

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2018-0052

WASTE DISCHARGE REQUIREMENTS

FOR
SIERRA PACIFIC INDUSTRIES
OROVILLE CEDAR MILL
BUTTE COUNTY

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

1. On 2 October 2017, Sierra Pacific Industries (Discharger or SPI) submitted a Report of Waste Discharge (RWD) that describes existing and proposed additions to its Oroville Cedar Mill (Facility). The Facility produces process wastewater that discharges to land. Additional information to complete the RWD was submitted on 25 October 2017.
2. The Discharger owns and operates the Facility that generates the waste and the land discharge areas, and is responsible for compliance with these Waste Discharge Requirements (WDRs).
3. The Facility is located at 3025 South 5th Avenue, in Oroville, California; Section 19, T19N, R4E, MDB&M. The Facility is comprised of Assessor's Parcel Numbers (APN) 035-440-020 and 035-440-021, as shown on Attachment A, which is attached hereto and made part of this Order by reference.
4. WDRs Order 5-00-207, adopted by the Central Valley Water Board on 15 September 2000, prescribes requirements for the discharge. Order 5-00-207 did not specify a flow of wastewater for the Facility. This WDR order is considered backlogged as the permit was due for renewal in 2015. Therefore, Order 5-00-207 will be rescinded and replaced with this Order.

Existing Facility and Discharge

5. Cedar logs are transported to the Facility where they are scaled, sorted, and decked. While in storage, the logs are sprinkled continuously from an onsite well with approximately 865,000 gallons per day (gpd) of fresh groundwater and/or storm water runoff mixed with log deck drainage pumped from the five-acre recycle/disposal (Pond). The pond is approximately 7 feet deep, and can hold an estimated 14 acre-feet (AF) of water with 2 feet of freeboard. It is estimated that less than 2 percent of the water sprinkled on the logs makes it to the Pond or roughly 17,300 gpd. The log processing operation consists of de-barking and dimension milling of primarily fencing products.
6. Milled cedar lumber is treated indoors, in a closed process, with Kop-Coat NP-2® to control sap stain. Kop-Coat NP-2® is an anti-sap stain and wood preservative. Lumber is submerged in this product for 2 minutes, raised and allowed to drip over the drip tank and drip pans. Residual product that collects in the drip pan is returned to the dip tank by means of a sump pump. Treated and dried lumber is then wrapped and stacked outdoors on an asphalt paved area prior to shipping.
7. A maximum of approximately 83 million board feet of lumber products are produced at the Facility annually. The Facility operates year-round.

8. One on-site supply well is located on the northeast portion of the Facility and provides supplemental water for log deck sprinkling. This well is approximately 135 feet deep and produces approximately 1,000 gallons per minute (gpm). A new well has been drilled and constructed in the northeast portion of the sawmill area to replace the existing damaged but functional well in the same area of the Facility. The new well is anticipated to be put into service in the near future and the original well will be designated as emergency backup supply.
9. Sawdust from the mill and bark from the de-barking process is stored in bins and sold as landscaping materials. The Facility's domestic wastewater is discharged to the sanitary sewer that connects to the wastewater treatment plant operated by the Sewerage Commission-Oroville Region. Domestic drinking water is provided by California Water Service. An above ground diesel storage tank is located in the northeast portion of the Facility in a concrete secondary containment structure. Fluids and lubricants are also stored under cover in this location.
10. The saw mill and log deck area is approximately 26 acres and graded such that runoff from this area and potential excess log deck sprinkling runoff are conveyed to the concrete debris collection basin prior to entering the Pond. The runoff to the Pond is recycled as sprinkling water, evaporates, or percolates to groundwater. No storm water leaves the property.
11. Log yard debris collected from the paved surfaces and the bark separator and Pond bottom debris, consisting of wood waste and bark, is periodically removed and sold either as landscape mulch or soil amendment.

Proposed Facility and Discharge Changes

12. The Discharger has constructed a bark processing facility (Bark Plant) that will use grinding and screening equipment to process bark & wood waste to produce soil amendments and decorative landscape mulch. The Bark Plant is located northeast and adjacent to the existing Facility on APN 035-440- 022 (see Attachment B). It consists of 6 acres of paved surface and 4 acres of gravel based surface and will receive bark from other SPI facilities. The bark processing will be through dry mechanical means and will not produce process wastewater.
13. Stormwater runoff from the Bark Plant is routed through a newly constructed ditch to the existing log yard Pond located on the south end of the Facility and is the only discharge from the Bark Plant. Stormwater is conveyed under the rail track through a new culvert to an open ditch then through another new culvert into the Pond.

Site-Specific Conditions

14. The Facility lies in the northeast portion of the Sacramento Valley near the western Sierra Nevada foothills at an elevation of approximately 160 feet above mean sea level. The nearest surface water is the Feather River, located approximately 1 mile west of the Facility. Topographic relief of the area is relatively flat to gently southwest sloping.
15. Soil information was obtained from the Natural Resources Conservation Service Web Soil Survey. Based on the Soil Survey, the predominant soil in the existing and proposed Bark Plant area are identified as Xerorthents loamy sand, with hydrologic soil group classification A. In summary, the Xerorthents loamy sand is composed primarily of dredged

spoil tailings and similar soils from gravelly alluvium that are typically excessively drained with very low runoff.

16. The mean annual temperature in the area varies between 49 and 75 degrees Fahrenheit (°F). Summer temperatures can reach to over 100°F, while winter temperatures can drop to the mid-20s°F range. The average annual precipitation is 30.66 inches (National Oceanic and Atmospheric Administration, 2017) with the majority of precipitation occurring in the winter months. The average annual evaporation rate is 52 inches per year based on information obtained from the California Irrigation Management Information System.
17. The Facility is in an area zoned by the City of Oroville as M-2 (Intensive Industrial); current land use in the vicinity of the Facility consists of forest products manufacturing and storage, biomass to energy operations, wastewater treatment and vacant property.

