and beneficial uses.

**2. Review of Other Relevant Factors**

In addition to the considerations listed in Section V.A.1 (above), Central Valley Water Board staff also considered other relevant factors (below) in the review of receiving water limitations.

a. **Synergistic Effects.** Surface water discharges may be fully compliant with dissolved oxygen and narrative objectives, but may combine with poor conditions in the receiving water to cause harmful algal blooms (HABs), eutrophication, dissolved oxygen sag, toxic effects, taste and

odor, and other harmful conditions. Surface water discharges when combined with the receiving water may also result in discolorations of the receiving water (e.g., mine drainage, floc due to pH change, etc.).

There are no known concerns for adverse synergistic effects in the receiving water.

b. **Limitations Enforced Within Receiving Water.** Certain Basin Plan objectives are expresses as receiving-water conditions rather than end-of-pipe limits (e.g., water-column “non-detect” or pollutant-specific numeric objectives for select chemicals and pesticides). Because these objectives apply directly to in-stream conditions, this Order retains the applicable receiving water limitations for those pollutant categories. During discharge events, receiving water monitoring is required, as appropriate, to verify that the discharge does not cause or contribute to exceedances of these objectives. Retaining these receiving water limitations provides added assurance of protecting beneficial uses and maintains consistency with the Basin Plan and applicable state and federal requirements.

c. **Other Site-Specific Information.** Canyon Creek is not listed as an impaired water body on the Clean Water Act 303(d) List (2022). However, Canyon Creek is tributary to the Pit River and the Pit River (from confluence of N and S Forks to Shasta Lake) and the Pit River is listed as impaired for: aluminum, iron, nutrients, organic enrichment/low dissolved oxygen, and dissolved oxygen. However, at the time of this permit renewal, there are no approved TMDLs with waste load allocations (WLAs) that apply to this Facility. No site-specific studies identify receiving water concerns requiring additional limitations.

d. **Data Characterization.** Industrial storm water discharge (effluent), storage and treatment ponds, and receiving water monitoring were reviewed as part of the permit renewal process. Existing monitoring data (Attachment G and Fact Sheet section II.C) do not demonstrate ongoing exceedances of Basin Plan receiving water objectives. In addition, this Order maintains the requirement for complete characterization of the industrial storm water discharge (effluent) and receiving water monitoring, as well as the addition of a complete characterization of the treatment ponds. These characterizations will consist of a full scan of priority pollutants and other constituents of concern.

e. **Compliance History.** During the prior permit term, the industrial storm water discharge (effluent) exceeded the pH effluent limitation once during the prior permit term, as well as a single exceedance of the annual average numeric action level for iron (Fact Sheet section II.D). In addition, the Facility has on occasion had compliance issues with receiving water limitations for pH, taste and odors (secondary MCLs for manganese), and turbidity during the prior permit term. Therefore, the Facility occasionally has had compliance issues with Basin Plan water quality objectives.

### 3. Summary of Receiving Water Limitations

Based on Central Valley Water Board staff review of the considerations presented above, existing permit provisions are adequate to ensure the Facility's discharge consistently meets federal and state regulations of the protection of beneficial uses in the receiving water. The effluent limitations and numeric action levels on the industrial storm water discharge, along with the requirement for effective storm water pollution control measures (i.e., effective BMPs) and corrective actions in accordance with the Industrial General Permit, as well as regular industrial storm water discharge (effluent) and receiving water monitoring in this Order and the included permit prohibitions and reopener provisions provide a multi-pronged approach to ensuring water quality standards are met. As such, receiving water limitations from the previous permit can be removed without the inclusion of additional conditions. Table F-15 provides a summary of the considerations in removing the receiving water limitations.

**Table F-15 Summary of Receiving Water Limitations Removed**

| Receiving Water Limitation Removed | Effluent Limitation, Storm Water Action Level and/or Monitoring | Other Relevant Factors |
|---|---|---|
| Bacteria (Numeric WQO) | Not a pollutant of concern. Storm water and treatment pond discharges do not require bacterial monitoring. | Domestic sewage disposal is to a septic tank/leach field adjacent to the main office building and is regulated by Shasta County Environmental Health. |
| Biostimulatory Substances (Narrative WQO), Chemical Constituents (Narrative WQO), Color (Narrative WQO), Dissolved Oxygen (Numeric WQO), and Taste and Odor (Narrative WQO) | Numeric storm water action levels included for aluminum, COD, iron, manganese, tannins and lignins, and zinc. Regular storm water discharge, treatment pond, and receiving water monitoring required. Visual receiving water observations for potential nuisance conditions. | BMPs are required to control storm water pollutants. |
| Floating Material (Narrative WQO) and Oil and Grease (Narrative WQO) | Numeric storm water action level for oil and grease. Discharge prohibitions for cogeneration ash, wood byproducts and sawmill debris, and wastewater. Regular visual monitoring for floating material, films, sheens, and coatings. | BMPs are required to control storm water pollutants. |

