

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2019-0014

WASTE DISCHARGE REQUIREMENTS

FOR
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

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

Background

1. On 5 January 2016, WZI Inc., on behalf of Sierra Forest Products (hereafter Discharger or Sierra Forest) submitted a Report of Waste Discharge (RWD) for Sierra Forest's Terra Bella Sawmill Facility (Facility). Additional addendums to the RWD were submitted on 29 April 2016, 4 May 2016, and 6 May 2016. The RWD and RWD addendums were signed and stamped by Richard B. Wilson (RCE 84164) to continue spraying water on wooden logs (wet decking) to maintain moisture conditions on the logs.
2. Sierra Forest owns and operates the Facility, which is at 9000 Road 234 in Terra Bella (Section 3, Township 23 South, Range 27 East, MDB&M). The Facility occupies Assessor Parcel Numbers (APNs) 320-122-002, 320-122-003, 320-122-004, 320-122-005, 320-122-008, 320-122-012, 320-122-014, 320-122-015, 320-122-016, 320-122-018, and 320-122-017. A Site Location Map is shown on **Attachment A**, which is incorporated by reference and considered a part of this Order.
3. WDRs Order 85-248, adopted by the Central Valley Water Board on 27 September 1985, prescribes requirements for the discharge of wastewater generated by both the Sierra Power Corporation cogeneration plant and Sierra Forest Products Terra Bella Sawmill Facility into an unlined pond and to 15 acres of adjacent land for irrigation. WDRs Order 85-248 includes a 30-day average daily dry weather discharge flow of 0.2 million gallons per day (mgd) for the cogeneration plant. The cogeneration plant ceased operation in January 2014 and has since been decommissioned. The 15 acres of land formally used for irrigation is now the location where the logs are stored, and where wet decking takes place.
4. On 28 July 2016, the Central Valley Water Board Executive Officer issued revised Monitoring and Reporting Program (MRP) 85-248 to gather more information and characterize the wastewater generated by the sawmill facility.
5. WDRs Order 85-248 needs to be updated to ensure the discharge is consistent with Central Valley Water Board plan and policies and prescribes requirements that reflect

changes the Discharger has made to the Facility. WDRs Order 85-248 will be rescinded and replaced with this Order.

Facility and Discharge

6. The Facility is a lumber processing facility that operates year-round, Monday through Friday for a one 8-hour shift. Operations at the Facility consist of debarking, sawing, edging, trimming, drying, and planning logs. The Facility produces about 45 million board feet per year of lumber.
7. Discharge at the Facility consists of storing water from the Terra Bella Irrigation District in the unlined pond and using the water for wet decking and dust control. The unlined pond is 340 feet (wide) by 340 feet (long) by 30 feet (deep) and has a volumetric capacity of 24.21 million gallons with two feet of freeboard. The unlined pond is in the southwestern portion of the property. Wet decking creates run-off that is collected in culverts and directed back to the unlined pond. In addition, any stormwater from the Facility is directed to the unlined pond. The natural gas boiler at the Facility produces steam that flows into the kilns that dry the lumber. The steam condenses back to water and is recycled in the natural gas boiler. Boiler blowdown is generated and collected in a tank prior to being pumped by water trucks and discharged into the unlined pond. Sierra Forest recirculates water in the unlined pond for wet decking. When the water level in the unlined pond is low, water from the Terra Bella Irrigation District is used as supplemental water to fill the unlined pond. A Facility Layout Map, Sawmill Operations Schematic and Water Flow Schematic are shown on **Attachments B, C and D**, respectively, which are incorporated by reference and considered a part of this Order.
8. The Discharger currently does not have a method for measuring the volume of run-off that flows from the wet-decking area to the unlined pond. WDRs Order 85-248 states that the Facility generated approximately 19,000 gpd by log deck spray. It is unclear if the unlined pond has sufficient capacity to fully contain and dispose of all wet decking run-off and stormwater in the event of a 100-year storm event. This Order requires the Discharger to submit a water balance demonstrating its unlined pond has adequate storage capacity for its current operation. Furthermore, this Order requires the Discharger to maintain a minimum of two feet of freeboard for the unlined pond unless a California registered civil engineer certifies less free board is adequate.
9. Sierra Forest obtains its source water from the Terra Bella Irrigation District. Terra Bella Irrigation District obtains its water mainly from the Friant-Kern Canal and occasionally supplements with groundwater wells during maintenance of the Friant-Kern Canal. There is a total of nine active wells (Wells 50, 72, 76, 77, 80, 84, 85, 86, and 87) as well as standby wells (Wells 63, 64, 74, and 78). Source water quality from the 2013 through 2017 annual consumer confidence reports are tabulated in Table 1. Where bold, the iron concentration in the source water for 2017 exceeded the Secondary Maximum Contaminant Level (MCL) of 0.3 mg/L for iron.

Table 1. Source Water Quality

Constituent/Parameter	Unit	2013	2014	2015	2016	2017
Copper	mg/L	0.25 ¹	0.1 ¹	0.1 ¹	0.1 ¹	0.16 ¹
Hardness	mg/L	10.4	29	23	15	18
Sodium	mg/L	3.2	5.8	5.1	4	4.3
Aluminum	mg/L	0.05	0.06	---	---	0.06
Arsenic	mg/L	0.002	---	0.0022	---	---
Nitrate as NO ₃	mg/L	2	2.5	ND	---	---
Chloride	mg/L	1.8	3.3	3.6	2	2.4
Iron	mg/L	0.107	0.246	0.140	0.115	0.324
Manganese	mg/L	0.022	0.034	0.02	0.028	0.0205
Electrical Conductivity (EC)	umhos/cm	38	63	72	50	56.6
Sulfate	mg/L	2.3	3.6	1.4	4.2	2.6
Total Dissolved Solids	mg/L	25	49	46	36.5	43.3
Zinc	mg/L	0.05	0.05	---	0.1	52

¹ Concentration detected at 90th percentile level out of ten samples.

10. The Facility has a dedicated flow meter that measures the source water used to fill the unlined pond. Data provided in the March 2016 to April 2018 Self-Monitoring Reports (SMRs) shows the volume of source water that was used to fill the unlined pond ranged from 4,518 gallons per month to 7.42 million gallons per month, and averaged 2.9 million gallons per month.
11. Based on data provided in the March 2016 to June 2018 SMRs, the quality of effluent in the unlined pond is shown in Table 2. WDRs Order 85-248 does not prescribe effluent metal limits. Where bold, the constituent concentrations are greater than their respective MCLs.