Groundwater Conditions

18. Based on the logs of existing groundwater monitoring wells MW-1, MW-2, and MW-3, fill material (dredge tailings) was encountered in each of the boreholes from the surface to approximately 5-6 feet below ground surface (bgs). Quaternary alluvium consisting of clayey gravel with sand was encountered from the base of the fill material to approximately 8-10 feet bgs. Silty clay, clayey sand, sand/silt and silt/gravel mixtures were encountered below the clayey gravel.
19. The average depth to groundwater is approximately 17 feet bgs in monitoring well MW-1, approximately 10 feet bgs in monitoring well MW-2 and approximately 7 feet bgs in monitoring well MW-3. The groundwater flow direction is generally northeast under hydraulic gradients generally ranging from 0.006 to 0.02 feet per foot (ft./ft.). Based on historical groundwater surface elevation measurements, the groundwater appears to be mounded in the immediate vicinity of the Pond, which may be inducing a limited localized gradient and flow direction. Hence the current groundwater monitoring system doesn't appear to have a true downgradient well location.
20. The U.S. Geological Survey (USGS) National Water Information System Web Interface was queried for available wells with water quality data in the vicinity of the Facility. Two sets of well data were found: one well, approximately 1-mile northeast of the Facility (section 20 of township 19 north, range 4 east), is 335 feet deep; a second well, located 500 feet northeast of the Facility (section 20 of township 19 north, range 4 east), is 152 feet deep. Regional groundwater is reported to be south/southwest based on USGS data.
21. Samples from these 2 USGS wells taken between 1957 and 2006 indicate TDS ranging from 240 to 300 mg/l and Specific Conductance ranging from 380 to 430 uS/cm. Based on the depth of the wells, they are assumed to be perforated or screened in the Laguna Formation, which occurs beneath the alluvium in the vicinity of the Feather River (DWR, 2014).

Basin Plan, Beneficial Uses, and Regulatory Considerations

22. The operative Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) designates beneficial uses; establishes water quality objectives (WQOs) to protect such uses; contains implementation plans and policies for protecting waters of the subject basins; and incorporates by reference plans and policies adopted by the State Water

Resources Control Board (State Water Board). Pursuant to Water Code section 13263, subdivision (a), WDRs implement the Basin Plan.

23. Local drainage is to the Feather River. The beneficial uses of the Feather River, as stated in the Basin Plan are: municipal; and domestic supply (MUN); agricultural supply (AGR); water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); cold freshwater habitat (COLD); and spawning, reproduction, and/or early development (SPAWN).
24. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply (MUN); agricultural supply (AGR); industrial service supply (IND); and industrial process supply (PRO).
25. The Basin Plan establishes narrative WQOs for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
26. The Basin Plan's numeric WQO for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN-designated groundwater.
27. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require waters designated for use as domestic or municipal supply to meet the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22 (Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
28. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.
29. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will adopt numerical limitations to implement the narrative objective on a case-by-case basis.
30. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 $\mu\text{mhos/cm}$. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 $\mu\text{mhos/cm}$ if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.
31. The Central Valley Water Board is developing amendments to the Basin Plan to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley. Strategies currently under consideration may:

- a. Alter the way the Board calculates available assimilative capacity for nitrate, which could result in new or modified requirements for nitrate management;
- b. Require dischargers to implement actions identified under an interim salinity permitting approach; and/or
- c. Establish alternate compliance approaches that would allow dischargers to participate in efforts to provide drinking water to local communities in consideration for longer compliance time schedules.

Should the Board adopt amendments to the Basin Plan to effectuate such strategies; these waste discharge requirements may be amended or modified to incorporate any newly-applicable requirements.

32. The stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has been coordinating efforts to implement new salt and nitrate management strategies. The Board expects dischargers that may be affected by new salt and nitrate management policies to coordinate with the CV-SALTS initiative.

Antidegradation Analysis

33. The State Water Board's *Policy with Respect to Maintaining High Quality Waters of the State*, Resolution 68-16 (Antidegradation Policy) prohibits degradation of groundwater unless it has been shown that:
 - a. The degradation is consistent with the maximum benefit to the people of the state.
 - b. The degradation will not unreasonably affect present and anticipated future beneficial uses.
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and
 - d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.
34. Degradation of groundwater by some of the typical waste constituents associated with discharges from a saw mill, after effective source control, treatment, and control measures are implemented, would be consistent with the maximum benefit to the people of the state. The Discharger's operation provides 130 full time jobs and produces approximately 83 million board feet of finished cedar products. The Discharger anticipates providing an additional 20 full-time jobs as part of the facility expansion for the bark processing plant. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State.
35. The Discharger has been monitoring groundwater quality at the Facility site since 2000. Based on available data, it is not possible to determine pre-1968 groundwater quality. Therefore, determination of compliance with the Antidegradation Policy for this Facility must be based on existing background groundwater quality.

36. Constituents of concern that have the potential to degrade groundwater quality include salts (primarily TDS, sodium, and chloride), turbidity, pH, chemical oxygen demand (COD), oil & grease, and tannins and lignins, as discussed below:

Constituent	Average Concentrations ⁵ (mg/L)			
	Effluent ¹	Background Groundwater ²	Downgradient Groundwater ³	Potential Water Quality Objective
TDS	--	230	224	450 ⁴ to 1,500 ⁸
Specific Conductance	--	312	289	700 ⁵ to 900 ⁸
pH	--	6.7	7.2	6.5 to 8.5 ⁸
Turbidity	--	9.2	351	1 to 5 ⁸
Oil & Grease	--	<1.4	1.6	--
COD	--	<3	47	--
Tannins & Lignins	--	<0.10	3.78	--

¹ No Pond data was required in the original permit.

² Compiled from MW-1, data collected 2010-2017.

³ Compiled from MW-2 & MW-3, data collected from 2010-2017.

⁴ Lowest agricultural water quality goal.

⁵ Average of 2010 – 2017 data

⁶ Primary Maximum Contaminant Level.

⁷ Secondary Maximum Contaminant Level.

⁸ Secondary Maximum Contaminant Level range.

- a. **Total Dissolved Solids.** Background groundwater quality is spatially variable with respect to TDS. The 95 percent upper confidence limit on the mean background TDS concentration is 230 mg/L. TDS concentrations in monitoring wells within the Pond mound average 224 mg/L. Therefore, the discharge has not caused exceedance of the most stringent potential water quality objective for protection of MUN beneficial uses, which is the short-term maximum secondary MCL of 1,500 mg/L.
- b. **Specific Conductance.** The specific conductance values for samples collected from monitoring wells MW-2 and MW-3 are less than the lower interquartile range (25th percentile) of the historical specific conductance values in samples collected from monitoring well MW-1. The median values of MW-2 and MW-3 are less than the median value of MW-1, which suggest there is no significant dissolved ionic constituent contribution from the Pond. The median specific conductance values in samples collected from each of the monitoring wells are below the California Department of Public Health (DPH) secondary drinking water MCL of 900 micromhos per centimeter (µmhos/cm) as a recommended level, and below 1,600 µmhos/cm as an upper level, and 2,200 µmhos/cm as a short-term maximum.
- c. The specific conductance values are stable, over time, in the three monitoring wells and appear to be consistent with specific conductance data collected from the USGS and DWR wells discussed above.
- d. **pH.** The pH values measured in the samples collected from monitoring wells MW-2 and MW-3 are generally greater than the upper bound of the 25th percentile for historical pH values in samples collected from monitoring well MW-1 (calculated using the hydrogen

ion concentration then converting back to pH). The median pH values in samples collected from each of the monitoring wells meet the U.S. Environmental Protection Agency (EPA) secondary drinking water MCLs of between 6.5 and 8.5 units.