| Receiving Water Limitation Removed | Effluent Limitation, Storm Water Action Level and/or Monitoring | Other Relevant Factors |
|---|---|---|
| pH (Numeric WQO) | TBEL for pH based on ELGs (SIC 2421) and numeric storm water action level for tannins and lignins. Weekly monitoring for pH in storm water discharge, treatment ponds, and receiving water is required. | BMPs are required to control storm water pollutants. |
| Pesticides (Narrative/Numeric WQO) | One-time priority pollutant scans include pesticide monitoring for industrial storm water discharge, and treatment pond characterization. | The industrial storm water characterization did not detect pesticides in concentrations above the method detection level during the prior permit term. |
| Radioactivity (Narrative/Numeric WQO) | No radioactive inputs expected from the sawmill and biomass cogeneration operations. | |
| Salinity (Narrative WQO) | Numeric storm water action level for EC. EC monitoring required for the industrial storm water (effluent), treatment ponds, and receiving water. | Compliance with the Salt Control Program including a Salinity Evaluation and Minimization Plan (SEMP) requirement along with BMPs to control storm water pollutants. |
| Suspended Material (Narrative WQO), Settleable Substances (Narrative WQO), Suspended Sediments (Narrative WQO), and Turbidity (Numeric WQO) | Discharge prohibitions for cogeneration ash, wood byproducts and sawmill debris. Numeric storm water action level for SS and TSS. Regular SS, TSS, and Turbidity monitoring required for the industrial storm water (effluent). Receiving water Turbidity monitoring is also required. | BMPs are required to control storm water pollutants. Requirement for a Solids Management Plan. Protective through monitoring and reporting program and comparing data to Basin Plan objectives. |
| Temperature (Numeric WQO) | Required weekly temperature monitoring of the industrial storm water (effluent), treatment ponds, and receiving water. | Protective through monitoring and reporting program and comparing data to Basin Plan objectives. |

## B. Groundwater

### 1. Groundwater Beneficial Uses

a. The beneficial uses of the underlying groundwater are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.

### 2. Basin Plan Water Quality Objectives

a. Basin Plan water quality objectives include narrative objectives for chemical constituents, tastes and odors, and toxicity in groundwater.

i. The chemical constituents objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial uses.

ii. The tastes and odors objective prohibit taste- and odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

iii. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life associated with designated beneficial uses.

Quantifying a narrative water quality objective requires a Facility-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.

b. The Basin Plan also establishes numerical water quality objectives for chemical constituents and radioactivity in groundwaters designated as domestic and municipal supply. These include, at a minimum, compliance with MCLs in Title 22 CCR. The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that groundwater do not contain chemical constituents in concentrations that adversely affect beneficial uses.

c. The Basin Plan also sets forth a numeric objective for total coliform organisms that requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100mL in domestic and municipal supply groundwater.

The Basin Plan requires the application of the most stringent objective necessary to ensure that waters do not contain chemical constituents, toxic substances, radionucleotides, taste- or odor-producing substances, or bacteria

in concentrations that adversely affect domestic and municipal supply, agricultural supply, and industrial supply, or other beneficial uses.

#### 3. Groundwater Limitations

a. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.

## VI. RATIONALE FOR PROVISIONS

### A. 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).

### B. Special Provisions

#### 1. Reopener Provisions

a. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).** On 17 January 2020, certain Basin Plan Amendments to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley became effective. Other provisions subject to U.S. EPA approval became effective on 2 November 2020, when approved by U.S. EPA. As the Central Valley Water Board moves forward to implement those provisions that are now in effect, this Order may be amended or modified to incorporate new or modified requirements necessary for implementation of the Basin Plan Amendments. More information regarding these Amendments can be found on the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) web page: (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

b. **Water Effects Ratio (WER) and Metal Translators.** A default WER of 1.0 has been used in this Order for calculating criteria for applicable inorganic

constituents. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total. If the Discharger performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

c. **Leachate Discharge Prohibition.** The Discharger is considering the treatment of wood byproduct stockpile leachate and/or ash stockpile leachate in its storm water treatment system and subsequent surface water discharge at Discharge Point 002 (i.e., SW-006). If the Discharger submits a characterization of the wood byproduct stockpile leachate and/or the ash stockpile leachate and it is determined that the discharge would not cause, or threaten to cause pollution, contamination, or nuisance in the receiving water, this Order may be amended or modified to revise Discharge Prohibition E and corresponding parts of the Order to allow discharge of wood fuel stockpile leachate and/or ash stockpile leachate to surface water.

d. **Test for Significant Toxicity.** This Order may be reopened for modification to revise the aquatic toxicity provisions if the Supreme Court determines that the test of significant toxicity cannot be used in NPDES permits and the State Water Board suspends or revises the aquatic toxicity water quality standards.

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

a. **Storm Water Action Levels and Best Management Practice (BMP) Improvement Evaluation.** As discussed in section IV.C.3 of this Fact Sheet, this Order establishes numeric action levels for constituents of concern in discharges of industrial storm water (effluent). The storm water action levels are pollutant concentrations above which the Central Valley Water Board has determined the storm water discharge could adversely affect receiving water quality (and control measures must be evaluated). The storm water action levels are not effluent limitations. The storm water action levels are used to determine if the storm water discharges from the Facility merit further monitoring to ensure that the Facility has been successful in implementing the SWPPP and/or if storm water pollution control measures must be reevaluated and improved upon.

In order to address storm water action level exceedances, the Discharger must evaluate BMPs and make necessary improvements to the Facility BMPs in order to reduce pollutants in the storm water discharge and to ensure protection of water quality.

b. **Method of Compliance Report.** The Discharger shall submit a Method of Compliance Report by the due date provided in Attachment E, Table E-12. The Report is required to address compliance issues associated with the

unauthorized discharge event and freeboard exceedances that occurred at the Facility during the term of the previous Order, as discussed in the compliance summary provided in Fact Sheet section II.D. In addition, the Report is required to address the capacity deficiencies associated with storm water and wastewater storage at the Facility, as identified in the Discharger's 2023 Water Balance Evaluation Report. The Report shall provide a plan to address noted compliance issues and pond storage deficiencies and provide a timeline to implement improvements. The Report shall include the results of an assessment of the adequacy of pond operating procedures, an evaluation of pond influent and effluent sources, and the results of an analysis of potential engineering improvements to the pond transfer system (e.g., new pumps, changes to the pipe network) and/or pond system (e.g., additional storage).