Table 2. Effluent Quality

Constituent/Parameter	Units	Ave	Min	Max	Count	MCL
pH	pH units	---	7	9	19	---
Electrical Conductivity (EC)	umhos/cm	310	203	635	22	900 ²
Oil & Grease	mg/L	---	<0.76	<0.86	5	---
Tannins & Lignins	mg/L	11.6	11.6	11.6	1	---
Biochemical Oxygen Demand	mg/L	7.3	<2	8.8	4	---
Total Suspended Solids	mg/L	20	15	28	4	---
Arsenic	mg/L	0.012	<0.046	0.013	3	0.01 ¹
Alkalinity	mg/L	76	52	110	4	---
Bicarbonate	mg/L	84	56	110	3	---
Calcium	mg/L	13	9	21	3	---
Carbonate	mg/L	<4.1	<4.1	<4.1	4	---

Constituent/Parameter	Units	Ave	Min	Max	Count	MCL
Chloride	mg/L	39	13	110	5	175 ²
Hardness	mg/L	49	31	82	3	---
Magnesium	mg/L	4.2	2.4	7.3	3	---
Potassium	mg/L	47	30	64	2	---
Sodium	mg/L	28	8	63	3	---
Sulfate	mg/L	2.4	0.4	5.8	4	250 ²
Total Dissolved Solids	mg/L	320	240	480	4	500 ²
Nitrate as N	mg/L	0.17	<0.021	0.30	3	10 ¹
Phosphate	mg/L	20	17	23	4	---
Barium	mg/L	0.041	0.026	0.053	3	1.0 ¹
Boron	mg/L	0.105	0.036	0.170	3	---
Iron	mg/L	0.80	0.58	1.10	4	0.3 ²
Manganese	mg/L	0.10	0.01	0.17	3	0.05 ²
Zinc	mg/L	0.021	0.021	0.021	1	5.0 ²
Chemical Oxygen Demand	mg/L	230	230	230	1	---

1 Denotes Primary Maximum Contaminant Level
 2 Denotes Secondary Maximum Contaminant Level

12. Based on analytical data provided in the March 2016 through June 2018 SMRs, arsenic, iron, and manganese concentrations in the effluent averaged 0.012 mg/L, 0.80 mg/L, and 0.10 mg/L, respectively, exceeding their respective MCLs as show in Table 2. In 2017, iron concentrations in the source water were reported as 0.324 mg/L, exceeding the iron MCL of 0.3 mg/L. Source water may be contributing to elevated concentrations of iron in the effluent. This Order includes a Metal Evaluation and Minimization Plan (Provision E.10) requiring the Discharger to identify and eliminate/reduce the sources of metals in the runoff water.
13. Chemicals used at the Facility include: Alkapro 25 (alkalinity adjuster) (10.78 gal/month), boiler shield 2725 (7.50 gal/month), triton 5330 (pH adjuster) (1.0 gal/month), BWT 101 (Sulfite adjuster) (90 cups/month), and BWT 5240 (Phosphate adjuster) (8 cups/month).
14. Domestic wastewater is discharged separately to an existing on-site septic tank/leachfield.
15. Products produced at the Facility consist of decorative landscape chips and agricultural potting soil.

Site-Specific Conditions

16. Land uses in the vicinity of the Facility are primarily agricultural. Crops grown in the area include pistachios and oranges, according to the Tulare County 2007 Land Use Maps published by the Department of Water Resources.
17. The Facility is in an arid climate characterized by dry summers and mild winters. The rainy season generally extends from November through May. Average annual pan evaporation

is about 70 inches in Porterville (approximately 7.5 miles north of Terra Bella) according to data in Bulletin 73-79, *Evaporation from Water Surfaces in California*, published by the Department of Water Resources in November 1979. The average annual precipitation is about 11 inches in Porterville according to data obtained from the Western Regional Climate Center.

18. The predominant soil types below the Facility are San Joaquin Loam and Centerville Clay, according to the Web Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service. San Joaquin Loam and Centerville Clay both have irrigated capability classification of 3e. Soils with “Class 3” have severe limitations that restrict the choice of plants or require special conservation practices, or both. The subclass “e” shows that the main problem is the hazard of erosion unless close-growing plant cover is maintained. The susceptibility to erosion and past erosion damage are the major soil-related factors affecting the soils that are assigned this subclass.
19. According to the June 2009 Federal Emergency Management Agency maps (Map Number 06107C1958E), the Facility is in Zone X. Areas in Zone X are outside of the 1 percent annual chance floodplain. No depth or base flood elevations are shown in the FEMA maps for this zone.

Groundwater Considerations

20. The Discharger does not have a groundwater monitoring well network at the Facility.
21. Groundwater is found at a depth of about 140 feet below ground surface (bgs), according to the RWD (*Lines of Equal Depth to Water in Wells Unconfined Aquifer*, published by the Department of Water Resources in Spring 2010).
22. Regional groundwater in the area flows in the southwest direction according the *Lines of Equal Elevation of Water in Wells Unconfined Aquifer*, published by the Department of Water Resources in Spring 2008.
23. Historical groundwater data from nearby wells within a three-mile radius, as shown in Table 3, indicates that shallow groundwater in the area is of good quality with respect to EC, nitrogen, arsenic, iron, and manganese.

Table 3. Groundwater Quality from Nearby Wells

Well Number	Well Depth (ft bgs)	Date Sampled	EC (umhos/cm)	Nitrate as N (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Chloride (mg/L)	Arsenic (mg/L)	Iron (mg/L)	Manganese (mg/L)
23S27E4A001M ¹	250	8/6/1958	356	1.02	28	2	22	---	---	---
23S27E5A001M ¹	352	9/1/1956	240	0.181	24	1.6	7.1	---	---	---
23S27E5H002M ¹	300	12/17/2014	395	4.65	26.6	1.94	30.1	0.001	<0.004	<0.0004
22S27E36C001M ¹	480	3/7/1957	475	7.23	55	2.4	25	---	---	---
Primary/Secondary MCLs			900	10	n/a	n/a	250	0.010	0.3	0.05