The pH values are near neutral and stable over time in the three monitoring wells.

- e. **Turbidity.** The turbidity values (not required by the WDR) measured in samples collected from monitoring well MW-2 are within or less than the 25th percentile of the turbidity values in samples collected from monitoring well MW-1. The turbidity values in samples collected from well MW-3 are generally greater than the 25th percentile of the turbidity values in samples collected from monitoring well MW-1. The median turbidity values in samples collected from background monitoring well MW-1 and the other two monitoring wells are greater than the California and EPA primary MCL of 1 nephelometric turbidity unit (NTU). The wide range of inter- and intra-well turbidities suggests the turbidity may be a function of well design, development, and sampling, rather than influence from the Pond.

However, the turbidity values are stable over time in the three monitoring wells with no discernable increasing or decreasing trends.

- f. **Oil and Grease.** There are insufficient detections of oil and grease in the background well MW-1 to calculate a 25th percentile. Oil and grease has only been detected two times since 2008 in samples collected from monitoring wells MW-2 and MW-3, and no discernable trends are observed. No water quality goals are established for oil and grease.
- g. **Chemical Oxygen Demand.** There are insufficient detections of chemical oxygen demand (COD) in the background well MW-1 to calculate a 25th percentile. However, the median COD concentrations measured in samples collected from monitoring wells MW-2 and MW-3 are greater than the median COD concentration of samples collected from monitoring well MW-1, with the median concentration calculated using non-detected concentrations at half the detection limit. The COD concentrations in the dataset appear to be stable with no discernable trends observed. However, the COD concentrations in samples collected from monitoring well MW-3 generally have higher variability than in samples collected from monitoring well MW-2, which may be a function of distance from the Pond. Water quality goals have not been established for COD.
- h. **Tannins and Lignins.** Because tannins and lignins has not been detected in background well MW-1, it is not possible to calculate a background 25th percentile distribution. The median tannins and lignins concentrations in groundwater samples collected from monitoring wells MW-2 and MW-3 are 0.56 mg/l and 1.97 mg/l, respectively. Water quality goals have not been established for tannins and lignins.

The tannins and lignins concentrations are stable in the samples collected from monitoring wells MW-2 and MW-3 since 2010, but exhibited a slight increasing trend prior to 2010.

- 37. This Order establishes effluent and groundwater limitations for the Facility that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

- a. Limited groundwater data indicates that groundwater has been degraded beyond background groundwater quality by the previous discharge and the discharge could pose a threat of degradation in the future. The requirements of this Order do not allow degradation to occur above applicable water quality standards.
 - b. However no true downgradient compliance well has been established at the site, degradation so far has only been observed in the mounded water below the pond.
38. The Discharger provides treatment and control of the discharge that incorporates: Wastewater flow, and depth monitoring, visual inspections of; paved product and Log Deck storage areas, storm water/log deck sprinkler system collection ditches, floating debris weir, pond/berm monitoring and maintenance program, and a motorized debris sweeper to clean paved areas. These BMPs have been effective in minimizing degradation from facility's activities.

Other Regulatory Considerations

39. Pursuant to Water Code section 106.3, subdivision (a), it is "the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Although this Order is not necessarily subject to Water Code section 106.3 because it does not revise, adopt or establish a policy, regulation or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes that policy by requiring discharges to meet MCLs designed to protect human health and ensure that water is safe for domestic use.
40. Based on the current threat and complexity of the discharge, the facility will now be classified as 2C as defined below:
- a. Category 2 threat to water quality: "Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance."
 - b. Category C complexity, defined as: "Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal."
41. California Code of Regulations, title 27 (Title 27), prescribes requirements for the treatment, storage, processing, and disposal of solid waste. However, discharges regulated under this Order are exempt from Title 27 requirements pursuant to provisions that exempt domestic sewage, wastewater, and reuse. Title 27, section 20090 provides in pertinent part as follows:

The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

- (a) Sewage -Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division.
 - (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 applicable RWQCB has issued WDRs, reclamation requirements, 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 according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.
42. Discharges authorized herein are exempt from Title 27 (per § 20090, subd. (b)) in that they involve waste discharges to land that are: regulated under WDRs prescribed by the Central Valley Water Board; in all respects compliant with the operative Basin Plan; and not subject to management in accordance with Title 22, Chapter 11, Division 4.5.
43. In 2009, the EPA published *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance). The Unified Guidance indicates that it:
- ...is tailored to the context of the RCRA groundwater monitoring regulations ... [however, there are enough commonalities with other regulatory groundwater monitoring programs ... to allow for more general use of the tests and methods in the Unified Guidance... Groundwater detection monitoring involves either a comparison between different monitoring stations ... or a contrast between past and present data within a given station... The Unified Guidance also details methods to compare background data against measurements from regulatory compliance points ... [as well as] techniques for comparing datasets against fixed numerical standards ... [such as those] encountered in many regulatory programs.
- The statistical data analysis methods in the Unified Guidance are appropriate for determining whether the discharge complies with Groundwater Limitations of this Order.
44. The State Water Board's National Pollutant Discharge Elimination System General Permit for Storm Water Dischargers Associated with Industrial Activities (Industrial General Permit), Order 2014-0057-DWQ (NPDES General Permit CAS000001) prescribes WDRs for discharges of storm water associated with industrial activities; and requires submittal of a

Notice of Intent by all affected industrial dischargers. The Discharger has submitted a Notice of Non-Applicability (NONA) exempting coverage under Industrial General Permit.