c. **Background Well Work Plan.** In September 2022, the Discharger installed three new monitoring wells (MW-6, MW-7, and MW-8) in response to the Groundwater Monitoring Well Network Evaluation required by the previous Order. The replacement upgradient monitoring well (MW-6) has been dry since installation in September 2022. In order to determine compliance with the groundwater limitations contained in section V.B, this Order requires the Discharger to submit a work plan to address the dry background well, the work plan shall also include a time schedule to replace the well. The well shall be replaced following approval of the work plan.

d. **Groundwater Monitoring Annual Report.** The Groundwater Monitoring Annual Report is required to provide a comprehensive summary of all monitoring data and activities conducted throughout the calendar year. This report allows the Central Valley Water Board to evaluate compliance with groundwater limitations, detect trends, and assess potential impacts to groundwater quality. It includes field procedures, sampling results, groundwater evaluations, flow direction, and any exceedances of water quality objectives or discharge specifications. Inclusion of laboratory data, inspection logs, and instrument calibration records support data integrity and regulatory oversight.

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

a. **Salinity Evaluation and Minimization Plan (SEMP).** The Basin Plan includes a Salt Control Program for discharges to groundwater and surface water. The Salt Control Program is a phased approach to address salinity in the Central Valley Region. During Phase I the focus will be on conducting a Prioritization and Optimization (P&O) Study to provide information for subsequent phases of the Salt Control Program. During Phase I, the Salt Control Program includes two compliance pathways for dischargers to choose; a Conservative Salinity Permitting Approach and an Alternative Salinity Permitting Approach.

The Discharger submitted a notice of intent for the Salt Control Program on 14 July 2021 indicating its intent to meet the Conservative Salinity Permitting Approach. However, on 8 August 2023 the Discharger was notified that after review of existing salinity data (e.g., electrical conductivity and total dissolved solids) suggested that the Facility would not be able to comply with the Conservative Salinity Permitting Approach and that they would be switched to the Alternative Salinity Permitting Approach.

Under the Alternative Permitting Approach, the Basin Plan requires that dischargers implement salinity minimization measures to maintain existing salinity levels and participate in the P&O Study. The Discharger's NOI demonstrated adequate participation in the P&O and this Order requires continued participation to meet the requirements of the Alternative Salinity Permitting Approach. This Order also requires continued implementation of the Discharger's SEMP and includes a performance-based salinity trigger to ensure salinity levels do not increase. In accordance with the Basin Plan, the salinity trigger was developed based on existing facility performance and considers possible temporary increases that may occur due to water conservation and/or drought.

b. **Storm Water Pollution Prevention Plan (SWPPP).** This Order requires the Discharger to implement BMPs, including treatment controls where necessary, to support attainment of water quality standards. The use of BMPs to control or abate the discharge of pollutants is allowed by 40 C.F.R. section 122.44(k)(3) because effluent limitations are infeasible, and BMPs are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA (40 C.F.R. 122.44(k)(4)).

This Order requires the Discharger to continue to implement a site-specific SWPPP for the Facility. The SWPPP is necessary to identify potential sources of pollutants that may come in contact with storm water and to control or abate the discharge of pollutants to surface water or groundwater.

In order to maintain an accurate record and useful SWPPP, the SWPPP must be revised whenever there is a change in construction, site operation, or maintenance, which may affect the discharge of significant qualities of pollutants to surface water or groundwater. The SWPPP must also be amended if there are violations of this Order or if the Discharger has not achieved the general objectives of controlling pollutants in the storm water discharges.

c. **First Flush Collection.** This site-specific BMP was developed by the Discharger after performing a log deck flushing study, which identified a minimum amount of rainfall needed to "flush" the log deck area of pollutants related to the sprinkler wastewater recirculation activities during

the dry season. This Order maintains the first flush BMP that requires the first 2 inches of storm water runoff from the log deck drainage areas be collected, after cessation of the log deck sprinkling (dry season log deck operations), in the Log Yard Pond. Then, all the wastewater in the Log Yard Pond is transferred to either the two Evaporation Ponds, the Retention Pond, and/or the Substation Pond. This Order prohibits the discharge of comingled recirculated sprinkler and first flush wastewater to surface water and surface water drainage courses. Once the Log Yard Pond is emptied of wastewater, it is configured for the wet season operations for the treatment of industrial storm water runoff from the log deck drainage areas, land application by sprinkler irrigation of the forested LAA, and subsequent surface water discharge to the unnamed tributary to Canyon Creek. The first flush collection may occur more than once in a wet season if the Discharger intermittently sprinkles logs with recirculated pond water during the wet season.

### 4. Construction, Operation, and Maintenance Specifications

a. **Pond Operating Requirements.** The operation and maintenance specifications for the treatment and storage of industrial storm water and wastewater in the facility ponds (i.e., Log Yard Pond, Fire Pond, Evaporation Pond 1 and 2, Substation Pond and Retention Pond) are necessary to protect the beneficial uses of the groundwater. The specifications included in this Order are retained from Order R5-2020-0017. In addition, reporting requirements related to use of the facility ponds are required to monitor their use and the potential impact on groundwater.

### 5. Special Provisions for POTWs – Not Applicable

### 6. Other Special Provisions

a. **Sludge, Wood Byproduct, and/or Ash Management.** Sludge disposal provisions are necessary to ensure proper disposal of collected screening, sludge, wood ash, wood byproduct, and other solids removed from liquid waste, ponds, or other sources in a manner that is consistent with CCR Title 27, division 2, subdivision 1, section 20005 et seq., and approved by the Executive Officer.