¹ United States Geological Survey National Water Information System: Mapper

Basin Plan, Beneficial Uses, and Water Quality Objectives

24. The *Water Quality Control Plan for the Tulare Lake Basin, Third Edition (revised May 2018)* (hereinafter Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives, contains implementation plans and policies for protecting all waters of the basin, and incorporates, by reference plans and policies of the State Water Resources Control Board (State Water Board). In accordance with Water Code section 13263(a), these waste discharge requirements implement the Basin Plan.
25. The Facility is in Detailed Analysis Unit (DAU) No. 243, within the Tule Lake Basin hydrologic unit. The Basin Plan identifies the beneficial uses of groundwater in the DAU as municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO), and wildlife habitat (WILD).
26. The Facility is in the Tule Delta Hydrologic Area No. 558.20 of the South Valley Floor Hydrologic Unit, as depicted on hydrologic maps prepared by the State Water Board, revised in August 1986. The Basin Plan designates surface waters within Hydrologic Unit 558 as Valley Floor Waters. As indicated in the Basin Plan, the beneficial uses of Valley Floor Waters are: agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO), water contact recreation (REC-1), non-water contact recreation (REC-2), warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), and groundwater recharge (GWR).
27. The Basin Plan includes narrative water quality objectives for chemical constituents that, at a minimum, require water designated as domestic or municipal supply to meet the Maximum Contaminant Levels (MCLs) specified in Title 22 of the California Code of Regulations (hereafter 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 Basin Plan establishes narrative water quality objectives for chemical constituents, taste and odors, and toxicity in groundwater. The narrative toxicity objective, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses.
29. Quantifying a narrative water quality objective 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, on a case-by-case basis, adopt a numerical limitation in order to implement the narrative objective.
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 Ayer and Westcot and similar reference indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 umhos/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 umhos/cm if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

31. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until there is a long-term solution to the salt imbalance. Until then, the Basin Plan establishes several salt management requirements, including:
 - a. The maximum electrical conductivity (EC) in the effluent discharged to land shall not exceed the EC of the source water plus 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.
 - b. Discharges to areas that may recharge to good quality groundwater; shall not exceed an EC of 1,000 umhos/cm, a chloride of 175 mg/L, or a boron content of 1.0 mg/L. This set of limits is specific to municipal discharges, but the Basin Plan generally applies these limits to industrial discharges to land.

Antidegradation Analysis

32. State Water Resources Control Board's (State Water Board) *Statement of 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 such degradation:
 - a. Will not unreasonably affect present and anticipated beneficial uses;
 - b. Will not result in water quality less than that prescribed in state and regional policies, (including violation of one or more WQOs);
 - c. Will be minimized by the discharger through best practicable treatment or control (BPTC) to minimize degradation; and
 - d. Will be consistent with the maximum benefit to the people of the State.
33. Constituents of concern that have the potential to degrade and pollute groundwater include salts and metals (arsenic, iron, and manganese).
 - a. For salinity, with a source water EC plus 500 umhos/cm ranging from 538 to 572 umhos/cm and an average effluent EC of 310 umhos/cm, the discharge meets the Basin Plan effluent EC limits of source plus 500 umhos/cm limit and the cap of 1,000 umhos/cm. This Order carries over the 500 umhos/cm plus source effluent limitation for EC to ensure the Discharger continues to minimize the amount of salinity the Facility adds to the runoff water.

- b. For metals, specifically arsenic, iron, and manganese, groundwater in the area is of good quality based on data from one well about two miles northeast of the Facility. Arsenic, iron, and manganese in the discharge averages 0.012 mg/L, 0.80 mg/L, and 0.10 mg/L, respectively, exceeding their respective MCLs. This Order requires the submittal of a Metal Evaluation and Minimization Plan (Provision E.10) requiring the Discharger to identify and eliminate/reduce the sources of metals in the runoff water.
34. The Discharger provides, or will provide required by this Order, the following treatment and control of the discharge that incorporates:
 - a. The collection of storm water by culverts placed along the wet decking area to divert stormwater to the onsite pond.
 - b. An effluent limitation for EC of 500 $\mu\text{mhos/cm}$ plus source water or 1,000 $\mu\text{mhos/cm}$, whichever is less;
 - c. Source water, dust control application, and pond monitoring; and
 - d. Preparation and implementation of a Metal Evaluation and Minimization Plan to address sources of elevated iron, manganese, and arsenic concentration in the unlined pond (as required by Provision E.10).

These control practices are reflective of BPTC of the discharge.

35. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State. The Discharger aids in the economic prosperity of the region by the direct employment and provides a tax base for local and state governments. Provided the discharge complies with State and Central Valley Water Board plans and policies, there is sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.
36. This Order establishes terms and conditions to ensure that the discharge does not unreasonably affect present and anticipated future beneficial uses of groundwater or result in groundwater quality worse than background or the water quality objectives set forth in the Basin Plan.
37. This Order is consistent with the Antidegradation Policy since: (a) the Discharger has or will implement BPTC to minimize degradation, (b) the limited degradation allowed by this Order will not unreasonably affect present and anticipated future beneficial uses of groundwater, or result in water quality less than water quality objectives, and (c) the limited degradation is of maximum benefit to the people of the State.

Other Regulatory Considerations

38. 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.

39. Based on the threat and complexity of the discharge, the Facility is determined to 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: "Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13262 of the Water code not included in Category A or Category B as described above. 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."
40. The discharge of waste authorized under this Order is exempt from the prescriptive requirements set forth in California Code of Regulation, title 27, section 20090 et seq. (See Cal. Code. Regs., tit. 27, section 20090, subd. (b).)
41. The Facility's storm water collection system is divided into two sections. Storm water in the north portion of the Facility drains to the northwest corner of the Facility and discharges to Deer Creek, a water of the United States. Storm water in the south portion of the Facility drains to the unlined pond. The Discharger applied for and received coverage under the Statewide General Permit for Storm Water Discharges Associated with Industrial Activities, State Water Board Order 2014-0057-DWQ, NPDES Permit No. CAS000001 on 1 June 2015 (WDID # 5F54I001607) for the discharge of industrial stormwater from the Facility to Deer Creek.
42. Water Code section 13267, subdivision (b)(1) provides as follows:

In conducting an investigation ... the regional board may require that any person who has discharged, discharges, or ... proposes to discharge ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.
43. Technical reports required under this Order (and per the separately-issued Monitoring and Reporting Program Order R5-2019-0014) are necessary to assure compliance with these WDRs. Additionally, the burden of producing such reports, as estimated by Central Valley Water board staff, is also reasonably related to the need for such reports.

44. The ability to discharge waste to the waters of the State of California is not a right but a privilege. (See Wat. Code, section 13263, subd. (g).) Accordingly, the adoption of this Order shall not be construed as creating a vested right to continue in any discharges otherwise authorized herein.

CEQA

45. The prescription of WDRs, protective of the environment, for the Facility (an existing facility and/or operation) is exempt from the California Environmental Quality Act (CEQA), Public Resource Code section 21000 et seq., pursuant to section 15301 of the CEQA Guidelines (Cal. Code Regs., tit. 14, 15000 et seq.).