45. Water Code section 13267, subdivision (b)(1) states:

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 or discharging, or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports 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 technical reports required by this Order and the separately-adopted Monitoring and Reporting Program R5-2018-0052 (incorporated herein) are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

46. The California Department of Water Resources (DWR) promulgates standards for the construction and destruction of groundwater wells (DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 97-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.
47. This Order prescribes additional WDRs for the continued operation of existing facilities (i.e., wastewater mgmt. systems) for the protection of the waters of the State. Accordingly, the adoption of this Order is exempt from the substantive provisions of the California Environmental Quality (CEQA), Public Resources Code section 21000 et seq., in accordance with section 15301 of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.).
48. The City of Oroville also previously determined that the operation of this facility does not require the County to undertake a discretionary approval CEQA.
49. On 7 July 2017 the City of Oroville also determined that the addition of the Bark Plant at the facility was categorically exempt from CEQA per Public Resources Code section 21080.
50. Pursuant to Water Code section 13263, subdivision (g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

51. All the above and the supplemental information in the attached Information Sheet, which is incorporated herein, were considered in establishing the following conditions of discharge.

52. The Discharger and interested agencies and persons have been notified of the Central Valley Water Board's intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.
53. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that WDR Order 5-00-207 is rescinded; and that, pursuant to Water Code sections 13263 and 13267, the Discharger, its agents, successors, and assigns shall comply with the following, so as to meet the provisions contained in Division 7 of the Water Code and regulations promulgated thereunder.

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as "hazardous" per Title 22, section 66261.1 et seq. is prohibited.
3. Discharge of waste classified as "designated" per Water Code section 13173, in a manner that causes a violation of the Groundwater Limitations under this Order, is prohibited.
4. Bypass around, or overflow from, the settling/recycling pond(s) or designated overflow pond(s) is prohibited.
5. Discharge of waste at a location or in a manner different from that described in the Findings enumerated herein is prohibited.
6. The discharge of toxic substances into the wastewater ponds such that biological treatment mechanisms are disrupted is prohibited.

B. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations under this Order.
2. Wastewater treatment, storage, and disposal shall not cause conditions of pollution or nuisance, per Water Code section 13050, subdivisions (l)-(m).
3. At all times, the discharge shall remain within the permitted wastewater conveyance structures and containment ponds.
4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

6. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.
7. As a means of ensuring compliance with Discharge Specification C.6, the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events. Notwithstanding the DO monitoring frequency specified in the monitoring and reporting program, If the DO in any single pond is below 1.0 mg/L for any single sampling event, the Discharger shall implement daily DO monitoring of that pond until the minimum DO concentration is achieved for at least three consecutive days. If the DO in any single pond is below 1.0 mg/L for three consecutive days, the Discharger shall report the findings to the Regional Water Board in accordance with General Reporting Requirement B.1 of the Standard Provisions and Reporting Requirements, 1 March 1991 ed. (SPRRs), which attached to and incorporated herein. The written notification shall include a specific plan to resolve the low DO results within 30 days of the first date of violation.
8. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any pond shall never be less than two (2) feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
9. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
10. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications C.8 and C.9.
11. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. The Discharger shall consult and coordinate with the Butte County Mosquito Vector and Control to maintain best management practices to control vector populations.
12. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
13. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.
14. The Discharger shall monitor debris accumulation in the wastewater storage ponds at least every five years, and shall periodically remove debris as necessary to maintain adequate

storage capacity. Specifically, if the estimated volume of debris in the reservoir exceeds five percent of the permitted reservoir capacity, the Discharger shall complete debris cleanout within 12 months after the date of the estimate.

C. Groundwater Limitations

Release of waste constituents from any portion of the Facility shall not cause groundwater to:

1. Contain constituents in concentrations that exceed either the Primary or Secondary MCLs established under Title 22.
2. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.
3. Compliance with these limitations shall be determined annually based on comparison of groundwater concentrations to applicable WQOs.

D. Solids Disposal Specifications

For the purposes of this Order: "sludge," means the solid, semisolid, and liquid organic matter removed from wastewater treatment, settling, and storage vessels or ponds; "solid waste" refers to solid inorganic matter removed by screens and soil sediments from washing of unprocessed fruit or vegetables; and except for waste solids originating from meat processing, "residual solids" means organic food processing byproducts such as culls, pulp, stems, leaves, and seeds that will not be subject to treatment prior to disposal or land application.

1. Sludge and solid waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal operation and adequate storage capacity.
2. Any handling and storage of sludge, solid waste, and residual solids shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.
3. If removed from the site, sludge, solid waste, and residual solids shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for reuse as animal feed, or land disposal at facilities (i.e., landfills, composting facilities, soil amendment sites operated in accordance with valid waste discharge requirements issued by a Regional Water Board) will satisfy this specification.
4. Any proposed change in solids use or disposal practice shall be reported in writing to the Executive Officer at least **180 days** in advance of the change.

E. Provisions

1. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be

exceeded in four years, the discharger shall notify the Central Valley Water Board by **31 January**.

2. In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.
3. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
4. The Discharger shall comply with separately-adopted Monitoring and Reporting Program (MRP) R5-2018-0052, which is also incorporated as part of this Order (as well as any subsequent revisions, as ordered by the Executive Officer). The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.
5. The Discharger shall comply with all applicable directives set forth in the SPRRs (incorporated herein).
6. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
7. At all times, the Discharger shall properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.
8. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.

9. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
10. In the event that the Discharger reports toxic chemical release data to the State Emergency Response Commission (SERC) pursuant to section 313 of the Emergency Planning and Community Right to Know Act (42 U.S.C. § 11023), the Discharger shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
11. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
12. In the event of any change in control or ownership of the Facility, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, and immediately forward this letter to the Central Valley Water Board.
13. To assume operation as Discharger 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, the name and 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 paragraph of Standard Provision B.3 of the SPRRs, 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, and a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
14. A copy of this Order and all its attachments (e.g., Information Sheet, SPRRs, etc.), and the operative MRP, shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
15. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 Title 23, section 2050 et seq.

The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, 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. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

