CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

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Regional Board Website (https://www.waterboards.ca.gov/centralvalley)

WASTE DISCHARGE REQUIREMENTS R5-2021-XXXX-

ORDER INFORMATION

Order Type(s):	Waste Discharge Requirements
Status:	Tentative
Program:	Non-15 Discharges to Land
Region 5 Office:	Sacramento (Rancho Cordova)
Discharger(s):	Rivermaid Trading Company
Facility:	Rivermaid Trading Company
Address:	6011 East Pine Street
County:	San Joaquin
Parcel Nos.:	049-120-65; 049-120-04

Executive Officer Certification: This section should only be included in orders adopted by the Board. To avoid confusion, each WDRs Order and each MRP now has its own EO certification language.

CERTIFICATION

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____ [Month] [Year].

_____
PATRICK PULUPA
Executive Officer

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GLOSSARY

ACL	Administrative Civil Liability Complaint
APN	Assessor's Parcel Number
bgs	below ground surface
$BOD_{[5]}$	[5-day] Biochemical Oxygen Demand at 20º Celsius
BPTC	Best Practical Treatment and Control
CEQA	California Environmental Quality Act, Public Resources Code section 21000 et seq
CV-SALTS	Central Valley Salinity Alternatives for Long-Term Sustainability
DO	Dissolved Oxygen
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EC	Electrical Conductivity
EIR	Environmental Impact Report
ETo	Evapotranspiration
FDS	Fixed Dissolved Solids
FEMA	Federal Emergency Management Agency
gpd	gallons per day
LAAs	Land Application Areas
lbs/ac/	Pounds per Acre
MCL	Maximum Contaminant Level
MG[D]	Million Gallons [per Day]

mg/L .....milligrams per liter

MND .....Mitigated Negative Declaration

MRP .....Monitoring and Reporting Program

msl.....Mean Sea Level

MUN .....Municipal

MW.....Monitoring Well

N.....Nitrogen

NA .....Not Applicable

ND .....not detected or non-detect

NE .....Not Established

NOA .....Notice of Applicability

NOC .....Notice to Comply

NPDES.....National Pollutant Discharge Elimination System

OAL .....Office of Administrative Law

O&M .....Operation and Maintenance Plan

ORP .....Oxidation Reduction Potential

RL.....Reporting Limit

RWD.....Report of Waste Discharge

RCRA .....Resource Conservation and Recovery Act

SAP .....Sample and Analysis Plan

SERC .....State of Emergency Response Commission

SPRRs .....Standard Provisions and Reporting Requirements

TDS .....Total Dissolved Solids

Title 22 .....California Code of Regulations, Title 22

Title 23 .....California Code of Regulations, Title 23

Title 27 .....California Code of Regulations, Title 27

TKN.....Total Kjeldahl Nitrogen

USEPA.....United States Environmental Protection Agency

Wat. Code .....Water Code

WDRs.....Waste Discharge Requirements

WQOs .....Water Quality Objectives

WWTF .....Wastewater Treatment Facility

WWTP.....Wastewater Treatment Plant

µg/L .....Micrograms per Liter

µmhos/cm.....Micromhos per Centimeter

FINDINGS

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

Introduction

1. On 12 November 2020, Rivermaid Trading Company submitted a Report of Waste Discharge (RWD) that describes a fruit processing plant that generates process wastewater to be discharged to land in Lodi, California. Additional information was submitted on 16 March 2021 and 31 March 2021.

2. Rivermaid Trading Company (Discharger) owns and operates the Facility that generates the wastewater and the associated land application areas (LAAs) and is responsible for compliance with these Waste Discharge Requirements (WDRs).

3. The Facility is located at 6011 East Pine Street in Lodi, California (Assessor's Parcel Numbers [APNs] 049-120-65 and 049-120-04), as shown on Attachment A, which is attached hereto.