### 7. Compliance Schedules – Not Applicable

## VII. 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 authorize the Central Valley 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 burden, including costs, of these monitoring and reporting requirements bears a reasonable relationship to the need for the reports and the benefits to be obtained therefrom. The Discharger, as owner and operator of the Facility, is required to comply with these requirements, which are necessary to determine compliance with this Order. The following provides additional rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

Water Code section 13176, subdivision (a), states: "The analysis of any material required by [Water Code sections 13000-16104] shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code." The DDW accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

Section 13176 cannot be interpreted in a manner that would violate federal holding time requirements that apply to NPDES permits pursuant to the CWA. (Wat. Code sections 13370, subd. (c), 13372, 13377.). Section 13176 is inapplicable to NPDES permits to the extent it is inconsistent with CWA requirements. (Wat. Code section 13372, subd. (a).) Lab accreditation is not required for field tests such as tests for color, odor, turbidity, pH, temperature, dissolved oxygen, electrical conductivity, and disinfectant residual. The holding time requirements are 15 minutes for dissolved oxygen and pH (40 C.F.R. section 136.3(e), Table II). Due to the location of the Facility, it is both legally and factually impossible for the Discharger to comply with section 13176 for constituents with short holding times.

### A. Influent Monitoring – Not Applicable

### B. Effluent Monitoring

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.

2. Order R5-2020-0017 required monitoring of the industrial storm water discharge from the Log Yard Pond to Canyon Creek at Monitoring Locations SW-005 (i.e., Discharge Point 001) and industrial storm water discharge from the forested LAA to unnamed tributary to Canyon Creek at Monitoring Location SW-006 (i.e., Discharge Point 002). However, Discharge Point 001 was permanently removed by the Discharger during the prior permit term. Thus, in this Order Discharger Point 001 (i.e., SW-005) has been designated historical.

3. Industrial storm water (effluent) monitoring frequencies and sample types have been retained from Order R5-2020-0017 for SW-006, except as noted in Table F-16, below.

4. Monitoring data collected over the previous term for total recoverable and dissolved aluminum, total recoverable and dissolved iron, and total recoverable and dissolved manganese demonstrate that the discharge is not causing an exceedance of the applicable water quality objectives/criteria in the downstream receiving water. Thus, this Order reduces the monitoring frequency from twice per month to once per month for these parameters. The Central Valley Water Board finds that this frequency is necessary to demonstrate compliance with the applicable water quality objectives/criteria and annual average industrial storm water action levels for aluminum, iron, and manganese.

5. Monitoring data collected over the previous term for settleable solids and total suspended solids demonstrate that the discharge is not causing an exceedance of the applicable water quality objectives/criteria in the downstream receiving water. Thus, this Order reduces the monitoring frequency from once per week to once per month for these parameters. The Central Valley Water Board finds that this frequency is necessary to demonstrate compliance with the applicable water quality objectives/criteria and annual average industrial storm water action levels for settleable solids and total suspended solids.

6. This Order establishes monthly industrial storm water (effluent) monitoring for total recoverable copper in order to determine if the discharge has the potential to cause or contribute to an exceedance of the downstream receiving water quality objectives/criteria. The Central Valley Water Board finds that this frequency is necessary for characterizing the storm water discharge for copper.

7. Order R5-2020-0017 required oil and grease monitoring twice per year. This Order increases the monitoring frequency for oil and grease from twice per year to once per month. The Central Valley Water Board finds that this frequency is necessary to demonstrate compliance with the applicable water quality objectives/criteria and annual average industrial storm water action levels for oil and grease.

8. This Order establishes monthly monitoring for total recoverable zinc. The Central Valley Water Board finds that this frequency for total recoverable zinc is necessary to demonstrate that the discharge is not causing exceedances of the applicable water quality objectives/criteria for zinc and to determine compliance with annual average storm water action level for zinc.

### C. Land Discharge Monitoring

Land discharge monitoring requirements are included in this Order to evaluate the quality and quantity of industrial storm water and wastewater applied to land and to assess the potential impacts to groundwater. Discharges to the Facility's storage, treatment, and disposal ponds (i.e., Log Yard Pond, Fire Pond, Evaporation Ponds 1 and 2, Substation Pond, and Retention Pond) as well as the forested Land Application Area have the potential to percolate to groundwater, and may carry

pollutants such as total dissolved solids, organic and inorganic nutrients, and metals. Monitoring of land discharges provides the technical basis for compliance with land discharge specifications, groundwater limitations, and the State Antidegradation Policy (Resolution 68-16).

### 1. Pond Discharge Monitoring

Pond monitoring requirements are included to ensure that the Facility's storage, treatment, and disposal ponds (i.e., Log Yard Pond, Fire Pond, Evaporation Ponds 1 and 2, Substation Pond, and Retention Pond) are operated and maintained to prevent water quality degradation, protect groundwater, and avoid nuisance conditions. Weekly monitoring of field parameters such as freeboard, pH, electrical conductivity, and dissolved oxygen, as well as inspections for odors, insects, and berm integrity, provides early detection of operational problems that could impact water quality.

In addition to routine operational and field monitoring, this Order introduces a once per permit term priority pollutant and waste characterization requirement for the sawmill recirculated sprinkler/first flush wastewater (LND-001), cogeneration wastewater (LND-006), which is consistent with discharges to land for sawmills and cogeneration facilities permitted under WDRs Orders under the Non-15 program (e.g., WDR Order R5-2018-0029 for SPI Anderson Sawmill). This monitoring provides a comprehensive evaluation of pollutants that may accumulate in the ponds over time and ensures consistency with the Basin Plan and Clean Water Act requirements for pollutant characterization.

