

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

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**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CA0080357
ORDER R5-2021-0036**

**WASTE DISCHARGE REQUIREMENTS FOR
SIERRA PACIFIC INDUSTRIES
QUINCY DIVISION
PLUMAS COUNTY**

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

Table 1. Discharger Information

Discharger:	Sierra Pacific Industries
Name of Facility:	Quincy Division
Facility Street Address:	1538 Lee Road
Facility City, State, Zip:	Quincy, CA 95971
Facility County:	Plumas County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001 (SW-007)	Industrial Storm Water	39° 56' 43.9" N	120° 54' 46.1" W	Mill Creek
002 (SW-006)	Industrial Storm Water	39° 56' 40.1" N	120° 54' 12.7" W	Mill Creek

Table 3. Administrative Information

This Order was Adopted on:	17 June 2021
This Order shall become effective on:	1 August 2021
This Order shall expire on:	31 July 2026
The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a NPDES permit no later than:	31 July 2025
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 **17 June 2021**.

PATRICK PULUPA, Executive Officer

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I. FACILITY INFORMATION

Information describing the Sierra Pacific Industries, Quincy 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. 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 through H are also incorporated into this Order.
- C. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections V.B, VI.C.4, and VI.C.6 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.
- D. 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 require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. The MRP is provided in Attachment E.

The technical and monitoring reports in this Order are required in accordance with Water Code section 13267, which states the following in subsection (b)(1), "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to

discharge, waste outside of its region could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional 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, the regional 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 Discharger owns and operates the Facility subject to this Order. The monitoring reports required by this Order are necessary to determine compliance with this Order. The need for the monitoring reports is discussed in the Fact Sheet.

- E. 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.
- F. 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 R5-2015-0070 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Central 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 recycle water from log yard sprinkling, commingled recycle and storm water (i.e., “first flush”), cooling tower blowdown, boiler blowdown, or other waste of recognizable sawmill or cogeneration origin to surface waters is prohibited.

- E. The discharge of storm water leachate from wood fuel 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, bark, sawdust, wood, or any waste recognized as originating from cogeneration operations to surface waters or surface water drainage courses is prohibited.
- G. Discharge of wastewater from the Retention Pond and Fire Pond off-site 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 Attachment A) recognized as originating from the Facility to surface waters or surface water drainage courses is prohibited.
- I. The discharge of process wastewater from barking, sawmill, and planing operations, as defined in 40 C.F.R. part 429 to surface waters is prohibited.
- J. The discharge of process wastewater (as defined in Attachment A) from log deck sprinkling water and first flush industrial storm water to surface waters is prohibited.
- K. Discharge of waste classified as 'hazardous,' as defined in the California Code of Regulations (CCR), Title 22, section 66261.1 et seq., including water treatment chemicals, solvents, or petroleum products (e.g., oil, grease, gasoline, and diesel), is prohibited.
- L. Discharge of waste classified as "hazardous" as defined in CCR, Title 23, section 2521(a), or "designated" (other than as specifically allowed in this Order), as defined in section 13173 of the Water Code, to the ponds is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Points 001 and 002

1. Final Effluent Limitations – Discharge Points 001 and 002

The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001 and 002. Unless otherwise specified, compliance shall be measured at Monitoring Location SW-007 and SW-006, as described in the MRP, Attachment E:

- a. **pH:**
 - i. 6.0 standard units as an instantaneous minimum.
 - ii. 9.0 standard units as an instantaneous maximum.
- b. **Acute Whole Effluent Toxicity.** Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
 - i. 70%, minimum for any one bioassay; and
 - ii. 90%, median for any three consecutive bioassays.

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following in Mill Creek:

1. **Bacteria.** The six-week rolling geometric mean of Escherichia coli (E. coli) shall not exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a statistical threshold value (STV) of 320 cfu/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
2. **Biostimulatory Substances.** Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
3. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
4. **Color.** Discoloration that causes nuisance or adversely affects beneficial uses.
5. **Dissolved Oxygen:**
 - a. The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent of saturation in the main water mass;
 - b. The 95-percentile dissolved oxygen concentration to fall below 75 percent of saturation; nor
 - c. The dissolved oxygen concentration to be reduced below 7.0 mg/L at any time.
6. **Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
7. **Oil and Grease.** Oils, greases, waxes, or other materials to be present 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.
8. **pH.** The pH to be depressed below 6.5 nor raised above 8.5.
9. **Pesticides:**
 - a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;

- b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;
 - c. Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by U.S. EPA or the Executive Officer;
 - d. Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 C.F.R. section 131.12.);
 - e. Pesticide concentrations to exceed the lowest levels technically and economically achievable;
 - f. Pesticides to be present in concentration in excess of the maximum contaminant levels (MCLs) set forth in CCR, Title 22, division 4, chapter 15; nor
 - g. Thiobencarb to be present in excess of 1.0 µg/L.
10. **Radioactivity:**
- a. Radionuclides to be present in concentrations that are harmful to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
 - b. Radionuclides to be present in excess of the MCLs specified in Table 64442 of section 64442 and Table 64443 of section 64443 of Title 22 of the California Code of Regulations.
11. **Suspended Sediments.** The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
12. **Settleable Substances.** Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
13. **Suspended Material.** Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.
14. **Taste and Odors.** Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.
15. **Temperature.** The natural temperature to be increased by more than 5° Fahrenheit. Compliance to be determined based on the difference in temperature at Monitoring Locations RSW-001 and RSW-002.

16. **Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
17. **Turbidity.**
 - a. Shall not exceed 2 Nephelometric Turbidity Units (NTU) where natural turbidity is less than 1 NTU;
 - b. Shall not increase more than 1 NTU where natural turbidity is between 1 and 5 NTUs;
 - c. Shall not increase more than 20 percent where natural turbidity is between 5 and 50 NTUs;
 - d. Shall not increase more than 10 NTU where natural turbidity is between 50 and 100 NTUs; nor
 - e. Shall not increase more than 10 percent where natural turbidity is greater than 100 NTUs.

B. Groundwater Limitations

1. Release of waste constituents from any storage, treatment, or disposal component associated with the Facility, in combination with other sources, shall not cause the underlying groundwater to contain waste constituents greater than background quality or water quality objectives, whichever is greater.

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. 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.
- l. 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.
- m. 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.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer 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. Failure to submit the request shall be considered a discharge without requirements, a violation of the

Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

- n. 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.
- o. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Central Valley Water Board by telephone (916) 464-3291 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 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. **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/):
(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

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 001 or 002 exceeds any industrial storm water action level in Table 4 or any receiving water limitation in section V.A, 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 and/or eliminate the receiving water limit violation. The BMP Improvement Evaluation and proposed BMP improvements must be submitted to the Central Valley Water Board within 60 days of the storm water action level exceedance or receiving water limit violation date. The BMP improvement(s) must be implemented as soon as practicable thereafter. The Facility 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

Parameters	Units	Annual Action Level	Instantaneous Maximum Action Level
Chemical Oxygen Demand (COD)	mg/L	120	--
Iron, Total Recoverable	µg/L	1,000	--
Tannins and Lignins	mg/L	30	--
Total Suspended Solids	mg/L	100	400

- i. Compliance with the storm water annual action levels will be evaluated as an annual average. Compliance with the instantaneous maximum action level will be evaluated on a single grab sample basis.

- ii. 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.
 - b. **Groundwater Characterization.** To determine compliance with Groundwater Limitations, section V.B, background wells and downgradient wells are necessary to characterize groundwater quality. There is an existing groundwater monitoring network to sample groundwater around the Facility. However, at least one background well and one downgradient well are necessary to characterize the groundwater around the Irrigation Pond and Land Application Area. There are several piezometers and a groundwater well in the vicinity, but it is unclear whether these can be used to characterize the groundwater quality underlying the Irrigation Pond and Land Application Area. Therefore, the Discharger shall complete the following to ensure compliance with Groundwater Limitations can be determined:
 - i. investigation/evaluation of whether the existing piezometers and groundwater well are sufficient to characterize the groundwater via groundwater monitoring by sampling according to MRP section VIII.B:
 - ii. depending on the results of the investigation/evaluation above, develop a work plan detailing the necessary steps and improvements to expand the groundwater monitoring network to include characterization of the Irrigation Pond and Land Application Area:
 - iii. complete the necessary improvements to characterize the underlying groundwater of the Irrigation Pond and Land Application Area:
 - iv. incorporate the new wells into the groundwater monitoring network:

The results of the investigation/evaluation in subsection i above shall be summarized in a report and submitted to Central Valley Water Board staff for review by the due date in the Technical Reports Table E-11 of the MRP. The work plan in subsection ii above shall be submitted to Central Valley Water Board staff for review by the due date in the Technical Reports Table E-11 of the MRP. When the improvements in subsection iii above are completed a final report shall be submitted summarizing the improvements made by the due date in the Technical Reports Table E-11 of the MRP.
 - c. **Antidegradation Reevaluation.** As part of an iterative evaluation of compliance with State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Antidegradation Policy), the Discharger shall submit an Antidegradation Reevaluation with its Report of Waste Discharge. The Antidegradation Reevaluation must use information obtained from the Groundwater Characterization required in section VI.C.2.b, in addition to results of the land discharge and groundwater monitoring, to confirm that

any groundwater degradation that has occurred as a result of Facility operations has not resulted in any exceedances of applicable groundwater water quality objectives or in any impacts to beneficial uses.

If the data indicate that exceedances of applicable groundwater water quality objectives or impacts to beneficial uses have occurred, the Discharger shall include a work plan (with an implementation schedule) to implement additional treatment or control measures to further limit any impacts from the ponds. Determination of background groundwater quality for use in the analysis shall be made using the methods described in Title 27 California Code of Regulations Section 20415(e)(10) or other method approved by the Executive Officer.

3. Best Management Practices and Pollution Prevention

- a. **Salinity Evaluation and Minimization Plan.** The Discharger shall continue to implement a salinity evaluation and minimization plan to identify and address sources of salinity discharged from the Facility. The salinity evaluation and minimization plan shall be included in the SWPPP described below.
- b. **Storm Water Pollution Prevention Plan (SWPPP).** The Discharger shall continue to implement a site-specific SWPPP for the Facility. An updated SWPPP that addresses the necessary BMPs to ensure compliance with the industrial storm water action levels specified in Table 4 shall be submitted to the Central Valley Water Board by the due date in the Technical Reports Table E-11 of the MRP.
 - i. The SWPPP must include the information needed to demonstrate 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 pollution sources;
 - (e) Assessment of potential pollutant sources;
 - (f) Minimum BMPs;
 - (g) Advanced BMPs, if applicable;
 - (h) Monitoring Implementation Plan;
 - (i) Salinity Minimization and Evaluation 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 maintain a table, 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. If amended, the amended SWPPP shall be submitted to the Central Valley Water Board within 30-days of the amendment. The SWPPP must also be amended for any of the following reasons:
 - (a) Exceedances of the storm water action levels;
 - (b) Receiving water limit violations;
 - (c) Exceed a surface water limitation;
 - (d) Exceed a groundwater limitation;
 - (e) Bypass of an approved discharge location or overflow from a pond that results in discharge to Mill Creek;
 - (f) Discharge of process wastewater to Mill Creek;
 - (g) Discharge of material of discernable sawmill origin, such as ash, bark, sawdust, wood, etc., of greater than 2.54 centimeters;
 - (h) Discharge from the Retention Pond or Fire Pond;
 - (i) Discharge of hazardous waste; or
 - (j) The Discharger has not achieved the general objectives of controlling pollutants in the storm water discharges.
 - (k) 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. **Facility-Specific BMP – 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 area plus any process wastewater remaining in Pond 1 and Pond 2 when collection of the flush commences (i.e., “first flush” or “comingled log deck sprinkle water and storm water”). The first flush shall be conveyed to the Retention Pond. The first flush shall not reach surface water. The first flush must be collected and conveyed to the Retention Pond after any subsequent sprinkling of the logs prior to storm water discharge to surface water. This Facility-specific BMP may be modified by approval of the Executive Officer.
- 4. Construction, Operation and Maintenance Specifications**
- a. **Pond 1, Pond 2, Retention Pond, Fire Pond, and Irrigation Pond Operating Specifications.**

- i. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- ii. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
- iii. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. In particular,
 - (a) An erosion control program should assure 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.
- iv. 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 a 25-year, 24-hour storm event.
- v. The Retention Pond and the Fire Pond in combination 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.
- vi. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the pond areas (or property owned by the Discharger).
- vii. As a means of discerning compliance with section VI.C.4.a.vi, 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.
- viii. Ponds shall not have a pH less than 6.0 or greater than 9.0.