4. The following materials are attached and incorporated as part of this Order:
    a. Attachment A – Site Map
    b. Attachment B – Facility Map
    c. Attachment C – Wastewater Flow Schematic
    d. Information Sheet
    e. Standard Provisions and Reporting dated 1 March 1991 (SPRRs)

5. Attached is **Monitoring and Reporting Program (MRP) R5-2021-XXXX**, which requires monitoring and reporting for discharges regulated under these WDRs.

Facility and Discharge

6. The 17.6-acre Facility, which began operating in 1979, processes cherries and pears, includes receiving, cleaning, chilling, cold storage of the fruit, and fumigation, for distribution to wholesalers and assembly of fruit baskets and packages.

7. The cherry processing season generally runs from April to July and pear season is July through October. In 2020, approximately 10,000 tons of cherries and 12,300 tons of pears were processed.

8. Source water for the Facility is municipal water from the City of Lodi. In 2018/2019 and 2019/2020, the Facility used approximately 14 million gallons per year. Water quality data for select constituents, as reported in the City of Lodi Annual Water

Quality Report for 2019 (published in May 2020), are summarized below. Concentrations are in milligrams per liter (mg/L) unless noted otherwise.

Table 1. Source Water Quality

Constituent	Average	Minimum and Maximum Concentrations
EC	353 µmhos/cm	61 – 810 µmhos/cm
TDS	271	85 – 500
Nitrate as N	3.5	ND – 7.1
Arsenic	0.004	ND – 0.007
Chloride	13.7	ND – 51
Iron	0.023	ND – 0.19
Manganese	0.001	ND -0.021
Sodium	22	5 - 61
pH	7.6 std. unit	7.0 – 8.0 std. unit

9. Chemicals used at the Facility that may impact wastewater quality are summarized below.

Table 2. Chemical Usage

Product	Maximum Daily Amount (gallons)
Bio Energizer Probiotic	20
Knockout	165
Peroxyacetic Acid 15	550
X-Rated Degreaser	165
CT130	200
Defoamer	250
Fludioxonil Fungicide	250
Magician Cleaner/Degreaser	55
Pac-Rite 534	55
WR-101	220

10. Wastewater is generated from washing the fruit, facility cleaning, fumigation, and condensate from cold storage. The wastewater treatment system consists of screens and an unlined wastewater pond. The Discharger will be adding land application areas and will use the wastewater for crop irrigation.

11. Wastewater at the Facility is captured in screened floor drains and discharged to a wastewater pond. The unlined wastewater pond is approximately 1.3 acres and is located in the northeast portion of the Facility. The pond is approximately 8 feet deep with a capacity of 1.3 million gallons, not including 2 feet of freeboard.

12. Annual influent flows to the pond are approximately 7 million gallons of wastewater and approximately 8 million gallons of storm water, with a daily average flow of approximately 20,000 gallons per day to the pond.

13. To determine wastewater quality in the pond, a wastewater sample was collected on 14 October 2019, during the pear processing season.

    Water Quality Objectives (or other numerical limits) are defined as:

    - Total Dissolved Solids (TDS) = Secondary Maximum Contaminant Upper Level
    - Nitrate as N = Primary Maximum Contaminant Level (MCL)
    - Chloride = Secondary MCL
    - Sodium = Lowest agricultural water quality goal
    - Iron = Secondary MCL
    - Manganese = Secondary MCL
    - Numerical limits have not been established (NE) for biochemical oxygen demand (BOD) and pH.

Table 3. Wastewater Quality (milligrams per liter [mg/L] unless noted otherwise)

Constituent	Effluent Concentrations	WQO (or other numerical limits)
TDS	307	1,000
BOD	15	NE
Nitrate as N	<0.1	10
TKN	5.7	10
Total Nitrogen	1.2	10
Chloride	14	250
Sodium	26	69
Iron	0.13	0.3
Manganese	0.08	0.05
pH	7.45 std. unit	NE

Table Source: 2020 RWD

14. Wastewater in the pond will be used to irrigate on-site landscaping and approximately 11 acres of LAAs to be cropped with alfalfa and native vegetation. The LAAs are bermed to prevent wastewater from leaving the LAAs, which is currently planned for sprinkler irrigation. In addition to crop and landscape irrigation, wastewater from the pond may be used for on-site dust control and washing down the Facility. Any runoff from these activities is collected in on-site drains and discharged back into the pond.