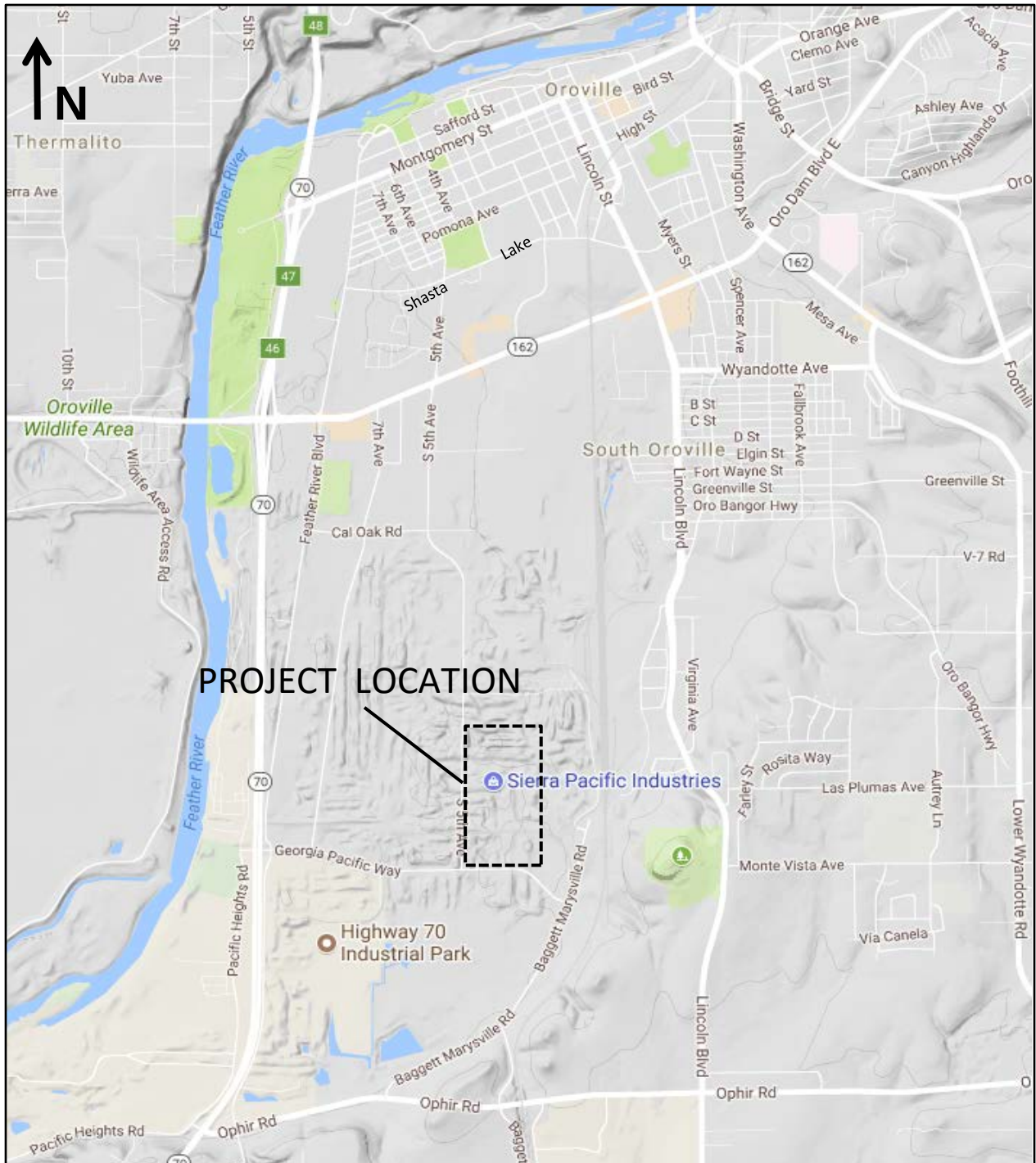
I, PATRICK PULUPA, Executive Officer, do hereby certify that the foregoing is a full true, and correct copy of an Order adopted by the California Regional Water Quality Control Board on 31 May 2018.

Original signed by

PATRICK PULUPA, Executive Officer

ORDER R5-2018-0052
SIERRA PACIFIC INDUSTRIES
OROVILLE CEDAR MILL
BUTTE COUNTY

ATTACHMENT A - LOCATION MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

LOCATION MAP

SIERRA PACIFIC INDUSTRIES
OROVILLE CEDAR MILL
BUTTE COUNTY

ATTACHMENT B – FACILITY MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

FACILITY MAP

SIERRA PACIFIC INDUSTRIES (SPI)
OROVILLE CEDAR MILL
WASTEWATER RECYCLE/DISPOSAL PONDS
BUTTE COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2018-0052

FOR

SIERRA PACIFIC INDUSTRIES
OROVILLE CEDAR MILL
BUTTE COUNTY

This Monitoring and Reporting Program (MRP), issued pursuant to Water Code section 13267, establishes requirements for monitoring Sierra Pacific Industries' (Discharger) discharge to an onsite recycle/disposal pond (Pond) at the Oroville Cedar Mill located at 3025 South 5th Avenue, in Oroville, California; Section 19, T19N, R4E, MDB&M (Facility). The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) or the Central Valley Water Board's Executive Officer.

A glossary of terms used in this MRP is included on the last page.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the onsite supply well specified in this MRP and indicated in Attachment B. Central Valley Water Board staff shall approve any proposed changes to flow monitoring locations prior to implementation of the change. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples shall be obtained at the monitoring points specified in this MRP and depicted on Attachment B. Central Valley Water Board staff shall approve any proposed changes to sampling locations prior to implementation of the change.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Location Name	Monitoring Location Description
MW-1 through MW-3	Locations as indicated on Attachment B of this order.
Pond	5 acre Recycle/stormwater pond southwest corner of property
Supply Well	New supply well, east side of property

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater.

The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, 1 March 1991 ed. (SPRRs).

Field test instruments (such as those used to measure pH, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA);
- *Test Methods for Evaluating Solid Waste* (EPA);
- *Methods for Chemical Analysis of Water and Wastes* (EPA);
- *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA);
- *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and
- *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125).

Approved editions shall be those that are approved for use by the U.S. Environmental Protection Agency (EPA) or the California Department of Public Health's (DPH) Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least 24 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate

technical justification for reduction in monitoring frequency. This monitoring program shall remain in effect unless and until a revised MRP is issued.

II. SPECIFIC MONITORING REQUIREMENTS

A. RECYCLE/STORM WATER POND MONITORING

Pond 1 used for storage, recycling, and disposal of wastewater shall be monitored as specified below. Dissolved oxygen monitoring applies to any pond containing more than two feet of standing water:

Constituent ¹	Units	Sample Type	Sample Frequency	Reporting Frequency
Freeboard ²	0.1 feet	Measurement	Monthly	Bi-annual
Berm condition	--	Observation	Monthly	Bi-annual
Dissolved Oxygen	mg/L	Grab	Monthly	Bi-annual
pH	units	Grab	Monthly	Bi-annual
EC	umhos/cm	Grab	Monthly	Bi-annual
Sulfate	mg/L	Grab	Quarterly	Bi-annual
COD	mg/L	Grab	Quarterly	Bi-annual
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly	Bi-annual
Tannins & Lignins	mg/L	Grab	Quarterly	Bi-annual
Standard Minerals ³	mg/L	Grab	Quarterly	Bi-annual
Copper (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Zinc (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Iron (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Manganese (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual

mg/L denotes milligrams per liter.