Flow monitoring is required to quantify hydraulic loading to the pond system, support mass loading calculations for salts, nutrients, and metals, verify compliance with land discharge specifications, and evaluate consistency with the State Antidegradation Policy (Resolution 68-16). Quantified monthly discharge volumes provide the technical basis for water balance tracking, freeboard management, and operational controls, and allow correlation of land discharge rates with groundwater levels and groundwater quality trends at down- and upgradient monitoring wells. The previous Order did not include a flow requirement; however, the storage capacity issues at the facility warrant direct measurement. Comparable Non-15 WDR Order for discharge to land (e.g., Order 2018-0052, SPI Oroville Cedar Mill, Butte County) include flow monitoring at land discharge points.

All other pond monitoring frequencies and sample types have been retained from Order R5-2020-0017, except as noted in Table F-16, below.

The rationale for pond monitoring is as follows:

a. **Operational Control.** Frequent field observations ensure that pond levels, berm stability, and freeboard are maintained to prevent overtopping, unauthorized discharges, or structural failures.

b. **Protection of Water Quality.** Monitoring pH, electrical conductivity, and dissolved oxygen provides indicators of pond chemistry and potential impacts to percolating water and groundwater quality.

i. **Discharge water quality.** Evaluate concentrations for pollutants of concern and identify any changes in the quality of the industrial storm water or wastewater discharges over time.

ii. **Demonstrate compliance.** Ensure that discharges do not exceed land discharge specifications contained in this Order.

iii. **Protect groundwater quality.** Assess the potential for degradation of underlying groundwater by comparing discharge data with groundwater monitoring results.

c. **Nuisance Prevention.** Routine inspections for odors, insect breeding, and other nuisance conditions ensure compliance with Basin Plan prohibitions on nuisance and public health hazards.

d. **Verification of Treatment/Disposal Performance.** Monitoring results demonstrate that the storage, treatment, and disposal ponds are functioning as intended for industrial storm water and wastewater management.

e. **Comprehensive Pollutant Screening.** Once per permit term priority pollutant and waste characterization scans on the sawmill sprinkler recirculation/first flush wastewater (LND-001) and cogeneration wastewater (LND-006) provide a broad evaluation of potential pollutants of concern, ensuring that trace contaminants or metals not captured in the routine monitoring are identified.

### 2. Land Application Area Monitoring

This Order establishes LAA monitoring requirements to evaluate the quality and quantity of the industrial storm water applied to the forested LAA and to assess the potential impacts to groundwater. Monitoring of the forested LAA ensures that the industrial storm water treatment BMP is operated and maintained to maximize the effectiveness of LAA treatment unit. In addition, monitoring of the forested LAA provides the technical basis for compliance with land discharge specifications, groundwater limitations, and the State Anti-Degradation Policy (Resolution 68-16).

## D. Receiving Water Monitoring

### 1. Surface Water

a. Order R5-2020-0017 required monitoring of the industrial storm water discharge from the Log Yard Pond to Canyon Creek at Monitoring Location SW-005 (Discharge Point 001) and upstream and downstream

receiving water monitoring at RSW-001 and RSW-002, respectively. However, Discharge Point 001 was permanently removed by the Discharger during the prior permit term. Thus, in this Order RSW-001 and RSW-002 have been designated historical.

b. Receiving water monitoring at RSW-003 and RSW-004 is necessary to assess the impacts of the industrial storm water discharge from Discharge Point 002 on the receiving stream. Receiving surface water monitoring frequencies and sample types have been retained from Order R5-2020-0017, except as noted in Table F-16, below.

c. Order R5-2020-0017 required receiving water monitoring for total recoverable and dissolved aluminum, total recoverable and dissolved iron, and total recoverable and dissolved manganese twice per month at Monitoring Locations RSW-003 and RSW-004. This Order decreases the monitoring frequency for these parameters from twice per month to once per month. The Central Valley Water Board finds that this frequency is necessary to assess the impact of the discharge on the receiving water for these parameters.

d. This Order establishes monthly receiving water monitoring requirements for total recoverable and dissolved copper, total recoverable and dissolved zinc, and tannins and lignins at Monitoring Locations RSW-003 and RSW-004. The Central Valley Water Board finds that this frequency is necessary to assess the impact of the industrial storm water discharge on the receiving water for these parameters.

**2. Groundwater**

a. Water Code section 13267 states, in part, “(a) A Regional Water Board, in establishing waste discharge requirements may investigate the quality of any waters of the state within its region” and “(b)(1) In conducting an investigation, the Regional Water Board may require that any person who discharges waste that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, a Regional Water Board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.” The Monitoring and Reporting Program is issued pursuant to Water Code section 13267. The groundwater monitoring and reporting program required by this Order and the Monitoring and Reporting Program is necessary to ensure compliance with these waste discharge

requirements. The Discharger is responsible for the discharges of waste at the facility subject to this Order.

b. Monitoring of the groundwater must be conducted to determine if the discharge has caused an increase in constituent concentrations, when compared to background. The monitoring must, at a minimum, require a complete assessment of groundwater impacts including the vertical and lateral extent of degradation, an assessment of all wastewater-related constituents which may have migrated to groundwater, an analysis of whether additional or different methods of treatment or control of the discharge are necessary to protect against excessive degradation or pollution or nuisance. If monitoring indicates that the discharge has incrementally increased constituent concentrations in groundwater above background, this permit may be reopened and modified. Until groundwater monitoring is sufficient, this Order contains Groundwater Limitations that allow groundwater quality to be degraded for certain constituents when compared to background groundwater quality, but not to exceed water quality objectives. If groundwater quality has been degraded by the discharge, the incremental change in pollutant concentration (when compared with background) may not be increased. If groundwater quality has been or may be degraded by the discharge, this Order may be reopened, and specific numeric limitations established consistent with the State Antidegradation Policy and the Basin Plan.

