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**[TENTATIVE] WASTE DISCHARGE REQUIREMENTS ORDER
R5-2026-XXXX**



ORDER INFORMATION

Order Type(s): Waste Discharge Requirements
Status: Tentative
Program: Non-15
Region 5 Office: Fresno
Discharger(s): Setton Pistachio of Terra Bella, Inc. and Porterville Citrus, Inc.
Facility: Terra Bella Processing Facilities
Address: 9370 Road 234, Terra Bella, CA 93636
County: Tulare County
Parcel Nos.: See Findings 2 and 3
GeoTracker ID: WDR100035349
Prior Order(s): 92-191 and 94-302

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 **XX** June 2026

PATRICK PULUPA,
Executive Officer

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GLOSSARY

Antidegradation Policy.....	Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Board Resolution 68-16
Basin Plan	Water Quality Control Plan for [BASIN]
bgs	Below Ground Surface
BOD[5]	[Five-Day] Biochemical Oxygen Demand at 20° Celsius
BPTC.....	Best Practicable Treatment and Control
CEQA	California Environmental Quality Act, Public Resources Code section 21000 et seq.
DO.....	Dissolved Oxygen
EC	Electrical Conductivity
EIR	Environmental Impact Report
FDS	Fixed Dissolved Solids
FEMA	Federal Emergency Management Agency
LAA	Land Application Area
lbs/ac/yr.....	Pounds per Acre per Year
µg/L	Micrograms per Liter
µmhos/cm.....	Micromhos per Centimeter
mgd	Million Gallons [per Day]
mg/L	Milligrams per Liter
AMSL	Above Mean Sea Level
MRP	Monitoring and Reporting Program
MW	Monitoring Well
MCL.....	Maximum Contaminant Level per Title 22
N.....	Nitrogen
R[O]WD.....	Report of Waste Discharge
SPRRs	Standard Provisions and Reporting Requirements
SERC	State Emergency Response Commission
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
WDRs.....	Waste Discharge Requirements
WQO[s].....	Water Quality Objective[s]

FINDINGS

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) hereby finds as follows:

Introduction

1. Setton Pistachio of Terra Bella, Inc. (Setton), a California corporation, submitted a 19 September 2025 Technical Report for the Report of Waste Discharge (September 2025 RWD) requesting an increase in the discharge rate from its Terra Bella Pistachio Processing Facility (Pistachio Facility). The September 2025 RWD also described changes made to the Pistachio Facility since 2023. The Pistachio Facility is situated just west of the Community of Terra Bella in the northwest quarter of Section 3, Township 23 S, Range 27 E, Mount Diablo Base and Meridian (MDB&M) in Tulare County as depicted on the Facility Location Map included as **Attachment A**.
2. Setton owns and operates the Pistachio Facility at 9370 Road 234 in Terra Bella. Porterville Citrus, Inc. (Porterville Citrus) owns and operates the Porterville Citrus Packing House (Citrus Facility) at 9512 Clements Street, which is adjacent to the Pistachio Facility. Setton and Porterville Citrus (collective, "Dischargers") share a process wastewater disposal system. The Pistachio Facility and Citrus Facility (collectively, "the Facilities") discharge their combined wastewater to land application areas (LAAs) owned by Setton and its various subsidiaries. Additionally, Setton owns the land on which the Facilities are located.
3. The discharge of wastewater from the Pistachio Facility was regulated by Waste Discharge Requirements (WDRs) Order 92-191, issued to Dole Fruit and Nut Company in September 1992. The Citrus Facility was regulated by WDRs Order 94-302, which was issued to Dole Citrus and Central Valley Citrus in October 1994. WDRs Order 92-191 authorized a discharge of up to 1.5 million gallons per day (mgd) of pistachio processing wastewater to one unlined storage pond. WDRs Order 94-302 authorized the discharge of up to 0.08 mgd of citrus processing wastewater to a 6.4-acre orchard cropped with oranges.
4. Setton purchased the Pistachio Facility from Dole Dried Fruit and Nut Company in 1995. At the time of the acquisition, the Facilities were located on adjacent properties under Dole's ownership. Setton's acquisition of the Pistachio Facility included property containing the citrus pond regulated under WDRs 94-302, and Setton assumed operation of the pond and discharge of the citrus wastewater.

The wastewater from the Pistachio Facility and Citrus Facility is not commingled but are separately discharged to the same LAAs.