¹ Samples shall be collected opposite the pond inlet at a depth of one foot.

² Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet.

³ At a minimum, general minerals should include Na, K, Ca, Mg, Cl, and NO₃.

In addition, the Discharger shall inspect the condition of the ponds monthly and document visual observations. Notations shall include observations of:

- Presence of weeds in the water or along the berm;
- Accumulations of dead algae, vegetation, scum, or debris on the pond surface;
- Animal burrows in the berms;
- Evidence of seepage from the berms or downslope of the ponds;

B. GROUNDWATER MONITORING

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

The Discharger shall monitor groundwater quality as required herein from Monitoring Wells MW -1, MW-2 and MW-3 as indicated on Attachment B.

Groundwater Sampling and Analysis

Prior to purging or sampling, the groundwater depth shall be measured in each well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction.

Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Otherwise, each monitoring well shall be purged of at least 3 to 5 casing volumes until pH,

electrical conductivity and turbidity have stabilized prior to sampling. Groundwater monitoring for all monitoring wells shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Groundwater Elevation ^a	0.01 Feet	Calculated	Quarterly	Bi-annual
Depth to Groundwater	0.01 Feet	Measurement	Quarterly	Bi-annual
Gradient	Feet/Feet	Calculated	Quarterly	Bi-annual
Gradient Direction	degrees	Calculated	Quarterly	Bi-annual
pH	Std. Units	Grab	Quarterly	Bi-annual
EC	Umhos/cm	Grab	Quarterly	Bi-annual
COD	mg/L	Grab	Quarterly	Bi-annual
TDS	mg/L	Grab	Quarterly	Bi-annual
Tannins & Lignins	mg/L	Grab	Quarterly	Bi-annual
Standard Minerals ¹	mg/L	Grab	Quarterly	Bi-annual
Copper (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Zinc (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Iron (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual
Manganese (Total & Dissolved)	ug/L	Grab	Quarterly	Bi-annual

mg/L denotes milligrams per liter.

¹ At a minimum, general minerals should include Na, K, Ca, Mg, Cl, and NO₃.

a. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

C. SUPPLY WELL MONITORING

Flow volume shall be measured from a location that provides a representative sample of the flow rate.

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Meter	Continuous	Bi-annual
pH	Std. Units	Grab	Annual	Annual
EC	Umhos/cm	Grab	Annual	Annual
COD	mg/L	Grab	Annual	Annual
TDS	mg/L	Grab	Annual	Annual
Tannins & Lignins	mg/L	Grab	Annual	Annual
Standard Minerals ^a	mg/L	Grab	Annual	Annual
Copper (Total & Dissolved)	ug/L	Grab	Annual	Annual
Zinc (Total & Dissolved)	ug/L	Grab	Annual	Annual
Iron (Total & Dissolved)	ug/L	Grab	Annual	Annual
Manganese (Total & Dissolved)	ug/L	Grab	Annual	Annual

mg/L denotes milligrams per liter.

a. At a minimum, general minerals should include Na, K, Ca, Mg, Cl, and NO₃.

D. Solids Disposal Monitoring

The Discharger shall report the handling and disposal of all Pond solids (e.g., screenings, grit, bark, debris, etc.) generated at the facility and not otherwise sold as a byproduct. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the pond system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to:

centralvalleyredding@waterboards.ca.gov

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the subject line of the email:

SPI Oroville/Butte/WDR WDID # 5A042055001

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
364 Knollcrest Drive, Suite 205
Redding, CA 96002

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of the WDRs and this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. Pursuant to Section B.3 of the SPRRs, the transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

Laboratory analysis reports do not need to be included in the monitoring reports; however, all laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3 (SPRRs). For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

In addition to the requirements of Standard Provision C.3 (SPRRs), monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports 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 Business and Professions Code sections 6735, 7835, and 7835.1.

In the future, the State Water Board or Central Valley Regional Water Board may require electronic submittal of monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>) or similar

system. Electronic submittal to CIWQS, when implemented, will meet the requirements of our Paperless Office System.

A. BI-ANNUAL MONITORING REPORTS

Bi-Annual monitoring reports shall be submitted to the Board by the **1st day of the second month after the 2nd and 3rd quarters** (i.e. the January-June report is due by **August 1st**). Each Bi-Annual Monitoring Report shall include the following:

1. Results of Groundwater Monitoring, if performed during the quarter, including:
 - a. A narrative description of all preparatory, monitoring, sampling, and sample handling for groundwater monitoring.
 - b. A field log for each well documenting depth to groundwater; method of purging; parameters measured before, during, and after purging; sample preparation (e.g., filtering); and sample preservation.
 - c. Calculation of the groundwater elevation at each monitoring well, and determination of groundwater flow direction and gradient on the date of measurement.
 - d. Summary data tables of historical and current water table elevations and analytical results.
 - e. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells, surface waters, and groundwater elevation contours referenced to an appropriate datum (e.g., NGVD).
2. Results of and Sludge/Biosolids Monitoring, if applicable, and verification of classification of biosolids as nonhazardous per 22 CCR, Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Waste (California Assessment Manual procedures).
3. Copies of laboratory analytical report(s).
4. A comparison of monitoring data to the groundwater limitations, and discharge specifications and an explanation of any violation of those requirements.
5. A copy of inspection log page(s) documenting inspections completed during the quarter.
6. A copy of calibration log page(s) verifying calibration of all hand-held monitoring instruments performed during the quarter.

B. ANNUAL MONITORING REPORTS

The second Bi-Annual Monitoring Report will serve as an **Annual Monitoring Report**. The Annual Monitoring Report for each calendar year shall include the following in addition to the items listed above.

1. Effective 2018, and every five years thereafter, an evaluation of sludge depth and sludge removal plans pursuant to Discharge Specification B.14.
2. Concentration vs. time graphs for each monitored constituent using all historic groundwater monitoring data. Each graph shall show the background groundwater concentration range, the trigger concentration specified above, and the Groundwater Limitation as horizontal lines at the applicable concentration.

3. Sludge monitoring results, if sludge were removed for off-site disposal during the year.
4. A summary of all sludge analytical data and verification of compliance with the sludge monitoring requirements.
5. A summary of information on the disposal of sludge and/or solid waste during the calendar year.
6. An evaluation of the performance of the Facility, including discussion of capacity issues, infiltration and inflow rates, nuisance conditions, and a forecast of the flows anticipated in the next year, as described in Standard Provision E.1.
7. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
8. Monitoring equipment maintenance and calibration records, as described in Standard Provision C.4.
9. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of a Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region, on 31 May 2018.