CV-SALTS Reopener

46. The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. These programs, once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate. For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers could comply with the new nitrate program either individually or collectively with other dischargers. For salinity, discharger that are unable to comply with stringent salinity requirements would instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. This Order may be amended or modified to incorporate any newly-applicable requirements.
47. 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.

Public Notice

48. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
49. 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.
50. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that Order 85-248 is rescinded; and that, pursuant to sections 13263 and 13267 of the Water Code, Sierra Forest Products, its agents, successors, and assigns in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of waste to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous', as defined in California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.
3. Treatment system bypass or overflow of untreated wastes is prohibited, except as allowed by Standard Provisions E.2 in *Standard Provisions and Reporting Requirements for Waste Discharge Requirements* (SPRRs), dated 1 March 1991, incorporated herein.
4. Discharge of wastewater in a manner or location other than that described herein or in the RWD is prohibited.
5. Discharge of toxic substances into the wastewater ponds such that biological treatment mechanisms are disrupted is prohibited.
6. Discharge of domestic wastewater to the unlined pond or any surface waters is prohibited.

B. Effluent Limitations

1. Effluent shall not exceed the following limitations:
 - a) The 12-month rolling average EC of the discharge shall not exceed the 12-month rolling average EC of the source water plus 500 umhos/cm or 1,000 umhos/cm, whichever is less. Compliance with this effluent limitation shall be determined monthly.

C. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of Groundwater Limitations of this Order.
2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.
3. The discharge shall remain within the permitted waste treatment/containment structures at all times.

4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
5. All conveyance, treatment, storage, and disposal units 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 discerning compliance with Discharge Specification B.6, the dissolved oxygen (DO) content in the upper one foot of any wastewater pond shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in any single pond is below 1.0 mg/L for three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.
8. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two 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. Specifically:
 - a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

- c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
 - d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
12. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within the pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
 13. Water contained in the onsite 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 once 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.

D. Groundwater Limitations

Release of waste constituents from any component of any treatment, storage, delivery system, or land application area associated with the discharge shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:

1. Nitrate as Nitrogen of 10 mg/L.
2. For constituents identified in Title 22, the MCLs quantified therein.

E. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991 (SPRRs), which are part of this Order.
2. The Discharger shall comply with the separately-issued MRP R5-2019-0014, which is part of this Order, and any revisions thereto as adopted by the Central Valley Water Board or approved by the Executive Officer.
3. A copy of this Order, including its MRP, Information Sheet, Attachments, and SPRRs, shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. 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 documents 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.

5. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include 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 only when the operation is necessary to achieve compliance with the conditions of this Order.
6. As described in the SPRRs, 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.
7. 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.
8. 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, a copy of which shall be immediately forwarded to the Central Valley Water Board.
9. To assume operation as a 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 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 SPRRs B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. 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.

10. **By 10 February 2020**, the Discharger shall submit a **Metal Evaluation and Minimization Plan** to address sources of elevated iron, manganese, and arsenic concentration in the unlined pond. The Metal Evaluation and Minimization Plan shall at a minimum include the following:
 - a) Data on current influent and effluent metal concentrations;
 - b) Identification of known metal sources;
 - c) Description of current plans to reduce/eliminate known metal sources;
 - d) Preliminary identification of other potential sources;
 - e) A proposed schedule for evaluating sources; and
 - f) A proposed schedule for identifying and evaluating potential reduction, elimination, and prevention methods.
11. **By 7 August 2019**, the Discharger shall submit a water balance demonstrating that there is sufficient capacity within the unlined pond to contain all of the wet decking runoff, boiler blowdown water, and stormwater during a 100-year wet year. The water balance must estimate the volume of all runoff the pond receives and demonstrate that the Facility can comply with Discharge Specifications C.8., C.9., and C.10. This Provision will be considered complete following written approval by Executive Officer.
12. 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.
13. 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.
14. If the Central Valley Water Board determines that the discharge has a reasonable potential to cause or contribute to an exceedance of a water quality objective, or to create a condition of nuisance or pollution, this Order may be reopened for consideration of additional requirements.

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 California Code of Regulations, 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 30th day 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 filling petitions are published on the Internet (at the address below), and will be provided upon request.

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

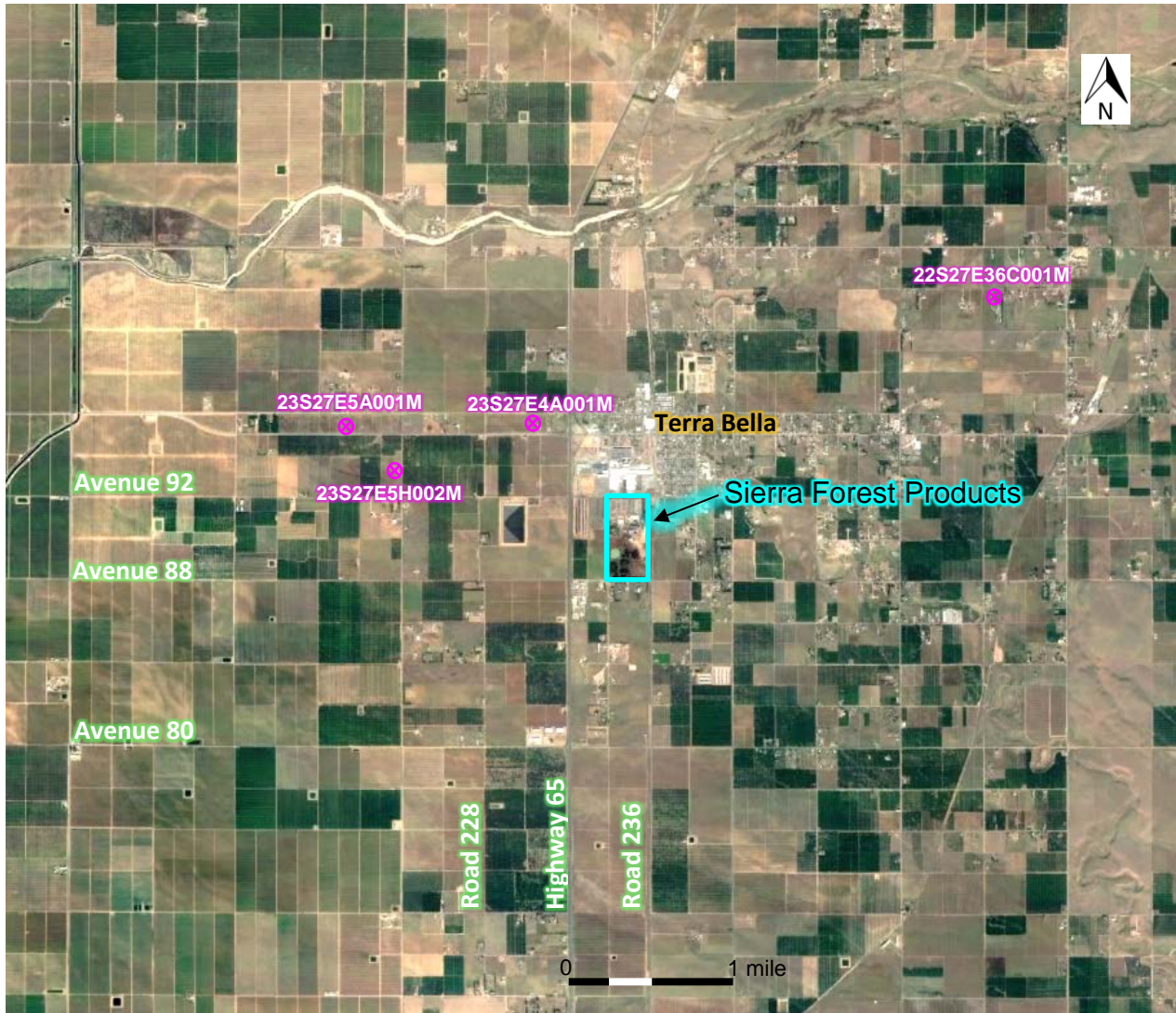
I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 8 February 2019.