c. This Order requires the Discharger to continue groundwater monitoring and includes a regular schedule of groundwater monitoring in the attached Monitoring and Reporting Program (Attachment E). The groundwater monitoring reports are necessary to evaluate impacts to waters of the State to assure protection of beneficial uses and compliance with Central Valley Water Board plans and policies, including the State Anti-Degradation Policy. Evidence in the record includes effluent monitoring data that indicates the presence of constituents that may degrade groundwater and surface water.

d. Groundwater monitoring frequencies and parameters have been retained from Order R5-2020-0017, except as noted in Table F-16, below.

e. The quarterly pond and groundwater monitoring data collected over the previous term for total recoverable and dissolved arsenic and total inorganic and organic nitrogen (i.e., total nitrogen, total nitrate, total nitrite, and total kjeldahl nitrogen) demonstrate that the land discharge does not have the potential to cause an exceedance of the applicable groundwater quality objectives. Thus, this Order removes quarterly pond and groundwater monitoring requirements for total and dissolved arsenic and total inorganic and organic nitrogen species. However, total recoverable arsenic, total nitrogen, total nitrate, and total nitrite monitoring are still required for the once per permit term priority pollutant characterization requirement for the wastewater contained in LND-001 and LND-006.

**Table F-16 Summary of Monitoring Changes**

| Parameter, Units | Type of Monitoring | Prior Sample Frequency | Revised Sample Frequency | Reason for Change |
|---|---|---|---|---|
| Aluminum, Total Recoverable and Filtered | Effluent (SW-006) | 2/Month | 1/Month | Required to determine compliance with SWAL. |
| Copper, Total Recoverable | Effluent (SW-006) | 1/Permit Term | 1/Month | Necessary to characterize the industrial storm water discharge. |
| Dissolved Organic Carbon | Effluent (SW-006) | 2/Permit Term | 1/Month | Required to determine criteria for aluminum in receiving water. |
| Iron, Total Recoverable and Filtered | Effluent (SW-006) | 2/Month | 1/Month | Required to determine compliance with SWAL. |
| Manganese, Total Recoverable and Filtered | Effluent (SW-006) | 2/Month | 1/Month | Required to determine compliance with SWAL. |
| Oil and Grease | Effluent (SW-006) | 2/Year | 1/Month | Required to determine compliance with SWAL. |
| Settleable Solids | Effluent (SW-006) | 1/Week | 1/Month | Required to determine compliance with SWAL. |
| Total Suspended Solids | Effluent (SW-006) | 1/Week | 1/Month | Required to determine compliance with SWAL. |
| Zinc, Total Recoverable | Effluent (SW-006) | 1/Permit Term | 1/Month | Required to determine compliance with SWAL. |
| Aluminum, Total Recoverable and Filtered | Receiving Water (RSW-003 and RSW-004) | 2/Month | 1/Month | Necessary to assess the impact of the aluminum in the discharge on the receiving water and potential to exceed secondary MCL. |
| Copper, Total Recoverable | Receiving Water (RSW-003 and RSW-004) | 1/Permit Term | 1/Month | Necessary to assess the impact of the copper in the discharge on the receiving water. |
| Copper, Dissolved | Receiving Water (RSW-003 and RSW-004) | -- | 1/Month | Necessary to assess the impact of the copper in the discharge on the receiving water. |
| Dissolved Organic Carbon | Receiving Water (RSW-003 and RSW-004) | 1/Permit Term | 1/Month | Required to determine criteria for aluminum in receiving water. |
| Iron, Total Recoverable and Filtered | Receiving Water (RSW-003 and RSW-004) | 2/Month | 1/Month | Necessary to assess the impact of the iron in the discharge on the receiving water and potential to exceed secondary MCL. |

| Parameter, Units | Type of Monitoring | Prior Sample Frequency | Revised Sample Frequency | Reason for Change |
|---|---|---|---|---|
| Manganese, Total Recoverable and Filtered | Receiving Water (RSW-003 and RSW-004) | 2/Month | 1/Month | Necessary to assess the impact of the manganese in the discharge on the receiving water and potential to exceed secondary MCL. |
| Tannins and Lignins | Receiving Water (RSW-003 and RSW-004) | -- | 1/Month | Necessary to assess the impact of the industrial storm water discharge on the receiving water. |
| Zinc, Total Recoverable | Receiving Water (RSW-003 and RSW-004) | 1/Permit Term | 1/Month | Required to assess the impact of the zinc in the discharge on the receiving water. |
| Zinc, Dissolved | Receiving Water (RSW-003 and RSW-004) | -- | 1/Month | Required to assess the impact of the zinc in the discharge on the receiving water. |
| Aluminum, Total recoverable and Filtered | Groundwater | -- | 1/Quarter | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Arsenic, Dissolved | Groundwater | 1/Quarter | -- | Review of groundwater monitoring data shows the maximum dissolved arsenic concentration in downgradient wells was Not Detected (<1.9 µg/L). |
| Nitrate, Total (as N) | Groundwater | 1/Quarter | 1/Permit | Review of groundwater monitoring data shows the maximum total nitrate concentrations in downgradient wells was 7.1 mg/L. |
| Nitrite, Total (as N) | Groundwater | 1/Quarter | 1/Permit | Review of groundwater monitoring data shows the maximum total nitrite concentrations in downgradient wells was 2.6 mg/L. |
| Nitrogen, Total (as N) | Groundwater | 1/Quarter | 1/Permit | Review of groundwater monitoring data shows the maximum total nitrogen concentration in downgradient wells was 8.3 mg/L. |