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

6. Other Special Provisions

a. Sludge, Wood Waste, 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, CCR, Division 2, Subdivision 1, Section 20005, et seq.

- ii. **Ash Management Plan.** The Discharger shall continue to implement the ash management plan and submit annual reports to the Central Valley Water Board. The annual reports shall describe at a minimum:
 - (a) Sources and amount of ash generated annually;
 - (b) Location(s) of on-site storage and description of containment area; and
 - (c) Plans for ultimate disposal. For landfill disposal, include the present classification of the landfill and 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 boiler 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 20220(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.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

- A. **Industrial Storm Water Action Levels (section VI.C.2.a, Table 4).** 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 an action level requires the Discharger to conduct a BMP Improvement Evaluation in accordance with section VI.C.2.a.
- B. **Dissolved Oxygen Receiving Water Limitation (section V.A.5.a-c).** Weekly receiving water monitoring during periods of discharge is required in the MRP (Attachment E) and is sufficient to evaluate the impacts of the discharge and compliance with this Order. Weekly receiving water monitoring data, measured at monitoring locations RSW-001 and RSW-002, will be used to determine compliance

with part “c” of the dissolved oxygen receiving water limitation to ensure the discharge does not cause the dissolved oxygen concentrations in Mill Creek to be reduced below 7.0 mg/L at any time. However, should more frequent dissolved oxygen and temperature receiving water monitoring be conducted, Central Valley Water Board staff may evaluate compliance with parts “a” and “b:

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

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

Average Annual Effluent Limitation (AAEL)

The highest allowable average of daily discharges over a calendar year, calculated as the sum of all daily discharges measured during a calendar year divided by the number of daily discharges measured during that year.

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 best available technology economically achievable/best conventional pollutant control technology (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.

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.

Estimated Chemical Concentration

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

Estuaries

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

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.

Process Wastewater

Process wastewater shall include log deck sprinkling water and first flush industrial storm water (defined under Storm Water below) from the log deck.

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.

Standard Deviation (σ)

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;
- μ is the arithmetic mean of the observed values; and
- n is the number of samples.

Storm Water

Storm water runoff from the site originates from a 53.6-acre log yard area (Industrial Storm Water) and from a 36.4-acre general industrial storm water area (General Industrial Storm Water). The site plan in Figure C-1 of Attachment C delineates these areas and is defined as follows.

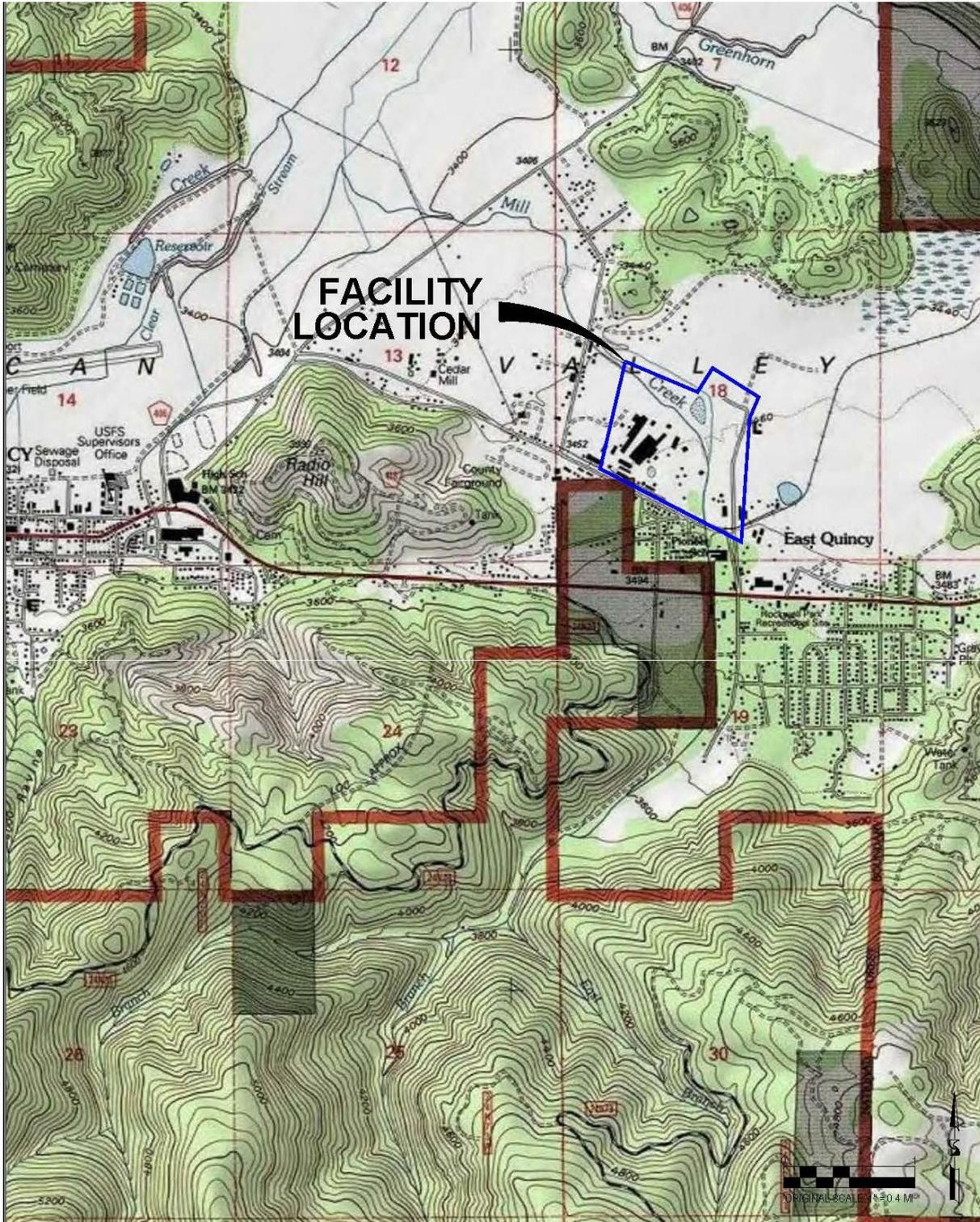
First Flush Industrial Storm Water. First flush industrial storm water is considered process wastewater and is prohibited from being discharged. First flush industrial storm water is defined as industrial storm water runoff from the first 2 inches of rainfall collected from the industrial storm water area after cessation of log deck sprinkling. The first flush collection may occur more than once in a wet season if the Discharger intermittently sprinkles logs with pond water during the wet season.

Industrial Storm Water. This Order regulates discharges of industrial storm water from the industrial stormwater area. Industrial storm water is collected in Pond 1 and Pond 2 after all log deck sprinkling water and first flush industrial storm water has been collected and removed from Pond 1 and Pond 2. Industrial storm water is either discharged from Pond 2 or pumped to the Irrigation Pond where it can be applied to the Land Application Area. Industrial storm water can be discharged to Mill Creek from Pond 2 at SW-007 or via the unnamed drainage ditch from the outfall structure of the Land Application Area at SW-006.

General Industrial Storm Water. This Order does not regulate discharges of general industrial storm water from the general industrial stormwater area. Storm water runoff from

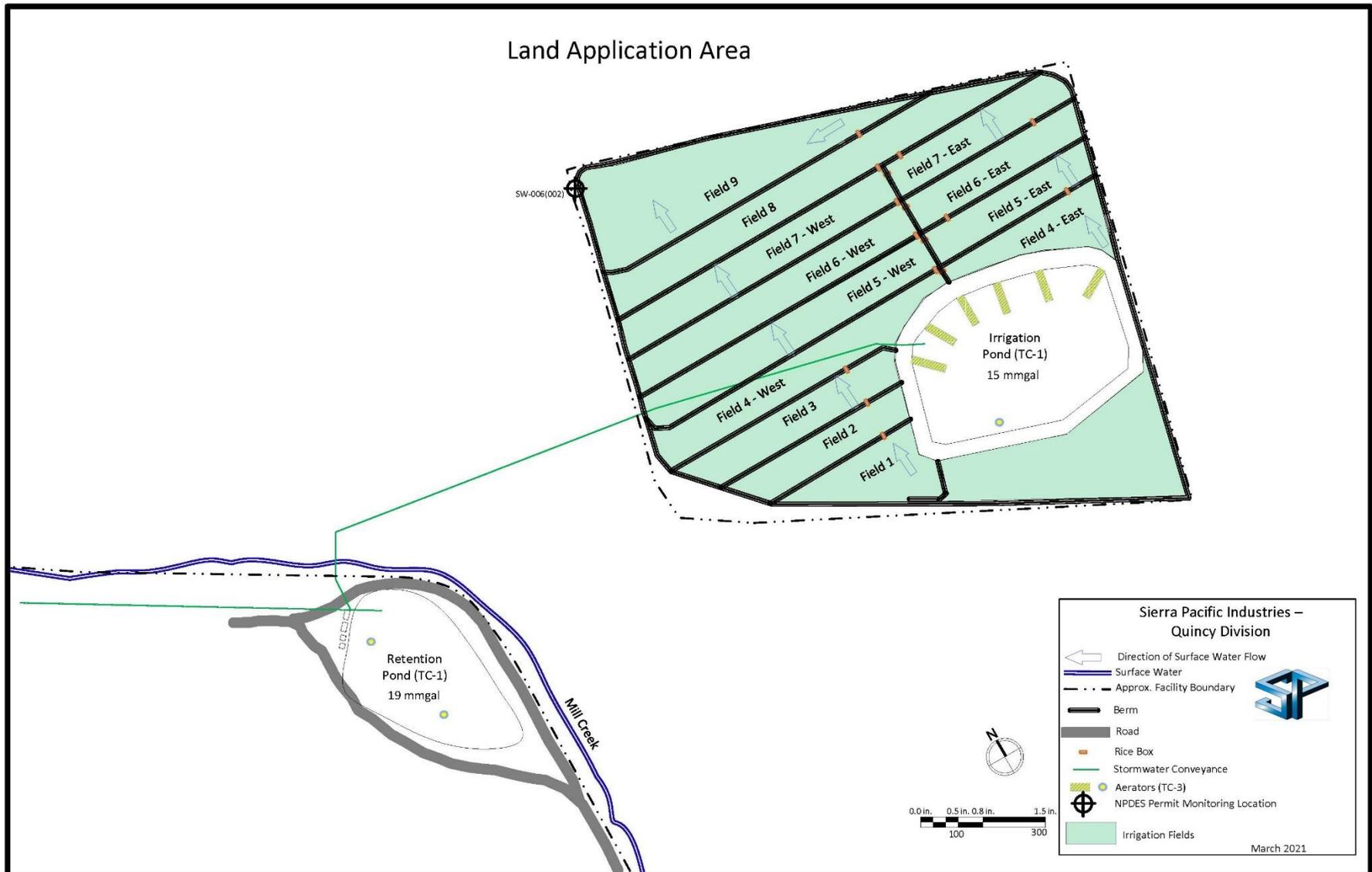
the general permit stormwater collection area is directed to Pond 4 and discharged to Mill Creek at SW-007. Storm Water runoff collected from the roof of the Planner Mill is discharged to Mill Creek at SW-004. General industrial storm water is discharged to Mill Creek under the State Water Resources Control Board (State Water Board) Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001.