Original signed by

PATRICK PULUPA, Executive Officer

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CaCO ₃	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Daily	Every day
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Bimonthly	Once every two calendar months (i.e., six times per year) during non-consecutive months.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year.
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
MTF	Multiple tube fermentation

INFORMATION SHEET

ORDER R5-2018-0052
SIERRA PACIFIC INDUSTRIES
OROVILLE CEDAR MILL
BUTTE COUNTY

Background

Sierra Pacific Industries (hereafter “Discharger”) owns and operates a facility that generates wastewater, that has a land discharge to an onsite unlined recycle/disposal pond (Pond) and that requires Waste Discharge Requirements (WDRs). The facility is located at 3025 South 5th Avenue, in Oroville, CA, Section 19, T19N, R4E, MDB&M. The facility occupies Assessor’s Parcel Numbers (APN) 035-440-020, as shown on Attachment A, which is attached hereto and made part of this Order by reference.

WDRs Order 5-00-207, adopted by the Central Valley Water Board on 15 September 2000, prescribes requirements for the discharge. Order 5-00-207 did not specify a flow of wastewater for the Facility. The WDR for the Facility is considered backlogged as the permit was due for renewal in 2015. Therefore, Order 5-00-207 will be rescinded and replaced with this Order.

EXISTING FACILITY

The Facility lies in the northeast portion of the Sacramento Valley near the western Sierra Nevada foothills at an elevation of approximately 160 feet above mean sea level. The nearest surface water is the Feather River, located approximately 1 mile west of the Facility. Topographic relief of the area is relatively flat to gently southwest sloping.

Facility receives raw cedar logs that are stored on its 21 acre paved log deck prior to processing. While stored on the log deck approximately 865,000 gallons/day (gpd) of onsite well water are sprinkled over the logs. This flow volume either absorbs into the logs, evaporates, or runs off the log deck to the Pond. With two feet of freeboard the pond has approximately 14 acre feet of storage capacity. The logs are removed from the log deck as needed for processing in the saw mill.

The processing operation consists of de-barking and dimension milling of primarily fencing products. Milled cedar lumber is treated indoors, in a closed process, with Kop-Coat NP-1©, anti-sap stain and wood preservative that contains didecyl dimethyl ammonium chloride (a disinfectant) and 3-iodo-2-propynyl butyl carbamate (a preservative). Lumber is submerged in this product for approximately 2 minutes, raised and allowed to drip over the drip tank and drip pans. Residual product that collects in the drip pan is returned to the dip tank by means of a sump pump. No supply water is used in the treatment operations and all chemicals used in the treatment process are recycled in the closed system. Treated and dried lumber is then wrapped and stacked outdoors on an asphalt paved area prior to shipping. Approximately 83 million board feet of lumber are produced at the facility each year.

FACILITY DISCHARGE

The discharge/recycle system consists of a bark and debris concrete capture basin and one unlined pond. The log deck is sprinkled continuously from an onsite well. The sprinkler system pumps fresh groundwater and/or water from the Pond over the unprocessed logs. Less than <2 % of this water drains to the paved log deck where it then gravity flows into a concrete capture basin before entering the Pond. After entering the Pond the water mixes with stormwater (seasonally) in the Pond and either evaporates, percolates or is pumped back via the sprinkling system atop the log deck. All other wastewater (sinks, toilets, drinking fountains, and truck wash clarifier) is captured and sent via municipal sewer line to the WWTP facility in Oroville for treatment.

The facility has added a bark processing plant. The plant will not utilize any supply water or discharge any process wastewater as a function of its operations. In a letter dated July 7, 2017 the City of Oroville determined that the addition of the bark plant was categorically exempt from CEQA under Section 21080 of the Public Resources Code. The bark plant, which was not covered in the previous permit, will not generate a process wastewater discharge from its operations. However, some additional stormwater will be generated from the proposed 10 acre bark processing plant and that water will be routed to the existing log deck Pond for reuse.

Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), and nutrients as summarized below:

Constituent	Average Concentrations (mg/L)			
	Effluent ¹	Background Groundwater ²	Downgradient Groundwater ³	Potential Water Quality Objective
TDS	--	230	224	450 ⁴ to 1,500 ⁸
Specific Conductance	--	312	289	700 ⁵ to 900 ⁸
pH	--	6.7	7.2	6.5 to 8.5 ⁸
Turbidity	--	9.2	351	1 to 5 ⁸
Oil & Grease	--	<1.4	1.6	--
COD	--	<3	47	--
Tannins & Lignins		<0.10	3.78	--

¹ No Pond data was required in the original permit.

² Compiled from NW-1, data collected 2010-2017.

³ Compiled from MW-2 & MW-3, data collected from 2010-2017.

⁴ Lowest agricultural water quality goal.

⁶ Primary Maximum Contaminant Level.

⁷ Secondary Maximum Contaminant Level.

⁸ Secondary Maximum Contaminant Level range.

GROUNDWATER CONDITIONS

The average depth to the shallow groundwater, based on the last 3 years of sampling data from onsite monitoring wells, is 17 feet in monitoring well MW-1, 10 feet in monitoring well MW-2 and

7 feet in monitoring well MW-3. The groundwater flow direction is generally northeast under hydraulic gradients generally ranging from 0.006 feet per foot (ft/ft) to 0.02 ft/ft. Based on historical groundwater surface elevation measurements, the groundwater appears to be mounded in the immediate vicinity of the pond, which may be inducing a limited localized gradient and flow direction. Regional flow is generally to the west/southwest towards the Feather River.

The United States Geological Survey (USGS) National Water Information System Web Interface identified two wells in the vicinity of the facility. One well was approximately 1-mile northeast of the facility and reported to be 335 feet deep with samples collected between 1957 and 2006. In general, total dissolved solids (TDS) concentrations range from 240 to 270 milligrams per liter (mg/l) and specific conductance ranges from 380 to 400 micro Siemens per centimeter (uS/cm).

The second well was approximately 500 feet northeast of the facility and reported to be 152 feet deep with samples collected between 1958 and 1987. In general, TDS concentrations range from 260 to 300 mg/l, specific conductance ranges from 380 to 430 uS/cm.

Based on the depth of the wells, they are assumed to be perforated or screened in the Laguna Formation, which occurs beneath the alluvium in the vicinity of the Feather River (DWR, 2014).

BASIN PLAN, BENEFICIAL USES, AND REGULATORY CONSIDERATIONS

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, revised July 2016 (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. The beneficial uses of underlying groundwater as set forth in the Basin Plan are Industrial Process Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), Industrial Process Supply (PRO).