ORIGINAL SIGNED BY

PATRICK PULUPA, Executive Officer

Order Attachments:

- Attachment A—Site Location Map
- Attachment B—Facility Layout Map
- Attachment C—Sawmill Operations Schematic
- Attachment D—Water Flow Schematic
- Monitoring and Reporting Program R5-2019-0014
- Information Sheet
- Standard Provisions and Reporting Requirements (SPRRs) dated 1 March 1991

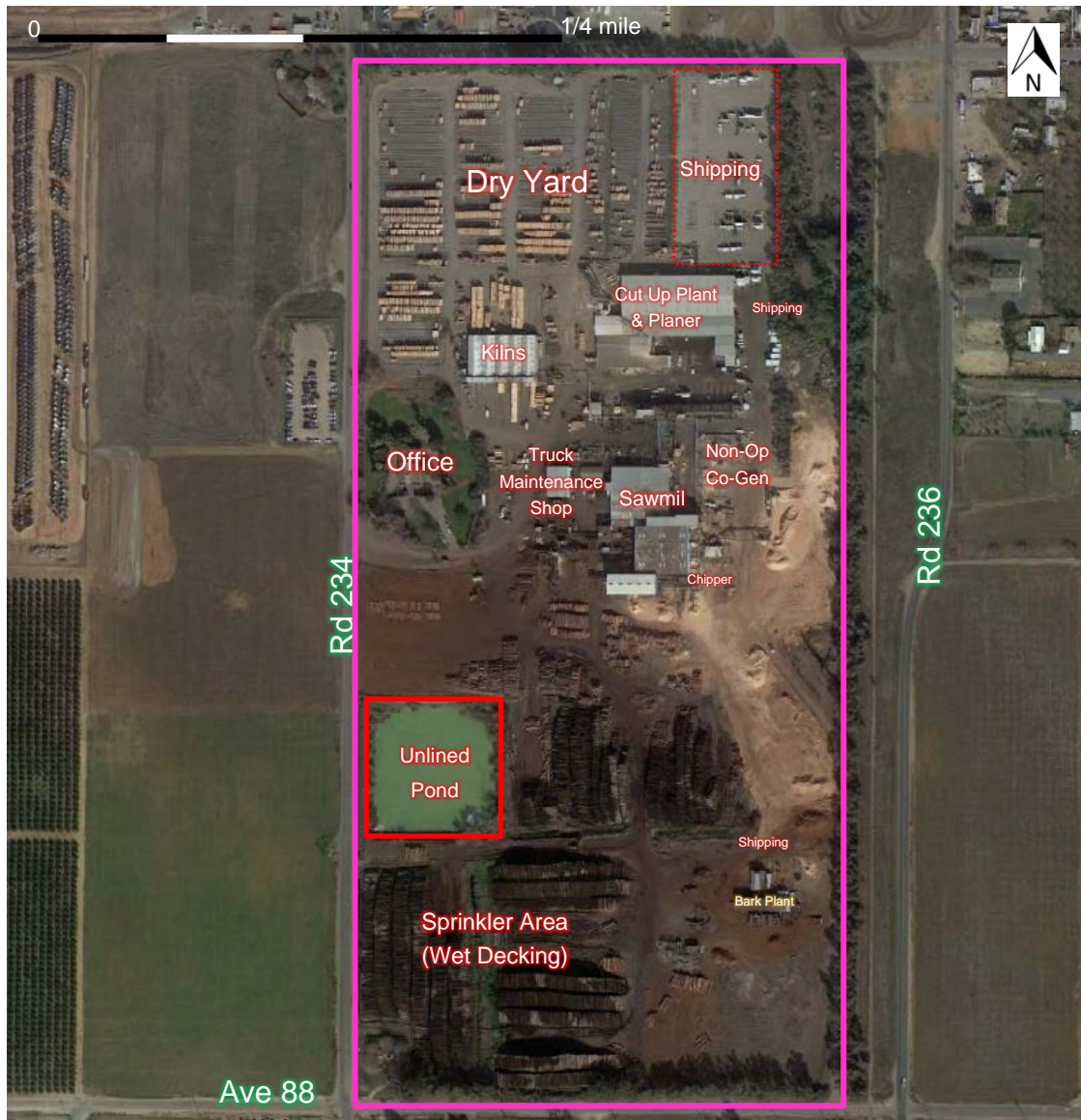


⊗ Well

SITE LOCATION MAP

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0014
 FOR
 SIERRA FOREST PRODUCTS
 TERRA BELLA SAWMILL FACILITY
 TULARE COUNTY