15. Two water balances were included in the 2020 RWD; one for an average rainfall year and one for a 100-year rainfall event. Based on the water balances, the total

crop demand will be greater than the volume of wastewater available for irrigation; therefore, supplemental irrigation will be needed in spring and summer months to maintain crops.

16. When supplemental irrigation water is needed to meet crop demands, the water will be supplied by an onsite irrigation well.

17. Solids are screened out of the wastewater and sent offsite for disposal at a landfill. Solids will not be land applied at the Facility.

18. Approximately 8 million gallons of onsite storm water is captured annually and discharged to the wastewater pond. No storm water leaves the property.

19. Domestic wastewater is discharged to on-site septic systems and leachfields regulated by the San Joaquin County Environmental Health Department. Domestic wastewater will not be discharged into the process wastewater collected and treatment system.

Site-Specific Conditions

20. Local land use in the vicinity primarily consists of agricultural fields, industrial facilities, and rural residential areas.

21. The Facility is located on relatively flat terrain. Soils in the area consist of Tokay fine sandy loam.

22. The site is located in FEMA Zone X: Area of Minimal Flood Hazard.

23. The nearest surface water is the Mokelumne River, approximately 0.5 miles north of the Facility. Wastewater discharged to the LAA is not expected to come into contact the Mokelumne River through surface water drainage or flooding.

24. The beneficial uses of the Mokelumne River from Camanche Reservoir to the Sacramento/San Joaquin Delta are agricultural supply; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.

25. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

26. Annual precipitation for an average rainfall year is 17.35 inches and 32.8 inches for a 100-year rainfall event based on Department of Water Resources (DWR) rainfall data for rainfall station Number B00503200, in Lodi, California. The average evapotranspiration annual rate using data collected between 1984 through 2014 is approximately 50.84 inches.

Groundwater Conditions

27. There are no groundwater monitoring wells at the Facility or within 0.5 miles from the Facility.

28. Based on groundwater data from the Department of Water Resources Information Center Interactive Map Application website (https://gis.water.ca.gov/app.bbat/) depth to groundwater at the Facility is approximately 80 to 100 feet below ground surface (bgs) with regional groundwater flow to the southwest, away from the Mokelumne River.

Legal Authorities

29. This Order is adopted pursuant to Water Code section 13263, subdivision (a), which provides in pertinent part as follows:

> *The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge…, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonable required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.*

30. Compliance with section 13263, subdivision (a), including implementation of applicable water quality control plans, is discussed in the findings below.

31. The ability to discharge waste is a privilege, not a right, and adoption of this Order shall not be construed as creating a vested right to continue discharging waste. (Wat. Code, § 13263, subd. (g).)

32. This Order and its associated MRP are also adopted pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

> *[T]he 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 … 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.*

40. The reports required under this Order, as well as under the separately issued MRP, are necessary to verify and ensure compliance with these WDRs. The burden associated with such reports is reasonable relative to the need for their submission.

Basin Plan Implementation

41. Pursuant to Water Code section 13263, subdivision (a), WDRs must "implement any relevant water quality control plans…, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241."

42. This Order implements the Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, revised May 2018* (Basin Plan), which designates beneficial uses for surface water and groundwater and establishes water quality objectives (WQOs) necessary to preserve such beneficial uses. (See Wat. Code, § 13241 et seq.)