5. The Facilities' area encompasses about 97 acres of land on the east side of Highway 65 and south of Terra Bella Avenue (Avenue 95) on the west edge of the community of Terra Bella as shown on the Facilities Site Map included as **Attachment B**. The Pistachio Facility comprises about 80 acres and Citrus Facility occupies the remaining 17 acres.
6. Process wastewater generated by the Facilities are currently discharged to about 961 acres of farmland as shown on the Facilities LAA Map included as **Attachment C**. The LAAs are primarily located in Sections 4, 5, 9, and 16 of Township 23 S, Range 27 E, Mount Diablo Base and Meridian (MDB&M). The Assessor Parcel Numbers (APNs), their associated acreage, and the respective landowners of the APNs that comprise the Facilities area and the LAAs are listed in **Attachment D**.
7. The Dischargers, as owners and/or operators of the Facilities, are responsible for compliance with the WDRs prescribed herein.
8. The following materials are attached and incorporated as part of this Order:
 - a. Attachment A – Facilities Location Map
 - b. Attachment B – Facilities Site Map
 - c. Attachment C – Facilities LAA Map
 - d. Attachment D – LAA Ownership and Acreage
 - e. Attachment E – Non-Pistachio Harvest Process Flow Diagram
 - f. Attachment F – Pistachio Harvest Process Flow Diagram
 - g. Attachment G – USGS Topographic Map
 - h. Standard Provisions & Reporting Requirements dated 1 March 1991 (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/std_provisions/wdr-mar1991.pdf)
 - i. Information Sheet
9. Also attached is **Monitoring and Reporting Program Order (MRP) R5-2026-XXX**, which requires monitoring and reporting for discharges regulated under these WDRs.

Setton Pistachio of Terra Bella, Inc. and Porterville Citrus, Inc.

Terra Bella Processing

Tulare County

10. WDRs Orders 92-191 and 94-302 are outdated and neither reflect the current discharge and disposal practices for either processing operation. The revised WDRs herein are necessary to reflect existing operations at the Facilities and ensure the discharge meets the requirements of current water quality plans and policies.

Regulatory History

11. The Facilities have been in use for over 50 years, with the earliest regulatory documents on file being Central Valley Water Board Resolution 71-78, which was issued to the Terra Bella Citrus Association on 24 September 1971. The Central Valley Citrus Packing Company (CVC) and the California Association of Pistachio Producers (CAPP) submitted RWD on 19 July 1977 for the discharge of up to 100,000 gallons per day (gpd) of industrial wastewater to two ponds owned by CVC. Wastewater from the two ponds was used for spray irrigation on CVC property and was also pumped into a third pond and used by Tulare County for dust control on county roads.
12. Records indicate that the T.M. Duche Nut Company (TMD) took over operations in early 1981 and submitted a RWD on 11 February 1981. The 1981 RWD indicated that CVC and TMD would discharge to ponds on their own properties but would share the disposal area if needed. Regulation of the TMD discharge remained under WDRs Order 78-11, while CVC was issued separate WDRs Order 82-072 that regulated a proposed discharge of up to 1.45 million gallons annually to an onsite evaporation percolation pond used by Tulare County for dust control.
13. The Dole Dried Fruit and Nut Company (Dole Fruit and Nut) purchased the Facilities in 1990 and submitted a RWD in May 1990 for the discharge of fruit and nut processing wastewater. Dole Fruit and Nut was issued WDRs Order 92-191 in September 1992, which is the current WDRs Order in place for the discharge of wastewater to land from the Pistachio Facility, and is discussed in more detail in the following section.
14. Dole Citrus and CVC were issued WDRs Order 94-302 in October 1994, which authorized the discharge of up to 80,000 gpd of citrus wastewater to an unlined evaporation percolation pond with a surface area of 22,500 square feet and a total depth of 16 feet below ground surface (bgs). Setton purchased the Pistachio Facility from Dole in 1995.

Historic Odor Issues and Cease and Desist Order R5-2020-0038

15. There is a long history of nuisance odor conditions at the Facilities. The file record contains a 6 January 1981 letter from TMD indicating they were aware of the odors and were working with a consultant to alleviate the issue. WDRs Order 91-121, Finding 7, indicates that, *“From 1980 to 1985, the Board and Tulare County received frequent odor and vector complaints against the Discharger.”*
16. On 12 and 13 March 2020, Central Valley Water Board staff (Staff) conducted inspections of the Facilities and the surrounding areas to evaluate compliance with WDRs Order 92-191. Staff found the Pistachio Facility violated its WDRs and the Water Code by failing to effectively manage wastewater storage and disposal, producing nuisance odors, and conducting operations beyond what was it was authorized to do.
17. Due to ongoing odor issues at the site, the Central Valley Water Board issued Cease and Desist Order (CDO) R5-2020-0038, on 13 August 2020, requiring Setton to:
 - Immediately cease and desist the generation of objectionable odors;
 - Immediately cease and desist (and otherwise abate) all nuisance conditions existing in, or arising from discharges to the treatment/storage pond and any other wastewater impoundments at the Facilities; and
 - Submit various reports proposing improvements to the treatment/storage pond and wastewater distribution system to come into compliance (i.e., a Pond Compliance Plan, an Aeration System and/or Pond Modifications Improvement Report, and an Operations and Maintenance Plan for the wastewater and storm water collection, treatment, and disposal systems.
18. The primary source of odors reported in 2020 was the lined 350-acre-foot effluent treatment and storage pond constructed in 2017. Since that time, Setton has ceased using the 350-acre-foot pond for the storage and dispersal of wastewater and now only uses the pond for collection of storm water, which is discharged to the LAAs.
19. Staff conducted multiple site visits between adoption of the CDO and 30 September 2024 and confirmed that these corrective actions had been implemented. Additionally, during the 2024 pistachio harvesting season, Staff conducted one inspection of the Facilities, and San Joaquin Valley Air Pollution Control District conducted seven additional inspections, in response to odor complaints. None of these inspections confirmed the presence of nuisance odors