ANTIDEGRADATION

Three groundwater monitoring wells were installed at the facility in 2001. Based on the data available, it is not possible to determine pre-1968 groundwater quality. Therefore, determination of compliance with Resolution 68-16 for this Facility must be based on existing background groundwater quality.

The discharge and the potential for groundwater degradation allowed in this Order is consistent with the Antidegradation Policy since; (a) The degradation is consistent with the maximum benefit to the people of the state, (b) The degradation will not unreasonably affect present and anticipated future beneficial uses, (c) The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and (9)The discharger employs best practicable treatment or control (BPTC) to minimize degradation.

CEQA

The adoption of this Order for a wastewater recycle/disposal system is categorically exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15301, which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review.

TITLE 27

California Code of Regulations, title 27 (Title 27), prescribes requirements for the treatment, storage, processing, and disposal of solid waste. However, discharges regulated under this Order are exempt from Title 27 requirements pursuant to provisions that exempt domestic sewage, wastewater, and reuse. Title 27, section 20090 provides in pertinent part as follows:

The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

- (a) Sewage -Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division.
- (b) Wastewater -Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:
 - (1) the applicable RWQCB has issued WDRs, reclamation requirements, 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 according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

Proposed Order Terms and Conditions

DISCHARGE PROHIBITIONS, SPECIFICATIONS AND PROVISIONS

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.
3. Discharge of waste classified as 'designated', as defined in CWC Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
4. Bypass around, or overflow from, the settling/recycling pond(s) or designated overflow pond(s) is prohibited.
5. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
6. The discharge of toxic substances into the wastewater ponds such that biological treatment mechanisms are disrupted is prohibited. Discharge of solid or liquid waste or pollutants, including solvents, oil, grease, or other petroleum products, to surface water, or surface water drainage courses is prohibited.

MONITORING REQUIREMENTS

Section 13267 of the California Water Code authorizes the Central Valley Water Board to require the Discharger to submit monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State.

The proposed Order includes Influent, Pond, groundwater, and solids monitoring. This monitoring is necessary to monitor the discharge, evaluate compliance with limitations prescribed by this Order.

REOPENER

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. The proposed Order would set limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the order.

LEGAL EFFECT OF RESCISSION OF PRIOR WDRS OR ORDERS ON EXISTING VIOLATIONS

The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;
 - d. A material change in the character, location, or volume of discharge.
4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:
 - a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.
 - b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.
 - c. The addition of a major industrial, municipal or domestic waste discharge facility.
 - d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

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5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.
6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentations of credentials, to:
 - a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,
 - b. Copy any records required to be kept under terms and conditions of this Order,
 - c. Inspect at reasonable hours, monitoring equipment required by this Order, and
 - d. Sample, photograph and video tape any discharge, waste, waste management unit, or monitoring device.
9. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.
11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.
12. The discharge shall remain within the designated disposal area at all times.

B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at **(916) 464-3291** *[Note: Current phone numbers for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.]* as soon as it or its agents

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have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within **two weeks**. The written notification shall state the nature, time and cause of noncompliance, and shall include a timetable for corrective actions.

2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events.

This plan shall:

- a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.
- b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes of contingency plans.
- c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
 - (1) the authorization is made in writing by a person described in 3a, 3b or 3c of this provision;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) the written authorization is submitted to the Board

Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.
5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

*Note: Current addresses for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.
or the current address if the office relocates.*

C. Provisions for Monitoring:

1. All analyses shall be made in accordance with the latest edition of: (1) *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA 600 Series) and (2) *Test Methods for Evaluating Solid Waste* (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).
2. Chemical, bacteriological, and bioassay analysis shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified 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 must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board.

Unless otherwise specified, all metals shall be reported as Total Metals.

3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to

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complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Record of monitoring information shall include:

- a. the date, exact place, and time of sampling or measurements,
 - b. the individual(s) who performed the sampling of the measurements,
 - c. the date(s) analyses were performed,
 - d. the individual(s) who performed the analyses,
 - e. the laboratory which performed the analysis,
 - f. the analytical techniques or methods used, and
 - g. the results of such analyses.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.
 5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.
 6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources *Bulletin 74-81* and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.
 - b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.
2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or a certified engineering geologist must

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certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.

3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.
4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or a California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 Under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.
2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that 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 by-pass. Severe property damage does not mean economic loss caused by delays in production); and
 - (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance; or
 - b. (1) by-pass is required for essential maintenance to assure efficient operation; and
 - (2) neither effluent nor receiving water limitations are exceeded; and
 - (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:

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- a. an upset occurred and the cause(s) can be identified;
- b. the permitted facility was being properly operated at the time of the upset;
- c. the discharger submitted notice of the upset as required in paragraph B.1. above; and
- d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.
5. 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 disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
6. Definitions

- a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with 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 action.
- b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.

- c. The monthly average concentration is the arithmetic mean of measurements made during the month.
- d. The "daily maximum" **discharge** is the total discharge by volume during any day.

- e. The “daily maximum” **concentration** is the highest measurement made on any single discrete sample or composite sample.
- f. A “grab” sample is any sample collected in less than 15 minutes.
- g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;
 - (1) at equal time intervals, with a maximum interval of one hour
 - (2) at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted **by 28 February** and include, but not be limited to, the following items:

- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any

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additional limitations, or changes to existing requirements, may be necessary to prevent Pass Through, Interference, or noncompliance with sludge disposal requirements.

- c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
- d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:
 - (1) Complied with baseline monitoring report requirements (where applicable);
 - (2) Consistently achieved compliance;
 - (3) Inconsistently achieved compliance;
 - (4) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);
 - (5) Complied with schedule to achieve compliance (include the date final compliance is required);
 - (6) Did not achieve compliance and not on a compliance schedule;
 - (7) Compliance status unknown.

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be **submitted quarterly from the annual report date** to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

- e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.

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- f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:
 - (1) Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;
 - (2) Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (3) Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (4) Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.
 - (5) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;
 - (6) Restriction of flow to the treatment plant; or
 - (7) Disconnection from discharge to the treatment plant.
- g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority of enforcement policy; funding mechanisms; resource requirements; and staffing levels.
- h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
- i. A summary of public participation activities to involve and inform the public.
- j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

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Regional Administrator
U.S. Environmental Protection Agency W-5
75 Hawthorne Street
San Francisco, CA 94105

and

State Water Resource Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

Revised January 2004 to update addresses and phone numbers