43. The Facility is within the San Joaquin Delta Hydrologic Area. Local drainage is to the Mokelumne River, approximately 0.5 miles north of the Facility. The beneficial uses of the Mokelumne River, as stated in the Basin Plan, are agricultural supply; water contact recreation; noncontact water recreation; warm freshwater habitat, cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.

44. Per the Basin Plan, the beneficial uses of underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

45. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.

46. 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 groundwater.

47. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to meet the MCLs in Title 22 of the California Code of Regulations (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.

48. The narrative toxicity WQO 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.

49. 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 WQO is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative WQO.

50. 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 of Agriculture by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an electrical conductivity (EC) of less than 700 µmhos/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 groundwater EC up to 3,000 µmhos/cm, if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop. The list of crops in Finding 14 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge, but it is representative of current and historical agricultural practices in the area.

Salt and Nitrate Control Programs Reopener

51. 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. The Basin Plan amendments were conditionally approved by the State Water Board on 16 October 2019 (Resolution 2019-0057) and by the Office of Administrative Law on 15 January 2020 (OAL Matter No. 2019-1203-03).

    a. 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 may comply with the new nitrate program either individually or collectively with other dischargers. For the Nitrate Control Program, the Facility falls within Groundwater Sub-Basin 5-022.01 (San Joaquin Valley – Eastern San Joaquin), a Priority 2 Basin. Notices to Comply for Priority 2 Basins will be issued within two to four years after the effective date of the Nitrate Control Program (17 January 2020).

    b. For the Salt Control Program, the Discharger will be issued a Notice to Comply with instructions and obligations for Salt Control Program. Upon receipt of the Notice to Comply, the Discharger must submit a Notice of Intent by the deadline included in the notice informing the Central Valley Water Board of their choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). Dischargers that are unable to comply with stringent salinity requirements for EC of 700 µmhos/cm to protect AGR

beneficial uses or 900 µmhos/cm to protect MUN beneficial uses will need to meet performance-based requirements and participate in a basin-wide planning effort to develop a long-term salinity strategy for the Central Valley (i.e., participate in the Priority and Optimization Study per Option 2).

As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs to ensure the goals of the Salt and Nitrate Control Programs are met.

51. This Order may be amended or modified to incorporate newly applicable requirements with respect to salinity or nutrients.

Compliance with Antidegradation Policy

52. State Water Resources Control Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (Resolution 68-16) 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.

53. Typical constituents of concern in food processing wastewater generally include, at a minimum, salts (primarily TDS, sodium, and chloride) and nitrate as nitrogen. The quality of wastewater generated from processing at the Facility is relatively similar in quality to the source water, as shown in Table 4 below.

    WQOs or other numerical limits are based on the following: Secondary Maximum Contaminant Upper Level for TDS; Primary Maximum Contaminant Level for nitrate as nitrogen; Lowest agricultural water quality goal for sodium; and Secondary Maximum Contaminant Level for chloride. The acronym NA in the table below is defined as not analyzed.

Table 4. Antidegradation Analysis

Constituent/Parameter	Wastewater Quality (10/14/2019)	Source Water Quality	WQO
EC (µmhos/cm)	NA	353	700
TDS (mg/L)	307	271	1,000
Nitrate as N (mg/L)	<0.1	3.5	10
TKN (mg/L)	5.7	NA	10
Sodium (µg/L)	26	22	69
Chloride (µg/L)	14	13.7	250

a. **Total Dissolved Solids.** For the purposes of evaluation, TDS is representative of overall salinity. The best measure for total salinity in groundwater is TDS. FDS is the inorganic fraction of TDS that have the potential to percolate or leach into shallow groundwater. However, the wastewater sample collected from the pond was not analyzed for FDS and only one sample was collected for TDS analysis. Due to the limited TDS data, this evaluation includes TDS effluent data from a nearby facility with similar processes. Delta Packing Company, located 1.6 miles south of the Rivermaid Trading Company, is a fruit packing company regulated under WDRs No. R5-2016-0029, adopted on 21 April 2016. Delta Packing packages cherries, pears, and grapes and discharges wastewater to ponds, similar to the Rivermaid facility. The TDS data used from Delta Packing were collected during their processing season from the wastewater pond.