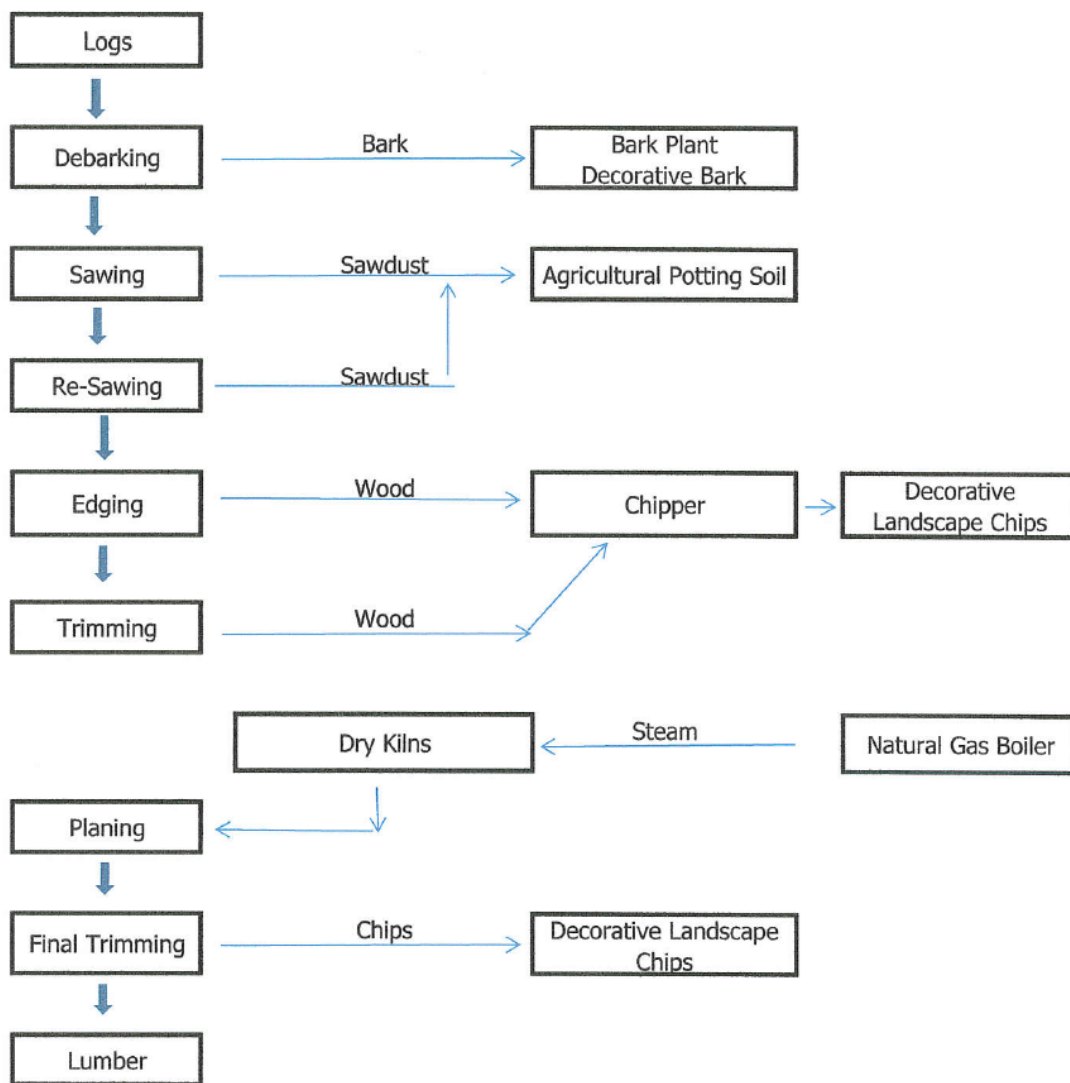
ATTACHMENT A



FACILITY LAYOUT MAP

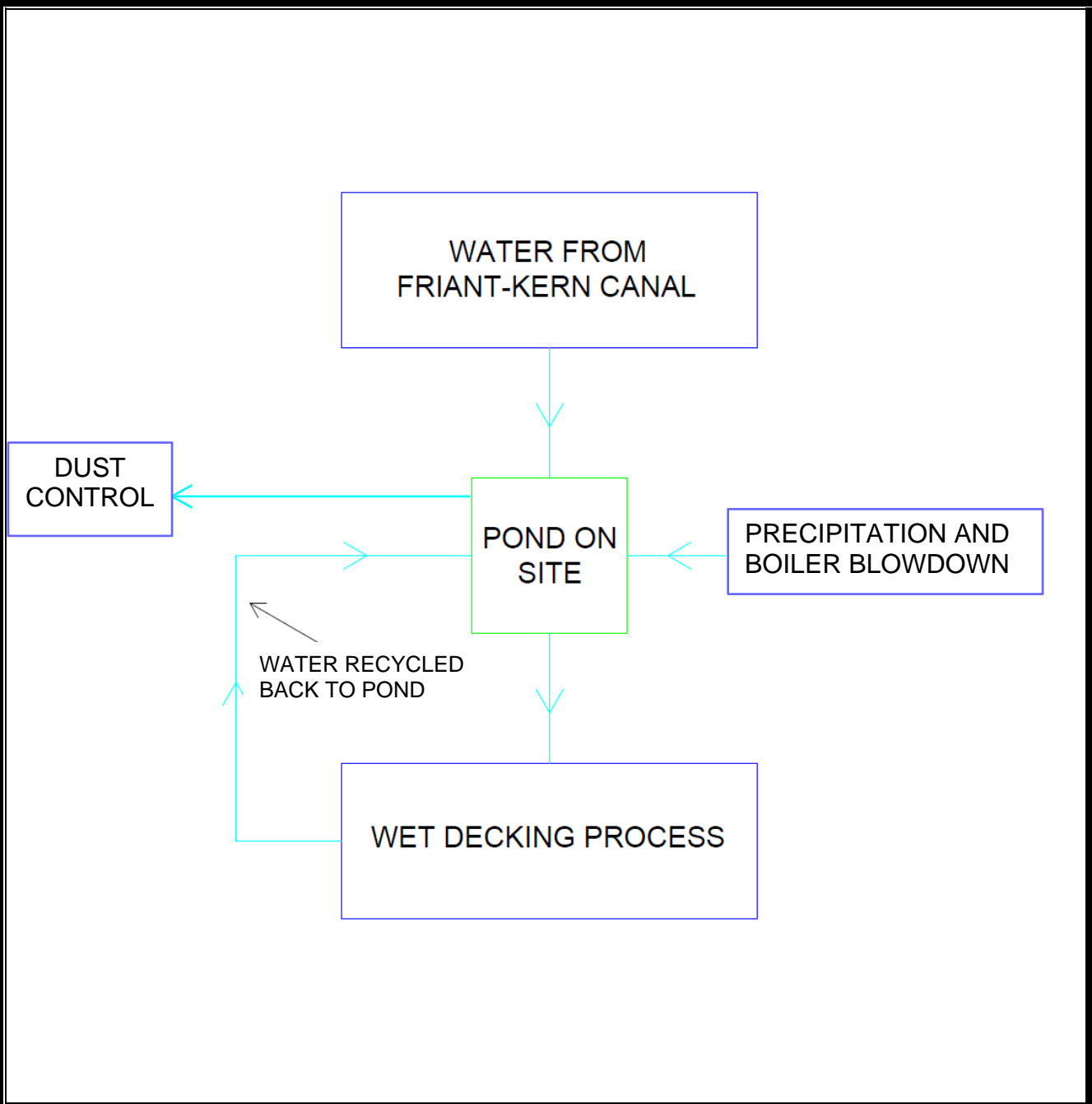
WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0014
FOR
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