ATTACHMENT B – MAP



 REMEDY ENGINEERING <small>CIVIL & ENVIRONMENTAL SOLUTIONS</small>	REMEDY ENGINEERING, INC. 2510 OLD EUREKA WAY REDDING, CA 96001 PHONE: (530) 241-7658	REVIEWED BY:	DRAWN BY:	FACILITY LOCATION MAP QUINCY MILL SITE SIERRA PACIFIC INDUSTRIES QUINCY, CALIFORNIA	FIGURE 1
		LR	MRW		
		DATE:	CLIENT:		
		12/11/19	SPI OSM		

Figure C-2



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/) (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/) (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, thorough 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.2.b 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 either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. section 122.22(a)(3).)
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 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly Owned Treatment Works (POTWs)

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

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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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 also authorize the Central Valley Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California regulations.

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, and temperature, 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, and temperature 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 MRP.
- 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 ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Resources Control Board at the following address or electronically via email to the DMR-QA Coordinator:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento, CA 95814
- H.** The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.
- I.** The results of all monitoring required by this Order shall be reported to the Central Valley Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

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
001	SW-007	A location where a representative sample of industrial storm water from Pond 2 can be obtained prior to comingling with general industrial storm water discharges from Pond 4 in the gravel diffuser and prior to discharge to Mill Creek. Latitude: 39° 56' 43.9" N; Longitude: 120° 54' 46.1" W
002	SW-006	A location where a representative sample of industrial storm water from the Land Application Area can be obtained prior to discharge to Mill Creek. Latitude: 39° 56' 40.1" N - Longitude: 120° 54' 12.7" W
--	RSW-001	In Mill Creek, near the pipeline overcrossing bridge approximately 1700 feet upstream of Discharge Point 001. Latitude: 39° 56' 36.2" N - Longitude: 120° 54' 26.0" W
--	RSW-002	In Mill Creek, approximately 550 feet downstream from Discharge Point 001. Latitude: 39° 57' 0.8" N - Longitude: 120° 54' 56.1" W
--	PND-001	Pond 1
--	PND-002	Pond 2
--	PND-005	Retention Pond
--	PND-007	Irrigation Pond
--	MW-1A and MW-7	Background Monitoring Wells
--	MW-3, MW-4, MW-5, and MW-6	Downgradient Monitoring Wells

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 Locations SW-006 and SW-007

1. The Discharger shall monitor industrial storm water, as defined in Attachment A and in accordance with Table E-2, at Monitoring Location SW-007 when discharging to Mill Creek from Discharge Point 001 and at Monitoring Location SW-006 when discharging to Mill Creek from Discharge Point 002.

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Meter	1/Day

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/Week
Temperature	°F	Grab	1/Week
Oil and Grease	mg/L	Grab	2/Year
pH	standard units	Grab	1/Week
Total Suspended Solids	mg/L	Grab	1/Month
Chemical Oxygen Demand	mg/L	Grab	1/Month
Electrical Conductivity @ 25°Celsius	µmhos/cm	Grab	1/Month
Hardness, Total (as CaCO3)	mg/L	Grab	2/Year
Iron, Total Recoverable and Dissolved	µg/L	Grab	1/Month
Tannins and Lignins	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Week

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 (except flow).** 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.
 - b. **Hand-held field meter.** A hand-held field meter may be used for **temperature, electrical conductivity, dissolved oxygen, turbidity, and pH**, 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 MRP shall be maintained at the Facility.
 - c. **Temperature, pH, Hardness, and Dissolved Oxygen.** The effluent samples for temperature, pH, hardness, and dissolved oxygen shall be taken approximately the same time and on the same date with the receiving water samples for these parameters.
 - d. **Turbidity.** Turbidity shall be determined by either individual samples or by samples taken over an averaging period. For averaging periods, a minimum of four samples per day shall be collected at each monitoring location for a period of up to four days during discharge. Samples collected for averaging must be spaced at least three hours apart.
 - e. **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 (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing. The Discharger shall conduct acute toxicity testing to determine whether the effluent is contributing acute toxicity to the receiving water. The Discharger shall meet the acute toxicity testing requirement:

1. **Monitoring Frequency** – The Discharger shall perform **twice per year** acute toxicity testing.
2. **Sample Types** – The Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be grab samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location SW-006 or SW-007.
3. **Test Species** – Test species shall be **rainbow trout** (*Oncorhynchus mykiss*).
4. **Methods** – The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. 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.
5. **Test Failure** – If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

B. Chronic Toxicity Testing. The Discharger shall meet the chronic toxicity testing requirements:

1. **Monitoring Frequency** – The Discharger shall perform chronic toxicity testing **once per permit term**.
2. **Sample Types** – Effluent samples shall be grab samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location SW-006 or SW-007. The receiving water control shall be a grab sample obtained from Monitoring Location RSW-001, as identified in this MRP.
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 alga, **Selenastrum capricornutum** (growth test).
5. **Methods** – The presence of chronic toxicity shall be estimated as specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002.
6. **Reference Toxicant** – All chronic toxicity tests shall be conducted with concurrent testing with a reference toxicant and shall be reported with the chronic toxicity test results.
7. **Dilutions** – For routine and compliance chronic toxicity monitoring, the chronic toxicity testing shall be performed using the dilution series identified in Table E-3, below. A receiving water control or laboratory water control may be used as the diluent.

Table E-3. Chronic Toxicity Testing Dilution Series

Samples	Dilution%	Dilution%	Dilution%	Dilution%	Dilution%	Dilution%	Controls
% Effluent	100	75	50	25	12.5	6.25	0
% Control Water	0	25	50	75	87.5	93.75	100

8. **Test Failure** – The Discharger must re-sample and re-test as soon as possible, but no later than fourteen (14) days after receiving notification of a test failure. A test failure is defined as follows:
- a. The reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 (Method Manual), and its subsequent amendments or revisions; or
 - b. The percent minimum significant difference (PMSD) measured for the test exceeds the upper PMSD bound variability criterion in the Method Manual.
- C. WET Testing Notification Requirements.** The Discharger shall notify the Central Valley Water Board within 24-hours after the receipt of test results indicating an exceedance of the acute toxicity effluent limitation specified in section IV.A.1.b of the Order.
- D. WET Testing Reporting Requirements.** All toxicity test reports shall include the contracting laboratory’s complete report provided to the Discharger and shall be in

accordance with the appropriate "Report Preparation and Test Review" sections of the Method Manual. At a minimum, whole effluent toxicity monitoring shall be reported as follows:

1. **Chronic WET Reporting.** Routing and compliance chronic toxicity monitoring results shall be reported to the Central Valley Water Board with the quarterly self-monitoring report, and shall contain, at minimum:
 - a. The results expressed in TUc, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate;
 - b. The percent effect for each endpoint at 100 percent effluent;
 - c. The statistical methods used to calculate endpoints;
 - d. The statistical output page, which includes the calculation of the PMSD;
 - e. The dates of sample collection and initiation of each toxicity test; and
 - f. The results compared to the numeric toxicity monitoring trigger.

Additionally, the quarterly self-monitoring reports shall contain an updated chronology of chronic toxicity test results expressed in TUc, and organized by test species, type of test (survival, growth or reproduction), and monitoring type, i.e., routine or compliance monitoring.

2. **Acute WET Reporting.** Acute toxicity test results shall be submitted with the quarterly discharger self-monitoring reports and reported as percent survival.
3. **Quality Assurance (QA).** The Discharger must provide the following information for QA purposes:
 - a. Results of the applicable reference toxicant data with the statistical output page giving the species, NOEC, LOEC, type of toxicant, dilution water used, concentrations used, PMSD, and dates tested.
 - b. The reference toxicant control charts for each endpoint, which include summaries of reference toxicant tests performed by the contracting laboratory.
 - c. Any information on deviations or problems encountered and how they were dealt with.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. Monitoring Locations PND-001, PND-002, PND-005 (Retention Pond), and PND-007 (Irrigation Pond)

1. The Discharger shall monitor Pond 1, Pond 2, the Retention Pond, and the Irrigation Pond at Monitoring Locations PND-001, PND-002, PND-005, and PND-007, respectively, in accordance with Table E-4 and the testing requirements described below:

Table E-4. Land Discharge Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Freeboard	feet-inches	Observation	1/Week
Odors	--	Observation	1/Week
Settled Matter Depth	feet-inches	Observation	1/Year prior to rainy season
Electrical Conductivity @ 25°Celsius	µmhos/cm	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
pH	standard units	Grab	1/Quarter
Total Dissolved Solids	mg/L	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Week
Arsenic, Dissolved	µg/L	Grab	1/Quarter
Iron, Dissolved	µg/L	Grab	1/Quarter
Manganese, Dissolved	µg/L	Grab	1/Quarter
Tannins and Lignins	mg/L	Grab	1/Quarter

2. **Table E-4 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-4 above:
 - a. **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.
 - b. **Hand-held field meter.** A hand-held field meter may be used for **electrical conductivity, pH, and dissolved oxygen**, 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 MRP shall be maintained at the Facility.

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Surface Water Monitoring Locations RSW-001 and RSW-002

1. The Discharger shall monitor Mill Creek, during periods of discharge from Discharge Point 001, at RSW-001 and RSW-002 in accordance with Table E-5 and the testing requirements described below:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	cfs	Estimate	1/Week
pH	standard units	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	1/Week
Temperature	°F	Grab	1/Week
Total Suspended Solids	mg/L	Grab	1/Month
Chemical Oxygen Demand	mg/L	Grab	1/Month
Electrical Conductivity @ 25°Celsius	µmhos/cm	Grab	1/Month
Hardness, Total (as CaCO3)	mg/L	Grab	1/Quarter
Iron, Dissolved	µg/L	Grab	1/Month
Tannins and Lignins	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Week
Dissolved Organic Carbon	mg/L	Grab	1/Quarter

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 above:
 - a. **Applicable to all parameters.** Samples shall be collected during the first 24 hours from the first discharge after the dry season during daytime business hours and according to the sampling frequency in Table E-5 thereafter. Receiving water sampling shall be concurrent with effluent (storm water) sampling, when applicable.
 - 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.
 - c. **Hand-held field meter.** A hand-held field meter may be used for **temperature, electrical conductivity, dissolved oxygen, turbidity, and pH**, 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 MRP shall be maintained at the Facility.
 - d. **Temperature, pH, Hardness, and Dissolved Oxygen.** The receiving water samples for temperature, pH, hardness, and dissolved oxygen, shall be taken approximately the same time and on the same date with the effluent samples for these parameters.
 - e. **Turbidity.** Turbidity shall be determined by either individual samples or by samples taken over an averaging period. For averaging periods, a minimum of four samples per day shall be collected at each monitoring location for a period of up to four days during discharge. Samples collected for averaging must be spaced at least three hours apart.

3. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002 when discharging to Mill Creek. Attention shall be given to the presence of:
 - a. Floating or suspended matter;
 - b. Discoloration;
 - c. Bottom deposits;
 - d. Aquatic life;
 - e. Visible films, sheens, or coatings;
 - f. Fungi, slimes, or objectionable growths; and
 - g. Potential nuisance conditions.