| Parameter, Units | Type of Monitoring | Prior Sample Frequency | Revised Sample Frequency | Reason for Change |
|---|---|---|---|---|
| Tannins and Lignins | Groundwater | -- | 1/Quarter | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Total Kjeldahl Nitrogen | Groundwater | 1/Quarter | -- | Review of groundwater monitoring data shows the maximum total kjeldahl nitrogen concentrations in downgradient wells was 6.2 mg/L. |
| Total Organic Carbon | Groundwater | -- | 1/Quarter | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Aluminum, Total Recoverable and Filtered | Land Discharge | -- | 1/Quarter | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Arsenic, Total Recoverable and Dissolved | Land Discharge | 1/Quarter | -- | Review of pond monitoring data shows the maximum total arsenic concentration in the ponds was 8.0 µg/L and the maximum dissolved arsenic concentration in the ponds was 8.3 µg/L. |
| Nitrate, Total (as N) | Land Discharge | 1/Quarter | -- | Review of pond monitoring data shows the maximum total nitrate concentrations in the ponds was 0.86 mg/L. |
| Nitrogen, Total (as N) | Land Discharge | 1/Quarter | -- | Review of pond monitoring data shows the maximum total nitrogen concentration in the ponds was 9.4 mg/L. |
| Observed Berm Conditions | Land Discharge | -- | 1/Month | Necessary to determine compliance with land discharge specifications and pond construction, operation and maintenance specifications within this Order. |
| Oil and Grease | Land Discharge | -- | 1/Quarter | Necessary to determine compliance with industrial storm water BMP requirements and land discharge specifications within this Order. |

| Parameter, Units | Type of Monitoring | Prior Sample Frequency | Revised Sample Frequency | Reason for Change |
|---|---|---|---|---|
| Oxidative-Reductive Potential (ORP as Eh) | Land Discharge | -- | 1/Month | Required to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Temperature | Land Discharge | -- | 1/Month | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Tannins and Lignins | Land Discharge | -- | 1/Quarter | Required to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |
| Total Kjeldahl Nitrogen | Land Discharge | 1/Quarter | -- | Review of pond monitoring data shows the maximum Total Kjeldahl Nitrogen concentrations in the ponds was 9.4 mg/L. |
| Total Organic Carbon | Land Discharge | -- | 1/Quarter | Necessary to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality |
| Zinc, Total Recoverable | Land Discharge | -- | 1/Quarter | Required to assess the impact of the industrial storm water and wastewater discharge to land on groundwater quality. |

### E. Whole Effluent Toxicity Testing Requirements

Aquatic toxicity testing is necessary to evaluate the aggregate toxic effect of a mixture of toxicants in the effluent on the receiving water. Acute toxicity testing is conducted over a short time period and measures mortality, while chronic toxicity testing is conducted over a short or longer period and may measure mortality, reproduction, and growth. For this permit, aquatic toxicity testing is to be performed following 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), and Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition (EPA-821-R-02-012).

Consistent with Order R5-2020-0017, twice yearly acute whole effluent toxicity testing is required and once per permit term chronic whole effluent toxicity testing is required to demonstrate compliance with the Basin Plan's narrative toxicity objective.

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

2. The null hypothesis (Ho) for the TST statistical approach is:

   Mean discharge IWC response ≤ RMD x Mean control response, where the chronic RMD = 0.75 and the acute RMD = 0.80.

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

3. The relative “Percent Effect” at the discharge IWC is defined and reported as:

   Percent Effect = ((Mean control response – Mean discharge IWC response) / Mean control response) x 100.

   This is a t-test (formally Student’s t-Test), a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC differs from the control, the test result is “Fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

## F. Other Monitoring Requirements

### 1. Precipitation Monitoring

Precipitation monitoring is necessary to assess the amount of rainfall that falls on the log yard drainage areas.

### 2. Ash and Cooling Tower Solids Monitoring

The annual ash and cooling tower solids monitoring is necessary to determine the quality and quantity of ash and colling tower solids generated at the Facility and to ensure the proper onsite management and offsite disposal. This Order retains the Ash non-hazardous waste characterization monitoring requirements for the agricultural beneficial reuse as a soil amendment liming capacity, phosphorus, pH, CAM 17 metals, and 2,3,7,8-TCDD equivalence (consistent with CCR Title 27 division 2, subdivision 1, section 20005 et seq.).

### 3. Industrial Water Supply Monitoring

Water supply monitoring (SPL-001) is required to evaluate the source of constituents in the cogeneration wastewater that may end up concentrating in the ROS reject water that is discharged to the Retention Pond. In addition, the

Discharger has utilized groundwater quality monitoring of the deeper regional aquifer (monitored at PW-2) in the 2019 antidegradation evaluation and again in 2023 the antidegradation re-evaluation (quarterly data was collected between June 2016 and December 2018).

4. **Effluent and Receiving Water Characterization Monitoring**

Periodic monitoring for priority pollutants and other constituents of concern for which criteria or water quality objectives apply and for which no effluent limitations have been established is included in this Order. This Order requires industrial storm water (effluent) monitoring for priority pollutants and other pollutants of concern at Monitoring Location SW-006 once during the first discharge event of the 2027/208 wet season that begins on 1 October 2027, and concurrent upstream receiving water monitoring at Monitoring Location RSW-003, in order to collect data to conduct a storm water analysis for the next permit renewal. See section IX.D of the MRP (Attachment E) for more detailed requirements related to performing priority pollutant monitoring.

## VIII. PUBLIC PARTICIPATION

The Central Valley Water Board has considered the issuance of WDRs that will serve as an NPDES permit for Sierra Pacific Industries Burney Division. As a step in the WDR adoption process, the Central Valley Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

### A. Notification of Interested Persons

The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Additionally, consistent with Water Code section 189.7, the Central Valley Water Board conducted outreach to potentially affected disadvantaged and/or tribal communities concerning tentative WDRs. Notification was provided through the following posting of the Notice of Public Hearing at the Facility, **<city hall or town hall or county courthouse>**, and the local post office. Additionally, the NOPH was posted on the Central Valley Water Board's Tentative Orders webpage.