Table 5. TDS Effluent Comparison

Effluent Sample Location	Sample Date	Constituent	Concentration (mg/L)
Rivermaid Pond	10/2019	TDS	307
Delta Packing Pond	5/2018	TDS	323
Delta Packing Pond	5/2019	TDS	361
Delta Packing Pond	5/2020	TDS	332
			WQO = 1,000

As shown in Table 5, TDS concentrations are low in both effluents when compared to the WQO and are relatively equivalent to source water quality. Because groundwater in the area is deep (approximately 80 to 100 feet bgs) and concentrations in effluent are low, TDS in effluent is unlikely to impact groundwater; however, this Order establishes an effluent limit for TDS for the protection of groundwater.

b. **Nitrate.** For nutrients such as nitrate, the potential for groundwater degradation depends on wastewater quality; crop uptake, and the ability of the vadose zone below the LAAs to support nitrification and denitrification to convert nitrogen to nitrogen gas before it reaches the water table. Therefore, this Order requires that

nutrients associated with the wastewater and other sources be applied to the LAAs at agronomic rates consistent with crop demand. Nitrate as nitrogen, TKN, and total nitrogen are required to be monitored in effluent.

c. **Sodium and Chloride.** Sodium and chloride are known to be key salinity constituents in food processing wastewater. Concentrations of sodium and chloride in wastewater and source water are relatively equivalent and are less their than WQOs.

   Because TDS represents overall salinity, which will capture sodium or chloride concentration increases, a TDS effluent limit is established in this Order for the protection of groundwater. Sodium and chloride will be monitored in the effluent.

54. The Discharger will provide treatment and control of the discharge that incorporates:
    a. the capture, segregation, and off-site disposal of solids.
    b. the even application of wastewater over the LAAs.

55. The Discharger's implementation of the above-listed BPTC measures will minimize the extent of water quality degradation resulting from the Facility's operation and discharge.

56. Degradation of groundwater by some of the typical waste constituents associated with discharges from food processors, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The Discharger's operation provides up to 800 jobs during processing seasons and approximately 40 jobs during the off-season. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

57. Based on the foregoing, the adoption of this Order is consistent with the State Water Board's Antidegradation Policy.

California Environmental Quality Act

58. The issuance of this Order, which prescribes requirements and monitoring of waste discharges at an existing facility, with negligible or no expansion of its existing use, is exempt from the procedural requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to California Code of Regulations, title 14, section 15301 (CEQA Guidelines).

Other Regulatory Considerations

59. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

Although this Order is not subject to section 106.2, it nevertheless promotes that policy by requiring discharges to meet Title 22 MCLs designed to protect human health and ensure that water is safe for domestic use.

60. This Order implements the Central Valley Water Board's Basin Plan, which designates beneficial uses for surface water and groundwater and establishes WQOs necessary to preserve such beneficial uses. (Wat. Code, § 13241 et seq.)

61. Based on the threat and complexity of the discharge, the facility is determined to be classified as 3C as defined below:

    a. Category "3" – Those discharges of waste that could degrade water quality without violating water quality objectives or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.

    b. Category "C" – 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 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.

62. This Order, which prescribes WDRs for discharges of industrial [food-processing] process water from [cannery operations], is exempt from the prescriptive requirements of California Code of Regulations, title 27 (Title 27), section 20005 et seq. (See Cal. Code Regs., tit. 27, § 20090, subds. (a)-(b).)

63. The State Water Board adopted Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities and requiring submittal of a Notice of Intent by all affected industrial dischargers. All storm water at the Facility is collected in the storm water basin or commingled with process wastewater and discharged to the LAAs. Storm water is not discharged offsite or discharged to waters of the U.S. Coverage under the NPDES General Permit CAS000001 is not required at this time.

64. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (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.

65. Statistical data analysis methods outlined in the US EPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (Unified Guidance) are appropriate for determining compliance with the Groundwater Limitations of this Order. Depending on the circumstances, other methods may also be appropriate.

Scope of Order

66. This Order is strictly limited in scope to those waste discharges, activities, and processes described and expressly authorized herein.

67. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new Report of Waste Discharge (RWD) per Water Code section 13260.

68. Failure to file a new RWD before initiating material changes to the character, volume or timing of discharges authorized herein, shall constitute an independent violation of these WDRs.

69. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as “Discharger,” subject only to the discretion to designate or substitute new parties in accordance with this Order.

Procedural Matters

70. 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.

71. The Discharger, interested agencies, and interested persons were notified of the Central Valley Water Board’s intent to prescribe the WDRs in this Order, and provided an opportunity to submit their written views and recommendations at a public hearing. (Water Code, §13167.5.)

72. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.

73. The Central Valley Water Board will review and revise the WDRs in this Order as necessary.

REQUIREMENTS

IT IS HEREBY ORDERED pursuant to Water Code sections 13263 and 13267, that the Discharger and their agents, employees, tenants, and successors shall comply with the following:

A. Discharge Prohibitions

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 Water Code section 13173, in a manner that causes violation of Groundwater Limitations, is prohibited.

4. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Section E.2 of the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, 1 March 1991 edition (Standard Provisions or SPRRs).

5. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.

6. Discharge of toxic substances into any wastewater treatment system or land application area such that biological treatment mechanisms are disrupted is prohibited.

7. Application of residual solids to the LAAs is prohibited.

8. Discharge of domestic wastewater to the process wastewater treatment system is prohibited.

9. Discharge of process wastewater to the domestic wastewater treatment system (septic system) is prohibited.

10. Discharge of domestic wastewater to the process wastewater ponds, LAAs or any surface waters is prohibited.

B. Flow Limitations

1. Effluent flows from the wastewater treatment pond to the LAAs shall not exceed the limits in Table 6 below. Flows will be calculated as a portion of the total flow, which will include storm water and process wastewater and excludes supplemental irrigation water.

Table 6. Flow Limits

Flow Measurement	Flow Limit
Total Annual Flow (As determined by the total flow for the calendar year)	15 MG

Flow Measurement	Flow Limit
Maximum Average Daily Flow (As determined by the total flow during the calendar month divided by the number of days in that month)	50,000 gpd

C. Effluent Limitations

1. The total volume of treated wastewater and contact storm water in the wastewater pond shall not exceed an **TDS annual average concentration of 600 mg/L**. The FDS flow weighted annual average is based on total flow and concentration of wastewater discharged.

D. Mass Loading Limitations

1. The treated wastewater applied to the LAAs or on-site landscape irrigation shall not exceed the following effluent and mass loading limits:

Table 7. Loading Limits

Constituent	Units	Irrigation Cycle Average	Annual Maximum
BOD Mass Loading	lb/ac/day	100	--
Total Nitrogen Mass Loading	lb/ac/year	--	Crop Demand

Compliance with the above requirements shall be determined as specified in the Monitoring and Reporting Program.

E. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the 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 and land application areas at all times, including the LAAs and on-site landscape irrigation areas. Wastewater may be used for dust control or facility washing in areas that can collect the wastewater and discharge it back to the wastewater pond.

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 discerning compliance with Discharge Specification 6, the dissolved oxygen (DO) content in the upper one foot of the wastewater pond shall not be less than 1.0 mg/L for three consecutive sampling events. If DO concentrations are less than 1.0 mg/L for three consecutive sampling events and objectionable odors are perceivable beyond the property limits, the Discharger shall report the findings to the Regional Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results and odors within 30 days.

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** 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 E.7 and E.8.