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

B. Groundwater Monitoring Locations MW-1A, MW-3, MW-4, MW-5, MW-6, and MW-7

1. 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 Well Nos. MW-1A, MW-3, MW-4, MW-5, MW-6, and MW-7) and shall be sampled and analyzed according to the schedule below. All samples shall be collected using approved EPA methods. Water table elevations shall be calculated to determine groundwater gradient and direction of flow.
2. 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.
3. Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged by low flow method according to United States Environmental Protection Agency Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures EPA/540/s-95/504, or by hand-bailing if low-flow is not possible, until temperature, pH, and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater monitoring at MW-1A, MW-3, MW-4, MW-5, MW-6, and MW-7, and any new groundwater monitoring wells, shall include at a minimum, the following:

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
Electrical Conductivity @ 25°Celsius	µmhos/cm	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Total Dissolved Solids	mg/L	Grab	1/Quarter
pH	standard units	Grab	1/Quarter
Arsenic, Dissolved	µg/L	Grab	1/Quarter
Iron, Dissolved	µg/L	Grab	1/Quarter
Manganese, Dissolved	µg/L	Grab	1/Quarter
Tannins and Lignins	mg/L	Grab	1/Quarter

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 above:
 - a. **Groundwater Elevation.** Groundwater elevation shall be determined 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.
 - 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.
 - c. **Hand-held field meter.** A hand-held field meter may be used for **electrical conductivity and pH** 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 MRP shall be maintained at the Facility.

IX. OTHER MONITORING REQUIREMENTS

A. Precipitation Monitoring

1. Precipitation information shall be collected and reported in accordance with Table E-7 below:

Table E-7. Precipitation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Precipitation	inches	Gauge	1/Day

B. Ash and Cooling Tower Solids Monitoring

1. Wood ash information shall be collected and reported in accordance with Table E-8 and the testing requirements described below:

Table E-8. Ash Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Feed Stock Composition	dry-tons	Continuous	1/Month
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
2,3,7,8-TCDD (Dioxin) - 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.** Electrical conductivity 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. **Dry-tons.** Units may be reported in volume or weight measurement.
 - c. **Ash Liming Capacity.** Test 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) AOAC 955.01.
 - d. **California Administrative Manual (CAM) Metals:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. Test method shall be in accordance with CCR Title 22 testing procedures.

- e. **Dioxin Equivalents.** Dioxin equivalents, also known as the TEQ, is a calculated value that reflects the combined effect of dioxin and furan compounds (congeners). Results for dioxin TEQ shall include all congeners. Upon Executive Officer approval, sampling frequency may be reduced after two consecutive years of data has been submitted.
3. The Discharger shall record on a monthly basis the following information about wood ash removed from the Facility and submit an annual SMR by the due date in the Technical Reports Table E-11:
 - 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 producer 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.)
4. The Discharger shall record the following information about cooling tower sludge, and summarize and submit the information in an annual report by the due date in the Technical Reports Table E-11:
 - a. Annual production of cooling tower sludge;
 - b. Volume of material stored at the Facility; and
 - c. Disposal location.

C. Aboveground Petroleum Storage Monitoring

1. The Discharger shall visually inspect the aboveground petroleum storage tanks, as required by the Facility's Spill Prevention Control and Countermeasure (SPCC) Plan. In the event of a petroleum release of greater than 42 gallons that meets the reporting requirements of the SPCC Plan, a report shall be submitted describing the corrective action that was taken to remediate and dispose of the contaminated area. The results shall be submitted with the monthly SMR.

D. Effluent and Receiving Water Characterization

1. Monitoring Frequency
 - a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location SW-006 or SW-007) **once** between **1 July 2022 and 30 June 2023.**

- b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001) **once** between **1 July 2022 and 30 July 2023.**

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 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.

2. **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-11.
3. The Discharger shall conduct effluent and receiving water characterization monitoring in accordance with Table E-9 and the testing requirements described in section IX.D.6 below.

Table E-9. 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

CTR Number	Volatile Organic Parameters	CAS Number	Units	Effluent Sample Type
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
NL	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
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

CTR Number	Semi-Organic Volatile Parameters	CAS Number	Units	Effluent Sample Type
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
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	24-hour Composite
1	Antimony, Total	7440-36-0	µg/L	24-hour Composite
2	Arsenic, Total	7440-38-2	µg/L	24-hour Composite
15	Asbestos	1332-21-4	µg/L	24-hour Composite

CTR Number	Inorganic Parameters	CAS Number	Units	Effluent Sample Type
3	Beryllium, Total	7440-41-7	µg/L	24-hour Composite
4	Cadmium, Total	7440-43-9	µg/L	24-hour Composite
5a (III)	Chromium, Total	7440-47-3	µg/L	24-hour Composite
6	Copper, Total	7440-50-8	µg/L	24-hour Composite
NL	Iron, Total	7439-89-6	µg/L	24-hour Composite
7	Lead, Total	7439-92-1	µg/L	24-hour Composite
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	24-hour Composite
9	Nickel, Total	7440-02-0	µg/L	24-hour Composite
10	Selenium, Total	7782-49-2	µg/L	24-hour Composite
11	Silver, Total	7440-22-4	µg/L	24-hour Composite
12	Thallium, Total	7440-28-0	µg/L	24-hour Composite
13	Zinc, Total	7440-66-6	µg/L	24-hour Composite

NON-METALS/MINERALS

CTR Number	Non-Metal/Mineral Parameters	CAS Number	Units	Effluent Sample Type
NL	Boron	7440-42-8	µg/L	24-hour Composite
NL	Chloride	16887-00-6	mg/L	24-hour Composite
14	Cyanide, Total (as CN)	57-12-5	µg/L	Grab
NL	Phosphorus, Total (as P)	7723-14-0	mg/L	24-hour Composite
NL	Sulfate	14808-79-8	mg/L	24-hour Composite
NL	Sulfide (as S)	5651-88-7	mg/L	24-hour Composite

PESTICIDES/PCBs/DIOXINS

CTR Number	Pesticide/PCB/Dioxin Parameters	CAS Number	Units	Effluent Sample Type
110	4,4-DDD	72-54-8	µg/L	24-hour Composite
109	4,4-DDE	72-55-9	µg/L	24-hour Composite
108	4,4-DDT	50-29-3	µg/L	24-hour Composite
112	alpha-Endosulfan	959-98-8	µg/L	24-hour Composite
103	alpha-BHC (Benzene hexachloride)	319-84-6	µg/L	24-hour Composite
102	Aldrin	309-00-2	µg/L	24-hour Composite
113	beta-Endosulfan	33213-65-9	µg/L	24-hour Composite
104	beta-BHC (Benzene hexachloride)	319-85-7	µg/L	24-hour Composite
107	Chlordane	57-74-9	µg/L	24-hour Composite
106	delta-BHC (Benzene hexachloride)	319-86-8	µg/L	24-hour Composite
111	Dieldrin	60-57-1	µg/L	24-hour Composite
114	Endosulfan Sulfate	1031-07-8	µg/L	24-hour Composite
115	Endrin	72-20-8	µg/L	24-hour Composite
116	Endrin Aldehyde	7421-93-4	µg/L	24-hour Composite

CTR Number	Pesticide/PCB/Dioxin Parameters	CAS Number	Units	Effluent Sample Type
117	Heptachlor	76-44-8	µg/L	24-hour Composite
118	Heptachlor Epoxide	1024-57-3	µg/L	24-hour Composite
105	gamma-BHC (Benzene hexachloride or Lindane)	58-89-9	µg/L	24-hour Composite
119	Polychlorinated Biphenyl (PCB) 1016	12674-11-2	µg/L	24-hour Composite
120	PCB 1221	11104-28-2	µg/L	24-hour Composite
121	PCB 1232	11141-16-5	µg/L	24-hour Composite
122	PCB 1242	53469-21-9	µg/L	24-hour Composite
123	PCB 1248	12672-29-6	µg/L	24-hour Composite
124	PCB 1254	11097-69-1	µg/L	24-hour Composite
125	PCB 1260	11096-82-5	µg/L	24-hour Composite
126	Toxaphene	8001-35-2	µg/L	24-hour Composite
16	2,3,7,8-TCDD (Dioxin)	1746-01-6	mg/L	24-hour Composite

CONVENTIONAL PARAMETERS

CTR Number	Conventional Parameters	CAS Number	Units	Effluent Sample Type
NL	pH	--	SU	Grab
NL	Temperature	--	°F	Grab

NON-CONVENTIONAL PARAMETERS

CTR Number	Nonconventional Parameters	CAS Number	Units	Effluent Sample Type
NL	Foaming Agents (MBAS)	MBAS	mg/L	24-hour Composite
NL	Hardness (as CaCO ₃)	471-34-1	mg/L	Grab
NL	Total Dissolved Solids (TDS)	TDS	mg/L	24-hour Composite
NL	Dissolved Organic Carbon (DOC)	DOC	mg/L	24-hour Composite
NL	Total Suspended Solids (TSS)	TSS	mg/L	Grab
NL	Chemical Oxygen Demand (COD)	COD	mg/L	Grab
NL	Tannins and Lignins (T-L)	T-L	mg/L	Grab

NUTRIENTS

CTR Number	Nutrient Parameters	CAS Number	Units	Effluent Sample Type
NL	Ammonia (as N)	7664-41-7	mg/L	24-hour Composite
NL	Nitrate (as N)	14797-55-8	mg/L	24-hour Composite
NL	Nitrite (as N)	14797-65-0	mg/L	24-hour Composite

OTHER CONSTITUENTS OF CONCERN

CTR Number	Other Constituents of Concern	CAS Number	Units	Effluent Sample Type
NL	1,2,3-Trichloropropane (TCP)	96-18-4	µg/L	Grab
NL	Trichlorofluoromethane	75-69-4	µg/L	Grab
NL	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	µg/L	Grab
NL	Styrene	100-42-5	µg/L	Grab
NL	Xylenes	1330-20-7	µg/L	Grab
NL	Barium	7440-39-3	µg/L	24-hour Composite
NL	Fluoride	16984-48-8	mg/L	24-hour Composite
NL	Molybdenum	7439-98-7	µg/L	24-hour Composite
NL	Tributyltin	688-73-3	µg/L	24-hour Composite
NL	Alachlor	15972-60-8	µg/L	24-hour Composite
NL	Atrazine	1912-24-9	µg/L	24-hour Composite
NL	Bentazon	25057-89-0	µg/L	24-hour Composite
NL	Carbofuran	1563-66-2	µg/L	24-hour Composite
NL	2,4-D	94-75-7	µg/L	24-hour Composite
NL	Dalapon	75-99-0	µg/L	24-hour Composite
NL	1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	µg/L	24-hour Composite
NL	Di(2-ethylhexyl)adipate	103-23-1	µg/L	24-hour Composite
NL	Dinoseb	88-85-7	µg/L	24-hour Composite
NL	Diquat	85-00-7	µg/L	24-hour Composite
NL	Endothal	145-73-3	µg/L	24-hour Composite
NL	Ethylene Dibromide (EDB)	106-93-4	µg/L	24-hour Composite
NL	Methoxychlor	72-43-5	µg/L	24-hour Composite
NL	Molinate (Ordram)	2212-67-1	µg/L	24-hour Composite
NL	Oxamyl	23135-22-0	µg/L	24-hour Composite
NL	Picloram	1918-02-1	µg/L	24-hour Composite
NL	Simazine (Princep)	122-34-9	µg/L	24-hour Composite
NL	Thiobencarb	28249-77-6	µg/L	24-hour Composite
NL	2,4,5-TP (Silvex)	93-72-1	µg/L	24-hour Composite
NL	Chlorpyrifos	2921-88-2	µg/L	24-hour Composite
NL	Diazinon	333-41-5	µg/L	24-hour Composite

6. **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.** 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.