The public had access to the agenda and any changes in dates and locations through the Central Valley Water Board's website (http://www.waterboards.ca.gov/centralvalley/board_info/meetings/)

### B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Central Valley Water Board at the address on the cover page of this Order.

To be fully responded to by staff and considered by the Central Valley Water Board, the written comments were due at the Central Valley Water Board office by 5:00 p.m. on **17 January 2026**.

### C. Public Hearing

The Central Valley 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: **26-27 February 2026**
Time: **<9:00 a.m.>**
Location: Online **OR** Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Dr., Suite #200
Rancho Cordova, CA 95670

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

### D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water board to review the action in accordance with Water Code section 13320 and CCR, 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

Instructions on how to file a petition for review (http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml) are available on the Internet.

### E. 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 Central Valley Water Board by calling (530) 224-4845.

### F. Register of Interested Persons

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

### G. Additional Information

Requests for additional information or questions regarding this order should be directed to Erin Jonasson at (530) 224-6128, or Erin.Jonasson@waterboards.ca.gov.

## ATTACHMENT G – SUMMARY OF INDUSTRIAL STORM WATER ANALYSIS

| Constituent | Units | Max SW | Max Down RW | Paired Up RW | C | CMC | CCC | Water & Org | Org. Only | Basin Plan | Prim. MCL | Sec. MCL | IGP NAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | µg/L | 1,642 | 72 | 80.1 | 221 | 392 | 221 | -- | -- | -- | 1,000 | -- | 1,100 |
| Aluminum, Dissolved | µg/L | 129 | 44.6 | 71.2 | 200 | -- | -- | -- | -- | -- | -- | 200 | -- |
| COD | mg/L | 27.4 | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 120 |
| Copper, Total | µg/L | 0.71 | NA | 0.8 | 2.5 | 3.2 | 2.5 | 1,300 | -- | 3.3 | 1,300 | 1,000 | 33.2 |
| EC | µmhos /cm | 198 | 157 | 113 | 700 | -- | -- | -- | -- | 700 | -- | 900 | -- |
| Iron, Total | µg/L | 2,042 | 598 | 172 | 1,000 | -- | 1,000 | -- | -- | -- | -- | -- | 1,000 |
| Iron, Dissolved | µg/L | 365 | 156 | 52.4 | 300 | -- | -- | -- | -- | -- | -- | 300 | -- |
| Manganese, Total | µg/L | 392 | 100 | 5.3 | 100 | -- | -- | -- | 100 | -- | -- | -- | 1,000 |
| Manganese, Dissolved | µg/L | 350 | 91.4 | 2.0 | 50. | -- | -- | -- | -- | -- | -- | 50. | -- |
| O&G | mg/L | DNQ ~1 | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 15 |
| pH | SU | 5.62 - 7.58 | 6.10 - 8.03 | 6.16 - 8.20 | 6.0 - 9.0 | -- | -- | -- | -- | 6.5-8.5 | 6.5-8.5 | -- | 6.0-9.0 |
| Settleable Solids | mL/L | ND <0.1 | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tannins and Lignins | mg/L | 1.22 | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| TDS | mg/L | 115 | NA | 55 | 500 | -- | -- | -- | -- | -- | -- | 500 | -- |
| TSS | mg/L | 21.6 | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 100 |
| Turbidity | NTU | 28.5 | 8.8 | 3.7 | 50 | -- | -- | -- | -- | -- | -- | -- | 50 |
| Zinc, Total | µg/L | 5.4 | NA | ND <0.8 | 9.6 | 32 | 32 | -- | -- | 9.6 | -- | 5,000 | 260 |

**Attachment G Table Notes:**

Data date range: January 2023 (first discharge) – February 2025, unless noted otherwise.

1. For comparison with IGP NALs and MCLs, the Max SW (Effluent) and Max down RW values are a maximum calendar annual average, where the background receiving water, Paired Up RW, is the annual average for the same year as the Max Down RW.
2. IGP NALs (i.e., benchmark thresholds) for COD, copper, iron, O&G, pH, TSS, and zinc are from Table 2 of the General Permit for Storm Water Associated with Industrial Activities Order 2014-0057-DWQ as amended in 2015 and 2018, NPDES Order No. CAS000001 (Industrial General Permit).
3. IGP NALs (i.e., benchmark thresholds) for aluminum and turbidity are from Table 4-2 of the 2021 U.S. EPA NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP).
4. IGP NALs (i.e., benchmark thresholds) for manganese is from Table 3 of the 2000 U.S. EPA MSGP.
5. The CMC and CCC for aluminum were calculated using site-specific 2018 U.S. EPA National Ambient Water Quality Criteria.
6. An ambient hardness value of 21 mg/L CaCO3 was used to calculate the hardness-dependent metals criteria for both copper and zinc (i.e., the CMC, CCC, and BP).
7. The Basin Plan EC is based on CV-SALTS recommended level for protection of the agricultural supply beneficial use.
8. Iron CCC, U.S. EPA National Recommended Ambient Water Quality Criteria, Freshwater Aquatic Life Protection, 4-day average.

**Abbreviations used in this table:**

| | |
|---|---|
| C = | Criterion used for Reasonable Potential Analysis |
| CMC = | Criterion Maximum Concentration (CTR or NTR) |
| CCC = | Criterion Continuous Concentration (CTR or NTR) |
| Water & Org = | Human Health Criterion for Consumption of Water & Organisms (CTR or NTR) |
| Org Only = | Human Health Criterion for Consumption of Organisms Only (CTR or NTR) |
| Basin Plan = | Numeric Site-Specific Basin Plan Water Quality Objective |
| MCL = | Drinking Water Standards Maximum Contaminant Level |
| NA = | Not Available |
| ND = | Non-detect |
| DNQ = | Detected, not quantified |