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 a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
13. The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least every five years beginning in **202XX**, and shall periodically remove sludge as necessary to maintain adequate storage capacity.
14. Storage of residual solids on areas not equipped with means to prevent storm water infiltration, or a paved leachate collection system is prohibited.

F. 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 in Title 22 of the California Code of Regulations.

2. Contain taste or odor-producing constituents, toxic substances, or any other constituent in concentrations that cause nuisance or adversely affect beneficial uses.

G. Land Application Area Specifications

1. The Discharger shall ensure that all water is applied and distributed with reasonable uniformity across each LAA field, consistent with good agricultural irrigation practices.

2. Crops or other vegetation (which may include, but is not limited to pasture grasses, native grasses, orchard trees, and/or ornamental landscaping) shall be grown in the LAAs or any areas where on-site irrigation may occur.

3. Land application of wastewater shall be managed to minimize erosion.

4. The LAAs shall be managed to prevent breeding of mosquitoes or other vectors.

5. LAAs shall be designed, maintained, and operated to comply with the following setback requirements:

Table 8. Setbacks

Setback Definition	Minimum Irrigation Setback (feet)
Edge of LAA to property boundary	25

Setback Definition	Minimum Irrigation Setback (feet)
Edge of LAA to manmade or natural surface water drainage course	25
Edge of LAA to domestic water supply well	100

6. LAAs shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Dischargers shall temporarily stop discharging immediately in the area of concern and implement corrective actions to ensure compliance with this Order.

7. Sprinkler heads shall be designed, operated, and maintained to create a minimum amount of mist.

8. Discharge to the LAAs or on-site landscaped areas shall not be initiated when the ground is saturated.

9. Any irrigation runoff (tailwater) shall be confined to the LAAs or returned to the treatment system and shall not enter any surface water drainage course or storm water drainage system.

H. Solids Disposal Specifications

For the purpose of this Order, solid waste refers to solid inorganic matter removed by screens and soil sediments from washing of unprocessed fruit or vegetables. 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. Residual solids shall be removed from screens, sumps, and ponds as needed to ensure optimal operation, prevent nuisance conditions, and maintain 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 90 days in advance of the change.

I. Provisions

1. The following reports shall be submitted pursuant to Water Code section 13267:
    a. **By XX Month 2022**, the Discharger shall submit a *Salt and Nutrient Management Plan* that describes all BPTCs implemented to ensure compliance with this Order and reduce or minimize effluent salt concentrations.
    b. At least **180 days** prior to any sludge removal and disposal, the Discharger shall submit a *Sludge Cleanout Plan*. The plan shall include a detailed plan for sludge removal, drying, and disposal. The plan shall specifically describe the measures to be used to control runoff or percolate from the sludge as it is drying, and a schedule that shows when solids are removed from the site prior to the onset of the rainy season **(1 October)**
    c. **Within 60 days** of installing a flow meter, submit a letter to the Central Valley Water Board with the installation completion date and location of the flow meter.

2. In accordance with California 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 workplans 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 Dischargers 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 Monitoring and Reporting Program **R5-2021-XXXX**, which is part of this Order, and any revisions thereto 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 the Standard Provisions, which are attached hereto and made part of this Order by reference.

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. 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 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 when the operation is necessary to achieve compliance with the conditions of this Order.

8. The Discharger shall use the best practicable 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 must 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.

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 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.

14. In order to rescind WDRs that are no longer necessary because the discharge to land permitted under this Order has ceased, the Discharger must contact the Central Valley Water Board's Compliance and Enforcement Unit to discuss appropriate wastewater treatment system closure requirements.

15. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

16. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

ENFORCEMENT

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.

ADMINISTRATIVE REVIEW

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board for administrative review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. To be timely, the State Water Board must receive the petition by 5pm on the 30th day 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 5pm on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the

Internet on the Water Boards Public Notice web page
(http://www.waterboards.ca.gov/public_notices/petitions/water_quality).