- 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. **24-hour Composite Samples.** All 24-hour composite samples shall be collected from a 24-hour flow proportional composite.
- d. **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.
- e. **Concurrent Sampling.** Effluent and receiving water sampling shall be performed at approximately the same time and on the same date.
- f. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table E-9 above.
- g. **Priority Pollutants.** For priority pollutant constituents the reporting level shall be consistent with the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv).
- h. **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.
- i. **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 and 1631 (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/) (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 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-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
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

Sampling Frequency	Monitoring Period Begins	Monitoring Period	SMR Due Date
1/Quarter	Permit effective date	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 August 1 November 1 February of following year
2/Year	Permit effective date	1 January through 30 June 1 July through 31 December	1 August 1 February of following year
1/Year	Permit effective date	1 January through 31 December	1 February of following year

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 (\pm 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 average monthly eluent limitation (AMEL), average weekly effluent limitation (AWEL), maximum daily effluent limitation (MDEL), or average annual effluent limitation (AAEL) 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. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in the

effluent (SW-006 or SW-007) and the receiving water (RSW-001 and RSW-002).

- b. **Temperature Receiving Water Limitations.** The Discharger shall calculate and report the temperature increase in the receiving water based on the difference in temperature at Monitoring Locations RSW-001 and RSW-002.
- c. **Turbidity Receiving Water Limitations.** The Discharger shall calculate and report the turbidity increase in the receiving water applicable to the natural turbidity condition specified in section V.A.16.a-e of the Waste Discharge Requirements.
- d. **Log Yard Sprinkling.** The Discharger shall report the dates on which log yard sprinkling occurred in the monthly SMR.
- e. **Groundwater Monitoring Reports.** The reports shall be 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. Each quarterly report shall contain:
 - i. Results of the monitoring of the groundwater in tabular format;
 - ii. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with this Order. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
 - iii. Calculation of groundwater elevations, determination of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
 - iv. Summary data tables of historical and current groundwater elevations; and
 - v. Copies of laboratory analytical report(s) for groundwater monitoring.

C. 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-11. 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). 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 section I.F. Central Valley Water Board staff will provide a tool with the permit 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 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-11:
 - 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.
3. **Report of Waste Discharge (ROWD).** 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-11:
 - a. Report of Waste Discharge (Form 200);
 - b. NPDES Form 1;
 - c. NPDES Form 2F; and
 - d. **Storm Water Pollution Prevention Plan (SWPPP) and Salinity Minimization and Minimization Plan.** The Discharger shall evaluate the effectiveness of the SWPPP and the salinity evaluation and minimization plan and provide a summary of each with the Report of Waste Discharge.
4. **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 below summarizes 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-11. Technical Reports

Report #	Technical Report	Due Date	CIWQS Report Name
Intentionally left blank	Standard Reporting Requirements	Intentionally left blank	Intentionally left blank
1	Analytical Methods Report	21 August 2021	MRP X.C.1
2	Analytical Methods Report Certification	1 May 2022	MRP IX.D.2
3	Report of Waste Discharge	31 July 2025	MRP X.C.3
4	Annual Operations Report	1 February 2022	MRP X.C.2
5	Annual Operations Report	1 February 2023	MRP X.C.2
6	Annual Operations Report	1 February 2024	MRP X.C.2
7	Annual Operations Report	1 February 2025	MRP X.C.2
8	Annual Operations Report	1 February 2026	MRP X.C.2
Intentionally left blank	Other Reports	Intentionally left blank	Intentionally left blank
9	Best Management Practice Improvement Evaluation	Within 60 days following storm water action level exceedance or receiving water violation	WDR VI.C.2.a
10	Groundwater Characterization Evaluation/Investigation	1 November 2021	WDR VI.C.2.b.i
11	Groundwater Characterization Work Plan	1 February 2022	WDR VI.C.2.b.ii
12	Groundwater Characterization Final Report	1 August 2022	WDR VI.C.2.b.iii
13	Antidegradation Reevaluation	31 July 2025	WDR VI.C.2.c
14	SWPPP Update	1 October 2021	WDR VI.C.3.b
15	Annual Ash Management Plan Report	1 April 2022	WDR VI.C.6.a
16	Annual Ash Management Plan Report	1 April 2023	WDR VI.C.6.a
17	Annual Ash Management Plan Report	1 April 2024	WDR VI.C.6.a
18	Annual Ash Management Plan Report	1 April 2025	WDR VI.C.6.a
19	Annual Ash Management Plan Report	1 April 2026	WDR VI.C.6.a

Report #	Technical Report	Due Date	CIWQS Report Name
20	Cooling Tower Sludge Annual Report	1 February 2022	MRP IX.B.4
21	Cooling Tower Sludge Annual Report	1 February 2023	MRP IX.B.4
22	Cooling Tower Sludge Annual Report	1 February 2024	MRP IX.B.4
23	Cooling Tower Sludge Annual Report	1 February 2025	MRP IX.B.4
24	Cooling Tower Sludge Annual Report	1 February 2026	MRP IX.B.4

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II.B 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:	5A321016001
CIWQS Facility Place ID:	256965
Discharger:	Sierra Pacific Industries
Name of Facility:	Quincy Division
Facility Address:	1538 Lee Road
Facility City, State Zip:	Quincy, CA 95971
Facility County:	Plumas County
Facility Contact, Title and Phone Number:	Matthew Taborski, Facility Manager, (530) 283-2820
Authorized Person to Sign and Submit Reports:	Matthew Taborski, Facility Manager, (530) 283-2820
Mailing Address:	1538 Lee Road Quincy, CA 95971
Billing Address:	SAME as Mailing Address
Type of Facility:	Electric Services (SIC 4911) and Sawmill and Planing Mill (SIC 2421)
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:	Not Applicable
Watershed:	North Fork Feather River
Receiving Water:	Mill Creek
Receiving Water Type:	Inland Surface Water

- A.** Sierra Pacific Industries (hereinafter Discharger) is the owner and operator of the Quincy Division (hereinafter Facility) sawmill and 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 storm water (as defined in Attachment A) to Mill Creek, a water of the United States, tributary to Spanish Creek and the East Branch of the North Fork Feather River within the North Fork Feather River Watershed. The Discharger was previously regulated by Order R5-2015-0070 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0080357 adopted on 5 June 2015 and expired on 31 July 2020. Attachment B provides a map of the area around the Facility. Attachment C provides site maps and 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 January 2020. The application was deemed complete on 1 May 2020. A site visit was conducted on 21 July 2020, 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, 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 and wood burning cogeneration facility located in Quincy, California. The Facility is bordered by Mill Creek to the north and east, Lee Road to the south, and Bell Lane to the west. The Facility occupies approximately 157 acres located on 10 parcels of land. The parcels on which the sawmill and cogeneration plant are located, occupy approximately 106 acres, of which 95% is paved.

The cogeneration plant produces a gross 35 megawatts (MW) of electric power, and approximately 0 to 24 MW is sold on the market. The sawmill operation consists of log scaling, wet and dry log storage, mechanical log debarking, sawmill, planing mill, kilns, lumber storage, aboveground petroleum storage areas, equipment fueling and maintenance, paved and unpaved roadways, and an office. The site includes a small log sawmill and large log sawmill. Wood waste from the sawmills are delivered to the cogeneration plant by conveyor.

A. Description of Wastewater and Biosolids Treatment and Controls

1. **Sawmill.** Site grading and the storm water drainage system direct all storm water runoff from the sawmill complex to the northwest corner of the Facility to a log deck pond system. The sawmill complex consists of a 36.4-acre general industrial stormwater area in the southwestern portion of the Facility (see shaded area in Attachment C) and a 53.6-acre log deck which is completely paved with asphalt.

Approximately 65 million board feet of logs are stacked on the paved log deck. During the dry summer months, the logs are sprinkled with water to prevent the development of blue stain and end checking. Sprinkling usually ends in late October or early November; however, sprinkling may occur outside that timeframe when air temperatures exceed 50°F. Excess log deck runoff drains to the log deck pond system. Log deck runoff contains bark, sawdust, tannins and lignins, dissolved organics, and settleable and suspended solids.

The log deck pond system consists of a bark separator, two log deck settling ponds (Ponds 1 and 2), and a 5-acre Retention Pond (see site plan in Attachment C). The settling ponds gravity drain and are valved to allow flexibility in operations. Pumps transfer water between Ponds 1 and 2 and the Retention Pond. The Facility also includes a Fire Pond and a 45 acre-foot Irrigation Pond. Pumps transfer water between Ponds 1 and 2 and the Irrigation Pond, and from the Retention Pond to the Irrigation Pond. The Discharger manages process wastewater (see definition in Attachment A) and industrial storm water from the sawmill complex as follows:

a. Dry Weather

- i. Water in Ponds 1 and 2 is recycled for log deck sprinkling.
- ii. Water in the Retention Pond and boiler and cooling tower blowdown may also be pumped to Ponds 1 and 2 and then recycled for log deck sprinkling.

b. Wet Weather

- i. The Discharger draws down Ponds 1, 2, and 4 and the Retention Pond to the extent possible prior to the beginning of the wet season.
- ii. All storm water runoff from the 36.4-acre general industrial stormwater area is directed to Pond 4 and discharged to Mill Creek under the State Water Resources Control Board (State Water Board) Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001 (General Industrial Storm Water Permit). This Order does not regulate discharges of general industrial storm water from the 36.4-acre general industrial stormwater area.
- iii. First flush storm water from the 53.6-acre log deck area is routed to Ponds 1 and 2, and immediately pumped from Pond 2 to the Retention

Pond until completely emptied. Retention Pond water may then be filtered using four sand filters located adjacent to the Retention Pond and conveyed to the Fire Pond for use in the cogeneration plant. Discharge of first flush storm water (process wastewater) is prohibited.

- iv. Subsequent to emptying the process wastewater from Ponds 1 and 2, industrial storm water (i.e., subsequent to the “first flush”) from the 53.6-acre log deck area is directed to Ponds 1 and 2, from which it is directed to the Retention Pond or Irrigation Pond or may be discharged to Mill Creek at Discharge Point 001. The primary discharge of industrial storm water is from the Land Application Area at Discharge Point 002.

For the purposes of this Order, and as defined in Attachment A, process wastewater for this Facility shall include log deck sprinkling water and first flush storm water. The “first flush” is defined as the first 2 inches of rainfall from the 53.6-acre log deck area commingled with residual pond water on the paved log deck following cessation of log deck sprinkling. The first flush collection may occur more than once in a wet season if the Discharger intermittently sprinkles logs with pond water during the wet season. Storm water runoff subsequent to the first flush is considered industrial storm water. The practice of collecting the first 2 inches of log deck runoff is considered a best management practice (BMP) to reduce pollutants in the storm water discharge to surface water.

Settled matter is removed from the settling pond bottoms annually. Bark and wood debris are reused off-site as landscape mulch or soil amendment.

Sawmill and planing mill processes are contained under cover; thus, no process wastewater is discharged from these activities.

2. **Cogeneration Plant.** Process wastewaters generated from the cogeneration plant include reverse osmosis concentrate, demineralizer regeneration wastewater, boiler blowdown water, and cooling tower blowdown water. These process wastewaters are collected in a collection sump and then directed to the Fire Pond, from which it may be reused within the cogeneration plant. This Order does not authorize the discharge of process wastewaters generated from the cogeneration plant to surface water.
3. **Material Storage.** All the storage tanks at the Facility are protected by roof coverings and secondary containment. The following petroleum tanks are located in the fuel storage area: 20,000-gallon above ground diesel tank and a 4,000-gallon above ground gasoline tank. Other fuels, oils, and chemicals are stored at various facility locations.
4. **Domestic Waste.** Domestic wastes generated from buildings along Lee Road, with the exception of the truck shop, are directed to the East Quincy Services District Wastewater Treatment Plant (WWTP). This includes waste from the forklift shop and an office on the south side of the Facility. Additionally, wash water from the two on-site wash racks is discharged to the WWTP.