ATTACHMENT B



SAWMILL OPERATIONS SCHEMATIC

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0014
 FOR
 SIERRA FOREST PRODUCTS
 TERRA BELLA SAWMILL FACILITY
 TULARE COUNTY



WATER FLOW SCHEMATIC

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0014
FOR
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2019-0014
FOR
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to Water Code section 13267, and establishes monitoring and reporting requirements for Sierra Forest Products (Discharger) regarding the operation of the Terra Bella Sawmill Facility (Facility) described in Wastewater Discharge Requirements (WDRs) R5-2019-0014. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts or the Executive Officer issues a revised MRP. Changes to sample location shall be established with concurrence of Central Valley Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. All analyses shall be performed in accordance with **Standard Provisions and Reporting Requirements for Waste Discharge Requirements**, dated 1 March 1991 (SPRRs).

Field test instruments (such as pH, electrical conductivity, and dissolved oxygen) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer and in accordance with manufacturer instructions.

Analytical procedures shall comply with the methods and holding times specified in the following: *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 United States Environmental Protection Agency or the State Water Resources Control Board (State Water Board), Division of Drinking Water Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for the requested reduction in monitoring frequency.

A glossary of terms used within this MRP is included on page 6.

MONITORING AND REPORTING PROGRAM ORDER R5-2019-0014
 SIERRA FOREST PRODUCTS
 TERRA BELLA SAWMILL FACILITY
 TULARE COUNTY

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

Monitoring Location Name	Monitoring Location Description
PND-001	Location where a representative sample of the water in the unlined pond can be obtained. Samples shall be collected opposite the pond inlet at a depth of one foot.
SPL-001	Location where a representative sample of the source water used in the wet decking process can be obtained.
DCM-001 through DCM-00X	Locations where wastewater is applied for dust control.

POND MONITORING

Pond sampling shall be collected at PND-001. A permanent marker (e.g., staff gages) shall be placed in the unlined pond. The marker shall have calibrations indicating water level at the design capacity and available operational freeboard. Samples shall be representative of the nature of the discharge. Time of collection of the samples shall be recorded. Pond monitoring shall include at least the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Weekly	Freeboard	Feet	Observation
Monthly	pH	pH Units	Grab
Monthly	Electrical Conductivity (EC)	umhos/cm	Grab
Monthly	Dissolved Oxygen	mg/L	Grab
Quarterly	Oil & Grease	mg/L	Grab
Semi-Annually ¹	Tannin & Lignin	mg/L	Grab
Quarterly	Chemical Oxygen Demand	mg/L	Grab
Semi-Annually ¹	Total Suspended Solids	mg/L	Grab
Semi-Annually ¹	Total Organic Carbon	mg/L	Grab
Quarterly	Iron	ug/L	Grab
Quarterly	Arsenic	ug/L	Grab
Quarterly	Manganese	ug/L	Grab
Semi-Annually ¹	General Minerals ²	various ³	Grab

- 1 Samples to be collected Semi-Annually during the 2nd quarter (between April and June) and the 4th quarter (between October and December).
- 2 General mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness (as CaCO₃), magnesium, nitrate as nitrogen, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance). Samples collected for metals shall be filtered with a 0.45-micron filter prior to preservation, digestion, and analysis.
- 3 mg/L or ug/L, as appropriate.

DUST CONTROL APPLICATION MONITORING

The Discharger shall monitor the application of wastewater made for dust control at DCM-001 as follows:

MONITORING AND REPORTING PROGRAM ORDER R5-2019-0014
 SIERRA FOREST PRODUCTS
 TERRA BELLA SAWMILL FACILITY
 TULARE COUNTY

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Daily	Volume of Wastewater	Gallons	Measured
Daily	Length of Road	Feet	Estimated
Daily	Area of Application	Acres	Calculated

SOURCE WATER MONITORING

The Discharger shall collect samples of the source water used for the wet decking process at SPL-001 and analyze them for the constituents specified below. Source water monitoring shall include the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Monthly	Volume	Gallons	Metered ¹
Quarterly ²	EC ³	umhos/cm	Grab
Annually ⁴	pH	pH units	Grab
Annually ⁴	Total Organic Carbon	mg/L	Grab
Annually ⁴	Tannin & Lignin	mg/L	Grab
Annually ⁴	Arsenic	mg/L	Grab
Annually ⁴	General Minerals ⁵	various ⁶	Grab

- 1 Volume of source water can be obtained from the Terra Bella Irrigation District.
- 2 Samples to be collected in January, April, July, and October.
- 3 If the source water is from more than one source, the electrical conductivity shall be reported as a weighted average and include copies of supporting calculations.
- 4 Samples to be collected in July.
- 5 General mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness (as CaCO₃), iron, magnesium, manganese, nitrate, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance). Samples collected for metals shall be filtered with a 0.45-micron filter prior to preservation, digestion, and analysis.
- 6 mg/L or ug/L, as appropriate.

REPORTING

All monitoring results shall be reported in **Quarterly Monitoring Reports** which are due by the first day of the second month after the calendar quarter. Therefore, monitoring reports are due as follows:

- First Quarter Monitoring Report: **1 May**
- Second Quarter Monitoring Report: **1 August**
- Third Quarter Monitoring Report: **1 November**
- Fourth Quarter Monitoring Report: **1 February**

A transmittal letter shall accompany each monitoring report. The transmittal letter shall discuss any violations that occurred during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions or a time schedule for implementing the corrective actions, reference to the previous correspondence is satisfactory.

MONITORING AND REPORTING PROGRAM ORDER R5-2019-0014
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
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The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence shall be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be mailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate regional water board office, in this case 1685 E Street, Fresno, CA, 93706.

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15, WDID: 5D542034001, Facility Name: Terra Bella Sawmill Facility, Order: R5-2019-0014

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly, whether the Discharger complies with waste discharge requirements, and shall discuss any violations that occurred during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Dischargers have previously submitted a report describing corrective actions or a time schedule for implementing the corrective actions, reference to the previous correspondence is satisfactory.