Domestic wastes generated from the truck shop and buildings within the central portion of the Facility are discharged to six septic tank/leachfield systems. The septic tanks are pumped every 3 to 5 years.

B. Discharge Points and Receiving Waters

1. The Facility is located in Section 18, T24N, R10E, MDB&M, as shown in Attachment B, a part of this Order.
2. Industrial storm water from the 53.6-acre log deck area may be discharged at Discharge Point 001 (39° 56' 43.9" N and 120° 54' 46.1" W) or Discharge Point 002 (39° 56' 40.1" N and 120° 54' 12.7" W) to Mill Creek, a water of the United States and a tributary to Spanish Creek and the East Branch of the North Fork Feather River.

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

1. Effluent limitations for industrial storm water contained in Order R5-2015-0070 for discharges from Discharge Point 001 (formerly Monitoring Location SW-001) and representative monitoring data from the term of Order R5-2015-0070 are as follows:

Table F-2. Historic Effluent Limitations

Parameter	Units	Historic Effluent Limitations	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
pH	standard units	Instantaneous Max 9.0 Instantaneous Min 6.0	6.9	6.9	6.9
Settleable Solids	ml/L	AMEL 0.1 MDEL 0.2	0.1	0.1	0.1

D. Compliance Summary

1. The Discharger was not issued any Administrative Civil Liability Complaints for the Facility during the term of Order R5-2015-0070.

E. Planned Changes

1. The Discharger is working towards being able to use the Retention Pond for industrial storm water, in the same way as Ponds 1 and 2 are used. This would allow the Facility more capacity to capture storm water from high intensity precipitation events.
2. The Facility is working towards being able to discharge cogeneration blowdown consistent with 40 C.F.R. part 429. This would allow the cogeneration to comply with the American Society of Mechanical Engineers (ASME) chemistry standards.

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, (commencing with section 21100) of Division 13 of the Public Resources Code. Additionally, the adoption of waste discharge requirements for the Facility constitutes permitting of an existing facility that is categorically exempt from the provisions of CEQA pursuant to California Code of Regulations (CCR), title 14, section 15301.

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

1. **Water Quality Control Plan.** 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, Fifth Edition, May 2018 (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. 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 Mill Creek, but does identify present and potential uses for the North Fork Feather River, to which Mill Creek, via Spanish Creek and the East Branch of the North Fork Feather River, 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 Mill Creek are as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Points	Receiving Water Name	Beneficial Use(s)
001 and 002	Mill Creek	Existing: municipal and domestic supply (MUN); hydropower generation (POW); water contact recreation (REC-1), including contact, and canoeing and rafting; non-contact water recreation (REC-2); cold freshwater habitat (COLD); cold spawning, reproduction, and/or early development (SPWN); and wildlife habitat (WILD).
--	Groundwater	Existing: municipal and domestic supply (MUN); agricultural supply (AGR); industrial service supply (IND); and industrial process supply (PRO).

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 State Water Board 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 State Water Board 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, receiving water limitations and best management practices (BMP's) 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 Antidegradation Policy). The State Antidegradation Policy is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. The State Antidegradation 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 Antidegradation 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 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, receiving water 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. Sawmills and planing mills are applicable industries under the storm water program and are obligated to comply with the federal regulations. Discharges to Mill Creek of storm water runoff from the 36.4-acre general industrial stormwater area from Pond 4 are subject to the requirements of the General Industrial Storm Water Permit.

The discharge of industrial storm water from the 53.6-acre log deck area could be regulated under the General Industrial Storm Water 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 permit. Therefore, discharges of industrial storm water from the 53.6-acre log deck area are not covered under the General Industrial Storm Water Permit and are covered under this Order.

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 6 April 2018 U.S. EPA gave final approval to California's 2014-2016 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." Mill Creek is not listed as an impaired waterbody. However, the downstream waterbodies, Spanish Creek and the North Fork Feather River are listed on the 2016 303(d) list as follows: Spanish Creek is listed as impaired for indicator bacteria and the North Fork Feather River is listed as impaired for PCBs and temperature.
2. **Total Maximum Daily Loads (TMDLs).** At the time of this permit renewal, there are no approved TMDLs with waste load allocations (WLAs) that apply to this Facility.
3. The 303(d) listings and TMDLs have been considered in the development of the Order. A pollutant-by-pollutant evaluation of each pollutant of concern is described in section IV.C.3 of this Fact Sheet.

E. Other Plans, Polices and Regulations

1. **Title 27.** The discharge authorized herein and the treatment and storage facilities associated with the discharge of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, California Code of Regulations (CCR), section 20005 et seq (hereafter Title 27). The exemption, pursuant to Title 27 CCR section 20090(a), is based on the following:

20090(b) Wastewater – Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:

- (1) the Central Valley Water Board has issued WDRs, or waived such issuance;
- (2) the discharge is in compliance with the applicable water quality control plan; and
- (3) the wastewater does not need to be managed as a hazardous waste.

The Fire Pond is lined and meets the preconditions for exemption from Title 27. Ponds 1 and 2, the Retention Pond, the Irrigation Pond, and the Land Application Area meet the preconditions for exemption from Title 27. However, because these facilities are unlined and wastewater contained in the ponds percolates to the underlying groundwater, additional investigation is needed to ensure the discharge is not causing an exceedance of water quality objectives and is in compliance with State and Federal antidegradation policies.

This Order requires the Discharger to conduct the Groundwater Characterization, according to section VI.C.2. b, of the Irrigation Pond and Land Application Area and incorporate the new wells into the groundwater monitoring network. The Discharger will also be required to confirm that the discharge has not resulted in pollution or nuisance in the Antidegradation Reevaluation report required in section VI.C.2.c, which the Discharger will submit as part of its permit renewal application. Should the Antidegradation Reevaluation reveal degradation inconsistent with the State Antidegradation Policy, the Discharger must propose additional treatment or control measure to further limit any impacts from the discharge. No wastewater contained in these ponds requires management 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 wastes. Appropriate separate regulatory coverage must be secured for such activities.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Effluent limitations and toxic and pretreatment effluent standards established pursuant to sections 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 1311(b)(1)(C); 40 C.F.R. section 122.44(d)(1)]. NPDES permits must incorporate discharge limits necessary to ensure that water quality standards are met. This requirement applies to narrative criteria as well as to 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 limits 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 (WQBELs) 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 toxicity, chemical constituents, discoloration, radionuclides, and tastes 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 of 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 of 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 section 13260 that requires 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 wastewater, 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 assure 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 recycle water from log yard sprinkling, commingled recycle and storm water, cooling tower blowdown, boiler blowdown, boiler feedwater treatment system effluent, or other waste of recognizable sawmill or cogeneration origin).** This Order prohibits discharges of recycle water from log yard sprinkling, commingled recycle and storm water, cooling tower blowdown, boiler blowdown, boiler feedwater treatment system

effluent, or other waste of recognizable sawmill or cogeneration origin to surface water.

5. Prohibition III.E (No discharge of storm water leachate from wood fuel stockpiles to surface waters or surface water drainage courses). This Order prohibits discharges of storm water leachate from wood fuel stockpiles to surface water or surface water drainage courses. This Order requires the Discharger to implement BMPs to prevent these discharges.
6. Prohibition III.F (No discharge of ash, bark, sawdust, wood, or any waste recognized as originating from cogeneration operations). This Order prohibits the discharge of ash, bark, sawdust, wood, or any waste recognized as originating from cogeneration operations to surface waters or surface water drainage courses.
7. **Prohibition III.G (No discharge of wastewater from the Retention Pond and Fire Pond off-site).** This Order prohibits discharges of wastewater from the Retention Pond and Fire Pond off-site, except to a suitable treatment plant or for reclamation purposes approved by the Executive Officer.
8. **Prohibition III.H (No discharge of debris recognized as originating from the Facility).** Effluent limitation guidelines (ELGs) were established at 40 C.F.R. part 429, subpart I for the Wet Storage Subcategory of the Timber Products Point Source Category, which applies to discharges from the storage of logs or roundwood on land during which water is sprayed or deposited intentionally on the logs (wet decking). The Discharger stacks logs in a 53.6-acre paved area (log deck) 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, and Order R5-2015-0070, this Order prohibits discharges of debris recognized as originated from the Facility to surface waters or surface water drainage courses.
9. **Prohibition III.I (No discharge of process wastewater from barking, sawmill, and planing operations).** ELGs 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) require 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 requires that there shall be no discharge of process wastewater pollutants into navigable waters. Consistent with 40 C.F.R. sections 429.21(a), 429.121, and 429.123, and Order R5-2015-0070, this Order prohibits discharges of process wastewater from barking, sawmill, and planing operations.

10. **Prohibition III.J (No discharge of process wastewater from log deck sprinkling and first flush industrial storm water).** Order R5-2015-0070 included a prohibition to eliminate the discharge of process wastewater (as defined in Attachment A) to surface waters by 1 June 2020. Consistent with Order R5-2015-0070, this Order prohibits the discharge of process wastewater (as defined in Attachment A) to surface waters.
11. **Prohibition III.K (No discharge of hazardous waste).** This prohibition is based on CCR, title 22, section 66261.1 et seq, that prohibits discharge of hazardous waste.
12. **Prohibition III.L (No discharge of hazardous waste).** This prohibition is based on CCR, title 23, section 2521(a) and on Water Code section 13173, that prohibits discharge of hazardous waste.

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 Best Professional Judgment 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, 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 “sawmills and planing mills” 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 Points 001 and 002:

- a. **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. sections 429.101 and 429.103, and Order R5-2015-0070, this Order prohibits discharges of debris recognized as originated from the Facility to surface waters or surface water drainage courses.

40 C.F.R. sections 429.101 and 103 also require that the pH be within the range of 6.0 to 9.0. The ELGs for the Wet Storage Subcategory at 40 C.F.R. sections 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, this Order includes instantaneous minimum and maximum effluent limitations for pH of 6.0 and 9.0 for discharges of industrial storm water based on BPJ.

- b. **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), and Order R5-2015-0070, this Order establishes a prohibition of discharges of process wastewater from barking operations.
- 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, and Order R5-2015-0070, this Order establishes a prohibition of discharges of process wastewater from sawmill and planing mill operations.

**Summary of Technology-based Effluent Limitations
 Discharge Points 001 and 002**

Table F-4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations
pH	standard units	Instantaneous Min 6.0 Instantaneous Max 9.0

C. Water Quality-Based Effluent Limitations (WQBELs) 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 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 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, storm water action levels, and receiving water limitations 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.** Refer to III.C.1. above for a complete description of the receiving water and beneficial uses.
- b. **Effluent and Ambient Background Data.** The reasonable potential analysis (RPA), as described in section IV.C.3 of this Fact Sheet, was based on data from March 2016 through May 2019, which includes effluent and ambient background data submitted in SMRs.
- c. **Assimilative Capacity/Mixing Zone.** Based on the available information, the worst-case dilution is assumed to be zero to provide protection for the receiving water beneficial uses. The impact of assuming zero assimilative capacity within the receiving water is that discharge limitations are end-of-pipe limits 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 to 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 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 five samples collected between March 2016 and May 2019, the effluent hardness ranged from 16 mg/L to 52 mg/L, the upstream receiving water hardness ranged from 19 mg/L to 24 mg/L, and the downstream receiving water hardness ranged from 19 mg/L to 36 mg/L. Due to the short duration, periodic nature of storm events and corresponding intermittent storm water discharges from the Facility, the CTR acute criteria calculated using an average receiving water hardness of 23 mg/L were used for evaluating compliance with water quality objectives for the storm water discharge.

3. **Determining the Need for WQBELs**

This Order regulates the discharge of storm water from industrial activity to surface water. The discharge is 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 permit. In accordance with 40 C.F.R. section 122.44(d)(1)(i), the Central Valley Water Board has conducted a review of effluent (storm water) and upstream and downstream receiving water data collected during the term of Order R5-2015-0070 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, storm water discharge data has been compared to applicable storm water numeric action level values 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 WQBELs, this Order includes storm water action levels for pollutants in the discharge that exceed applicable storm water numeric action level values or are causing exceedances of applicable water quality objectives in the downstream receiving water. The storm water action levels are not effluent limits and should not be interpreted as such; they are merely levels that the Central Valley Water Board has used to determine if storm water discharges from the Facility merit further BMP monitoring to ensure that the Facility has been successful in implementing BMPs identified in the Storm Water Pollution Prevention Plan (SWPPP).

Downstream receiving water monitoring data, applicable water quality criteria and objectives, and storm water action levels have been provided in Attachment G.

Most constituents are not discussed in this Order, as the storm water discharge is well below the pollutant numeric action level values and/or the water quality objectives/criteria for these constituents. However, the following constituents are notable for discussion upon assessment of the data.

- a. **Chemical Oxygen Demand (COD).** 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 runoff, especially carbon. The storm water benchmark value in U.S. EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) for General Sawmills and Planing Mills (SIC code 2421) for COD is 120 mg/L.

Effluent COD ranged from 10 mg/L to 492 mg/L in 10 samples collected between March 2016 and May 2019. Upstream and downstream receiving water monitoring data for COD is not available. Based on the levels of COD in the effluent and the nature of runoff from sawmill operations, a storm water action level of 120 mg/L for COD has been retained from Order R5-2015-0070 based on the benchmark in U.S. EPA's MSGP. 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.

- b. **Iron.** U.S. EPA developed National Recommended Ambient Water Quality Criteria (NAWQC) for the protection of freshwater aquatic life for iron. The recommended 4-day average (chronic) criterion is 1,000 µg/L. In addition, the State Water Board Division of Drinking Water (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. Title 22 requires compliance with Secondary MCLs on an annual average basis.

Total recoverable iron concentrations in the storm water effluent ranged from 71 µg/L to 4,310 µg/L, based on 5 samples collected from March 2016 through May 2019. Based on 3 samples collected concurrently in the upstream and downstream receiving water between March 2016 and May 2019, dissolved iron concentrations in the upstream receiving water ranged from 38 µg/L to 116 µg/L, and in the downstream receiving water ranged from 50 µg/L to 119 µg/L. Based on the available data, dissolved iron concentrations in the downstream receiving water do not exceed the Secondary MCL. However, the concentration of iron in the effluent storm water may contribute to an increase of iron in the downstream receiving water. Therefore, this Order includes a storm water action level for iron of

1,000 µg/L based on the U.S. EPA NAWQC. If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility's BMPs in order to reduce iron concentrations in the storm water discharge.

- c. **pH.** 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." The effluent pH ranged from 6.28 to 6.9 from four samples and the downstream receiving water pH ranged from 6.71 to 7.47 based on four samples collected between March 2016 and May 2019. Based on monitoring data indicating that the downstream receiving water is in compliance with the Basin Plan objectives, the Central Valley Water Board finds that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the Basin Plan water quality objectives 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 and 9.0, respectively, based on BPJ for discharges of industrial storm water.
- d. **Settleable Solids.** The Basin Plan states that waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. To ensure compliance with the Basin Plan objectives, Order R5-2015-0070 included an average monthly effluent limit (AMEL) and maximum daily effluent limit (MDEL) for settleable solids of 0.1 ml/L and 0.2 ml/L, respectively. Settleable solids were not detected in the effluent in 11 out of 12 samples collected from March 2016 through May 2019. The single detection of 0.1 ml/L did not exceed the effluent limits; therefore, the discharge is not causing exceedances of the applicable water quality objectives in the downstream receiving water for settleable solids and effluent limits for settleable solids have not been retained in this Order. Removal of these effluent limitations is in accordance with the federal anti-backsliding regulations (see section IV.D.3 of this Fact Sheet).
- e. **Tannins and Lignins.** For inland surface waters, the Basin Plan states that "[w]ater shall be free of discoloration that causes nuisance or adversely effects 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 effluent or receiving water. Some studies have indicated that elevated levels of tannins and lignins are harmful to aquatic life.
- Effluent tannins and lignins ranged from 0.45 mg/L to 60.6 mg/L in 10 samples collected between March 2016 and May 2019. Based on the levels of tannins and lignins in the effluent and the nature of runoff from sawmill operations, a storm water action level of 30 mg/L for tannins and lignins has been retained from Order R5-2015-0070. 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.

- f. **Total Suspended Solids (TSS).** 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 storm water annual average numeric action level value in the for General Sawmills and Planing Mills (SIC code 2421) for TSS is 100 mg/L and the instantaneous maximum is 400 mg/L.

Effluent TSS ranged from 6 mg/L to 140 mg/L in nine samples collected between March 2016 and May 2019. Based on the levels of TSS in the effluent and the nature of runoff from sawmill operations, an annual average storm water action level of 100 mg/L and a maximum daily storm water action level of 400 mg/L for TSS has been established in this Order based on the numeric action level (NAL) values in Table 2 of the General Permit for Storm Water Associated with Industrial Activities Order 2014-0057-DWQ, NPDES Order No. CAS000001 (Industrial General Permit or IGP). If exceeded, the Discharger is required to evaluate and update, if necessary, the Facility’s BMPs in order to reduce the TSS in the storm water discharge.

4. **WQBEL Calculations**

This Order does not include WQBELs for individual pollutants.

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

For compliance with the Basin Plan’s narrative toxicity objective, this Order requires the Discharger to conduct whole effluent toxicity testing for acute and chronic toxicity, as specified in the MRP (Attachment E section V.). This Order also contains effluent limitations for acute toxicity and requires the Discharger to implement best management practices to investigate the causes of and identify corrective actions to reduce or eliminate effluent toxicity.

- a. **Acute Aquatic Toxicity.** The Basin Plan contains a narrative toxicity objective that 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 also states that, “...effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate...”.

Due to the site-specific conditions of the discharge, the Central Valley Water Board has used professional judgment 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).” Acute toxicity effluent limits are required to ensure compliance with the Basin Plan’s narrative toxicity objective.

U.S. EPA Region 9 provided guidance for the development of acute toxicity effluent limitations in the absence of numeric water quality objectives for toxicity in its document titled "Guidance for NPDES Permit Issuance", dated February 1994. In section B.2. "Toxicity Requirements" (pgs. 14-15) it states that, "In the absence of specific numeric water quality objectives for acute and chronic toxicity, the narrative criterion 'no toxics in toxic amounts' applies. Achievement of the narrative criterion, as applied herein, means that ambient waters shall not demonstrate for acute toxicity: 1) less than 90% survival, 50% of the time, based on the monthly median, or 2) less than 70% survival, 10% of the time, based on any monthly median. For chronic toxicity, ambient waters shall not demonstrate a test result of greater than 1 TUc." Accordingly, effluent limitations for acute toxicity have been included in this Order as follows:

Acute Toxicity. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

70%, minimum for any one bioassay; and

90%, median for any three consecutive bioassays.

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 and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 C.F.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

For non-continuous discharges, such as those from the Facility, 40 C.F.R. section 122.45(e) states:

- a. Non-continuous discharges. Discharges which are not continuous, as defined in section 122.2, shall be particularly described and limited, considering the following factors, as appropriate:
- b. Frequency (for example, a batch discharge shall not occur more than once every 3 weeks);

- c. Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);
- d. Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and
- e. Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc or more than 250 grams (1/4 kilogram) of zinc in any discharge.

Thus, the Central Valley Water Board is not restricted to a particular averaging period for non-continuous discharges.

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 previous Order R5-2015-0070 included process wastewater final effluent limitations for pH, TSS, copper, lead, zinc, settleable solids, and acute and chronic whole effluent toxicity. The previous Order R5-2015-0070 also included industrial storm water final effluent limitations for pH, settleable solids, and acute whole effluent toxicity. The process wastewater effluent limitations have not been retained in this Order. The industrial storm water effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order R5-2015-0070, with the exception of effluent limitations for settleable solids. The industrial storm water effluent limitations for settleable solids have not been retained from Order R5-2015-0070. This removal or 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.

Mill Creek is considered an attainment water for pH, TSS, copper, lead, zinc, settleable solids, and acute and chronic toxicity because the receiving water is not listed as impaired on the 303(d) list for these parameters. "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." State Water Board Order WQ 2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility.

As discussed in section IV.D.4, below, removal or relaxation of the effluent limitations complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for pH, TSS, copper, lead, zinc, settleable solids, and acute and chronic toxicity from Order R5-2015-0070 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 of this Fact Sheet, updated information that was not available at the time Order R5-2015-0070 was issued indicates that settleable solids does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water satisfy requirements in CWA section 402(o)(2). The updated information that supports the removal of effluent limitations for settleable solids includes the following:

- i. **Settleable Solids.** Effluent monitoring data collected between March 2016 and May 2019 indicate that the discharge is not causing exceedances of the applicable water quality objectives for settleable solids in the downstream receiving water.

Thus, removal of the effluent limitations for settleable solids from Order R5-2015-0070 is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time of permit issuance.

4. **Antidegradation Policies**

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. The Order requires compliance with applicable federal technology-based standards and with WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted 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 best practicable treatment or control (BPTC) of the discharge. The impact on existing water quality will be insignificant.

- a. **Surface Water.** This Order includes a new discharge prohibition that prohibits the discharge of process wastewater (Prohibition III.J). Therefore, the process wastewater effluent limitations for pH, TSS, copper, lead, zinc, settleable solids, and acute and chronic whole effluent toxicity have been removed. Due to the discharge prohibition, the removal of effluent limitations for process wastewater does not allow for an increase in the mass of pollutants and is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.
- b. **Groundwater.** The Discharger utilizes three settling ponds, a Retention Pond, a Fire Pond, and an Irrigation Pond to hold process wastewater and industrial storm water on site. The Fire Pond is lined. Percolation from the unlined ponds may result in an increase in the concentration of some 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 BPTC to minimize degradation; and
 - iv. The degradation is consistent with the maximum benefit to the people of the state.

Though some ponds are unlined, the Central Valley Water Board considers the use of unlined ponds to store and treat process water to be an industry-standard practice that is an appropriate component of an effective suite of BMPs. This Order, specifically the BMPs and pollution prevention measures required in section VI.C.3, will require the Discharger to implement BPTC. In addition, the Central Valley Water Board finds, based on existing information, that the limited groundwater degradation that may occur under this Order will not result in exceedances of any applicable groundwater water quality objectives or in any impacts to beneficial uses. Therefore, pollution or nuisance will not occur. Lastly, the limited degradation that may occur under this Order inheres to 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.

This Order requires the Discharger to conduct the Groundwater Characterization, according to section VI.C.2. b, of the Irrigation Pond and Land Application Area and incorporate the new wells into the groundwater monitoring network. The Discharger will also be required to confirm that the discharge has not resulted in pollution or nuisance in a the Antidegradation Reevaluation report required in section VI.C.2.c, which the Discharger will submit as part of its permit renewal application. Should the Antidegradation Reevaluation reveal degradation inconsistent with the State Antidegradation Policy, the Discharger must propose additional treatment or control measure to further limit any impacts from the discharge.