In addition to the details specified in Standard Provision C.3, 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.

Laboratory analysis reports do not need to be included in the monitoring reports; however, the laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3 of the SPRRs.

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 California Business and Professions Code sections 6735, 7835, and 7835.1.

A. All Quarterly Monitoring Reports shall include the following:

Pond Reporting

1. The tabulated results of Pond Monitoring specified on page 2.

Dust Control Application Reporting

1. The tabulated results of Dust Control Application Monitoring specified on page 2 and 3.

MONITORING AND REPORTING PROGRAM ORDER R5-2019-0014
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

2. Map identifying the date and the approximate location of wastewater application for dust control.

Source Water Reporting

1. The results of Source Water Monitoring specified on page 3. If multiple sources are used, the Discharger shall calculate the flow-weighted average concentrations for the specified constituents. Results must include supporting calculations, if required.
2. For each month of the quarter, the cumulative monthly volume of water added to the pond for the wet decking process and dust control application.

B. Fourth Quarter Monitoring Reports, in addition to the above, the Discharger shall submit a Fourth Quarter Monitoring report on **1 February of each year**, and shall include the following:

Facility Information

1. The names and general responsibilities of all persons in charge of wastewater management.
2. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.
3. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4).
4. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.
5. A discussion and summary of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.

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 8 February 2019.

ORIGINAL SIGNED BY

PATRICK PULUPA, Executive Officer

MONITORING AND REPORTING PROGRAM ORDER R5-2019-0014
 SIERRA FOREST PRODUCTS
 TERRA BELLA SAWMILL FACILITY
 TULARE COUNTY

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CBOD	Carbonaceous BOD
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-Hour Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots.
Daily	Samples shall be collected at least every day.
Twice Weekly	Samples shall be collected at least twice per week on non-consecutive days.
Weekly	Samples shall be collected at least once per week.
2/Month	Samples shall be collected at least twice per month during non-consecutive weeks.
Monthly	Samples shall be collected at least once per month.
Bimonthly	Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months.
Quarterly	Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October.
Semiannually	Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in April and October.
Annually	Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October.
mg/L	Milligrams per liter
mL/L	milliliters [of solids] per liter
ug/L	Micrograms per liter
umhos/cm	Micromhos per centimeter
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0014
SIERRA FOREST PRODUCTS
TERRA BELLA SAWMILL FACILITY
TULARE COUNTY

INFORMATION SHEET

Background

Waste Discharge Requirements (WDRs) Order 85-248 currently regulates the discharge of wastewater generated by both the Sierra Power Corporation cogeneration plant and the Sierra Forest Products (hereafter Discharger or Sierra Forest) Terra Bella Sawmill Facility (Facility) into an unlined pond and to 15 acres of adjacent land for irrigation in Terra Bella, Tulare County. WDRs Order 85-248 allows a 30-day average daily dry weather discharge flow of 0.2 million gallons per day (mgd) for the cogeneration plant. The cogeneration plant no longer exists. Therefore, this Order does not specify a flow limitation. The discharge at the Facility consists of wet decking runoff to an onsite unlined pond. A portion of the water from the unlined pond is used for dust control as needed.

On 5 January 2016, WZI Inc., on behalf of Sierra Forest submitted a Report of Waste Discharge (RWD) for Sierra Forest Products' Terra Bella Sawmill Facility (Facility). Additional addendums to the RWD were submitted on 29 April 2016, 4 May 2016, and 6 May 2016. The RWD and RWD addendums were signed and stamped by Richard B. Wilson (RCE 84164) to continue the operation of spraying water on wooden logs (wet decking) to maintain moisture conditions on the logs.

On 21 August 2018, Central Valley Water Board staff inspected the sawmill facility and verified the cogeneration plant no longer exists.

Discharge

The Facility is a lumber processing facility that operates year-round, Monday through Friday for a one 8-hour shift. Operations at the Facility consisting of debarking, sawing, edging, trimming, drying, and planning logs. Discharge at the Facility consists of storing water from the Terra Bella Irrigation District in the unlined pond and using the water for wet decking and dust control. Wet decking creates run-off that is collected in culverts and directed back to the unlined pond. In addition, any stormwater is directed to the unlined pond. Sierra Forest recirculates water in the unlined pond for wet decking. When the water level in the unlined pond is low, water from the Terra Bella Irrigation is used as supplemental water to fill the unlined pond.

Soil and Groundwater Conditions

Soils below the Facility are San Joaquin Loam and Centerville Clay, according to the Web Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service.

The Discharger does not have a groundwater monitoring well network in the vicinity of the sawmill facility.

Groundwater in the area is approximately 140 feet below ground surface (bgs) according to the RWD (*Lines of Equal Depth to Water in Wells Unconfined Aquifer*, published by the Department of Water Resources in Spring 2010).

Regional groundwater in the area flows in the southwest direction according the *Lines of Equal Elevation of Water in Wells Unconfined Aquifer*, published by the Department of Water Resources in Spring 2008.

Historical groundwater data from nearby wells within a three-mile radius, indicates that shallow groundwater in the area is of good quality with respect to EC, nitrogen, arsenic, iron, and manganese.

Monitoring Requirements

Section 13267 of the 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 water of the State.

The proposed Order includes pond monitoring, dust control application monitoring, and source water monitoring. This monitoring is necessary to characterize the discharge and evaluate compliance with effluent limitations and specifications prescribed by this Order.

CV-SALTS Regulatory Considerations

The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley at its 31 May 2018 Board Meeting. These programs once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate. The Salinity Control Program currently being developed would subject dischargers that do not meet stringent salinity numeric values (700 $\mu\text{S}/\text{cm EC}$ as a monthly average to protect the AGR beneficial use and 900 $\mu\text{S}/\text{cm EC}$ as an annual average to protect the MUN beneficial use) to performance-based salinity requirements, and would require these dischargers to participate in a basin-wide Prioritization and Optimization Study to develop a long-term strategy for addressing salinity accumulation in the Central Valley.

The level of participation required of dischargers whose discharges do not meet stringent salinity requirements will vary based on factors such as the amount of salinity in the discharge, local conditions, and type of discharge. The Board anticipates that the CV-SALTS initiative will result in regulatory changes that will be implemented through conditional prohibitions and modifications to many WDRs region-wide, including the WDRs that regulate discharges from the Facility. More information regarding this regulatory planning process can be found at the following link:
https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/

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. It may be appropriate to reopen the Order if new technical information is received or if applicable laws and regulations change.

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.

Waste Discharge to Land

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

Waste Discharge to Land

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.

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- 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:

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