5. Stringency of Requirements for Individual Pollutants

This Order contains technology-based effluent limitations for pH, as discussed in IV.B.2 of this Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. This Order also implements effluent limits for acute toxicity, as discussed in IV.C.5 of this Fact Sheet, to implement the Basin Plan’s narrative toxicity objective.

**Summary of Final Effluent Limitations
 Discharge Points 001 and 002**

Table F-5. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations	Basis
pH	standard units	Instantaneous Max 9.0 Instantaneous Min 6.0	BPJ
Acute Toxicity	% survival	70% minimum for any one bioassay; 90% median for any three consecutive bioassays	BP

Table F-5 Notes:

- Abbreviations used in this table are as follows:**
BPJ – Based on Best Professional Judgement.
BP – Based on water quality objectives contained in the Basin Plan.

- E. Interim Effluent Limitations – Not Applicable**
- F. Land Discharge Specifications – Not Applicable**
- G. Recycling Specifications – Not Applicable**

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

1. CWA section 303(a-c), requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Central Valley Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that “[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses.” The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains receiving surface water limitations based on the Basin Plan numerical and narrative water quality objectives for bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity.
2. **Bacteria.** On 7 August 2018, the State Water Board adopted Resolution 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 “*Amendment to the Water Quality Control Plan for Ocean Waters of California—Bacteria Provisions and a Water Quality Standards Variance Policy.*” The Bacteria Water Quality Objectives established in 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.

The Bacteria Water Quality Objectives correspond with the risk protection level of 32 illnesses per 1,000 recreators and use *Escherichia coli* (*E. coli*) as the indicator of pathogens in freshwaters and enterococci as the indicator of pathogens in estuarine waters and ocean waters.

The Bacteria Provisions provide that where a permit, waste discharge requirement (WDR), or waiver of WDR, includes an effluent limitation or discharge requirement that is derived from a water quality objective or other guidance to control bacteria (for any beneficial use) that is more stringent than the Bacteria Water Quality Objective, the Bacteria Water Quality Objective would not be implemented in the permit, WDR, or waiver of WDR. This

standard has not been met in this Order; therefore, the Bacteria Water Quality Objective has been implemented as a receiving water limitation.

B. Groundwater

1. Order R5-2015-0070 included site-specific groundwater limitations for pH and a narrative limit for taste, odor, chemical constituents, toxicity, and color, to protect the beneficial uses of underlying groundwater from unanticipated percolation from the Facility's wastewater ponds. The removal of site-specific groundwater limitations will not unreasonably affect present and anticipated beneficial uses of the underlying groundwater nor result in water quality less than described in applicable policies. The removal of site-specific groundwater limitations is not expected to cause other impacts on water quality. The Central Valley Water Board finds that the removal of the site-specific groundwater limitations: a) is to the maximum benefit to the people of the state; b) will not unreasonably affect present and anticipated beneficial uses of the underlying groundwater; and c) will not result in water quality less than that prescribed in policies, and is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

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 at the following link:

[Central Valley Salinity Alternatives for Long-Term Sustainability \(CVSALTS\) web page:](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

2. Special Studies and Additional Monitoring Requirements

- a. **Storm Water Action Levels and Best Management Practice Improvement Evaluation.** As discussed in section IV.C.3 of this Fact Sheet, this Order establishes storm water action levels for constituents of concern in discharges of industrial storm water. 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 levels are used to determine if 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 and/or receiving water limitation violations, 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. **Groundwater Characterization.** To determine compliance with groundwater limitations, the Discharger is required to characterize groundwater quality. As specified in section VI.C.2.b, the Discharger shall evaluate the capability and implement the necessary steps to characterize the groundwater quality underlying the Irrigation Pond and Land Application Area, and incorporate the subsequent groundwater monitoring wells into the existing groundwater monitoring network.
- c. **Antidegradation Reevaluation.** The Discharger is required to submit an Antidegradation Reevaluation, as specified in section VI.C.2.c, to confirm that the land discharge continues to be consistent with the State Antidegradation Policy.

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

- a. **Salinity Evaluation and Minimization Plan.** A Salinity Evaluation and Minimization Plan for salinity is required to be maintained in this Order to ensure adequate measures are developed and implemented by the Discharger to reduce the discharge of salinity to Mill Creek. The requirements of this plan will be included in the SWPPP.
- b. **Storm Water Pollution Prevention Plan.** This Order requires the Discharger to implement BMPs, including treatment controls where necessary, in order 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 are 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 and useful SWPPP, the SWPPP must be revised when 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 Order, or the Discharger has not achieved the general objectives of controlling pollutants in the storm water discharges.

- c. **Facility Specific BMP – First Flush Collection.** Each year, after cessation of log deck sprinkling, the Discharger shall collect the first 2 inches of rainfall from the log deck area (i.e., first flush) in Pond 1 and Pond 2. The first flush plus any process wastewater (i.e., from log deck sprinkling) contained in Pond 1 and Pond 2, shall be conveyed to the Retention Pond. The first flush shall not reach surface water. Pond 1 and Pond 2 must be emptied of first flush and process wastewater prior to collection of industrial storm water for discharge or conveyance to the Irrigation Ponds. The first flush collection BMP must be repeated after any subsequent sprinkling of the logs. This Facility-specific BMP may be modified by approval of the Executive Officer.

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

- a. **Pond 1, Pond 2, Retention Pond, Fire Pond, and Irrigation Pond Operating Specifications.** The operation and maintenance specifications for Pond 1, Pond 2, Retention Pond, Fire Pond, and Irrigation Pond are necessary to ensure proper operation and maintenance of the ponds,

minimize potential impacts to groundwater quality, and protect the beneficial uses of the groundwater. In addition, reporting requirements related to use of the ponds are required to monitor their use and the potential impact on groundwater.

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

6. Other Special Provisions

- a. **Sludge, Wood Waste, and/or Ash Management.** Sludge disposal provisions are necessary to ensure proper disposal of collected screenings, sludges, wood ash, wood waste, 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.

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 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E) of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

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. For industrial storm water, effluent monitoring frequencies and sample types for flow (1/Day), oil and grease (2/Year), pH (1/Week), TSS (1/Month), COD (1/Month), hardness (2/Year), total recoverable iron (1/Month), tannins and lignins (1/Month), and turbidity (1/Week) have been retained from Order R5-2015-0070 to determine compliance with effluent limitations and storm water action levels for these parameters.
3. Monitoring of process wastewater has not been retained from Order R5-2015-0070 because the discharge of process wastewater is prohibited by this Order (Prohibition III.J).

4. Order R5-2015-0070 required regular effluent monitoring of industrial storm water for copper, settleable solids, and zinc. This Order removes the regular effluent monitoring of industrial storm water for these parameters. The Central Valley Water Board finds that regular monitoring of these parameters is not necessary, and the samples obtained from the characterization study are sufficient to characterize the industrial storm water effluent.
5. Order R5-2015-0070 required weekly monitoring of the industrial storm water discharge for electrical conductivity. This Order reduces the monitoring frequency to monthly. The Central Valley Water Board finds that regular monthly monitoring of the industrial storm water for electrical conductivity is sufficient to characterize the effluent.
6. This Order requires effluent monitoring for priority pollutants and other constituents of concern once during the period beginning 1 July 2022 through 30 June 2023 in order to collect data to conduct a reasonable potential analysis for the next permit renewal. See section IX.D of the MRP for more detailed requirements related to performing priority pollutant monitoring.
7. 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." 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 sections 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.

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity.** Consistent with Order R5-2015-0070, twice a year 96-hour bioassay testing is required to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Order R5-2015-0070 required annual chronic whole effluent toxicity testing. This Order reduces the chronic whole effluent toxicity testing frequency to once per permit term. The reduced monitoring frequency is

sufficient to demonstrate compliance with the Basin Plan's narrative toxicity objective.

D. Receiving Water Monitoring

1. Surface Water

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream.
- b. Regular monthly receiving water monitoring for flow, pH, hardness, dissolved iron, and turbidity have been retained from Order R5-2015-0070 to determine compliance with receiving water limitations for these parameters.
- c. Regular receiving water monitoring for electrical conductivity has been reduced in this Order to once per month from once per week that was contained in Order R5-2015-0070. The reduced monitoring frequency is sufficient to determine if the discharge is impacting the receiving water for this parameter.
- d. This Order adds regular weekly receiving water monitoring for dissolved oxygen and temperature. Regular receiving water monitoring is necessary in order to determine compliance with the receiving water limitations in this Order.
- e. This Order adds quarterly receiving water monitoring for dissolved organic carbon. Regular receiving water monitoring is necessary in order to determine if downstream aluminum concentrations meet criteria in the receiving water.
- f. This Order removes the regular monthly monitoring of the receiving water for copper, lead, and zinc. Regular monitoring of the receiving water for these constituents is not necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream.
- g. This Order requires monitoring in the upstream receiving water for priority pollutants and other pollutants of concern once during the period beginning 1 July 2022 through 30 June 2023, concurrent with effluent monitoring, in order to collect data to conduct a reasonable potential 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.

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.” 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 MRP is issued pursuant to Water Code section 13267. The groundwater monitoring and reporting program required by this Order and the MRP are necessary to assure 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 confirm that any groundwater degradation resulting from the discharge is in compliance with the groundwater limitations contained in this Order, and to ensure protection of beneficial uses and compliance with Central Valley Water Board and State Water Board plans and policies, including the State Antidegradation Policy. This Order requires a regular schedule of groundwater monitoring in the MRP.

E. Other Monitoring Requirements

1. Precipitation Monitoring

Precipitation monitoring is necessary to assess the amount of rainfall that falls on the log deck area.

2. Ash and Cooling Tower Solids Monitoring

The annual ash and cooling tower sludge report is necessary to determine the quantity of ash and cooling tower sludge generated at the Facility and to ensure the proper handling of such material.

3. Pond Monitoring

Pond monitoring requirements for freeboard and settled matter depth are necessary to assess compliance with pond operating requirements and to ensure pond integrity. Pond monitoring for electrical conductivity, pH, total dissolved solids, arsenic, and manganese are necessary to assess the impacts of the discharge on groundwater.

VIII. PUBLIC PARTICIPATION

The Central Valley Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Sierra Pacific Industries, Quincy Division Sawmill Facility. 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. Notification was provided through posting on the Central Valley Waterboard's website on **13 April 2021**, and through posting by the Discharger at the Plumas County Courthouse and at the Facility entrance on **26 April 2021**.

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/) (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 **13 May 2021**.

C. Public Hearing

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

Date: **17 June 2021**
Time: **8:30 a.m.**
Location: **Online**

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 California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth

day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

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

Or by email at waterqualitypetitions@waterboards.ca.gov

[Instructions on how to file a petition for review](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instructions.shtml)

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instructions.shtml) are available on the Internet.

E. Information and Copying

The ROWD, 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 Stacey Alexander at (530) 224-3219.

ATTACHMENT G – SUMMARY OF COMPLIANCE WITH RECEIVING WATER OBJECTIVES

Abbreviations used in this table:

- B = Maximum Receiving Water Concentration or lowest detection level, if non-detect
- C = Criterion used for Compliance with Water Quality Objective
- 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
- SWAL= Storm Water Action Level
- NA = Not Available
- ND = Non-Detect

General Note: All inorganic concentrations are given as a total concentration.

Constituent	Units	B	C	CMC	CCC	Water & Org	Org. Only	Basin Plan	SWAL	RW Obj. Met?
Chemical Oxygen Demand	mg/L	--	120	--	--	--	--	--	120	Inconclusive
Iron, Total	µg/L	119	1000	--	1000	--	--	--	--	Yes
Tannins and Lignins	mg/L	--	30	--	--	--	--	--	30	Inconclusive
Total Suspended Solids	mg/L	--	100	--	--	--	--	--	100	Inconclusive