at the Facilities. Technical reports required by the CDO were all submitted by the Discharger by the deadlines specified in the CDO. In April 2025, the Central Valley Water adopted Order R5-2025-0017, rescinding the CDO, based on findings that Setton had completed all tasks required by the CDO.

20. Since adoption of the existing WDRs for both Facilities in the early 1990's, multiple technical reports have been submitted for the proposed wastewater flow rate increases, changes to the process wastewater disposal system at the Facilities, and LAA expansions. A timeline summarizing pertinent documents submitted to the Central Valley Water Board requesting changes in the pistachio wastewater operations at the Facilities are below.
- A January 2009 RWD requested an increase in the maximum daily and annual discharge rates of 3 mgd and 60 million gallons per year (mgy), respectively, and an increase in the LAA acreage to 250 acres.
 - A December 2016 RWD proposed the addition of a 350-acre-foot lined pond (i.e., anaerobic lagoon), an increase in flow to 88.3 mgy, and an increase in the LAA acreage to 283 acres.
 - A December 2019 RWD, amended in April 2020, proposed an LAA expansion that would result in a total of 1,015 acres and increases to the daily and annual authorized discharge volumes of 4.0 mgd, and 100 mgy, respectively. Setton also requested a pH limit revision from 6.5 to 4.5. Central Valley Water Board staff responded in a letter on 15 May 2020 that indicated the revised RWD was incomplete and the requested changes were not made.
 - A March 2021 RWD, amended in May 2021, proposed to keep the discharge limit of 60 mgy, requested authorization to apply wastewater to 872 acres of LAAs, described improvements to the wastewater treatment and distribution system, and again requested pH limit revision from 6.5 to 4.5.
 - A March 2023 RWD, revised in May 2023, again proposed an increase in the maximum annual and daily discharge of pistachio wastewater up to 85 mgy and 3 mgd, respectively. Additionally, this RWD proposed an additional 89 acres of LAA (961 acres total), and revision of the lower pH limit from 6.5 to 4.5 pH s.u. Staff responded in a letter on 9 June 2023 that the revised RWD was complete and that Staff could proceed with revising the WDRs for the Facilities.

- A May 2023 Revised RWD identified three wastewater treatment processes employed at the Pistachio Facility's prior to disposal: filtration, dissolved air flotation (DAF), and aeration.
21. Staff reviewed and responded to the May 2023 Revised RWD indicating it was complete and that Staff would proceed with the development of updated WDRs for the Facilities. However, following the rescission of CDO R5-2020-0038 in April 2025, Setton submitted an Addendum to the May 2023 Revised RWD on 20 May 2025 that described several additional changes to the wastewater treatment disposal system that were not included in the May 2023 Revised RWD. Staff requested further information following review of the May 2025 Addendum, and the Discharger addressed Staff's request in a revised September 2025 RWD. The proposed changes are discussed in greater detail the following findings.

Changes to Wastewater Disposal System

22. The May 2025 Addendum described several changes made to the wastewater treatment disposal system that were not included in the May 2023 Revised RWD and had not been previously discussed with Staff. The changes reported in the May 2025 Addendum RWD included:
- Removal of the DAF units after the 2022 processing season and replacement with the Fiber Filter System (FFS) proposed in the May 2023 RWD. Previously, both the DAF system and FFS were to be used in conjunction, with the FFS preceding the DAF in the treatment process.
 - The addition of a centrifuge to increase solids removal. The Discharger anticipates that the addition of the centrifuge will result in an approximate 56 percent TSS reduction, which is based on an experimental centrifuge test conducted during the 2024 harvest season.
 - Construction of a new, lined wastewater retention pond (Bella Pond) upstream of the current East and West ponds that will serve as a holding pond for the new proposed centrifuge. The Pond was completed in August 2025, but the Addendum did not include design/construction plans for the Bella Pond.
23. To address potential odors emanating from the Pistachio Facilities' wastewater ponds, the September 2025 RWD indicates a Venturi Aerator will be used in the East Pond, and paddle wheel aerators will be available for installation in the Bella Pond and the West Pond, if needed. Additionally, the RWD notes that extra oxygen may be provided to the ponds with the addition of hydrogen peroxide.

24. To further address the potential odor generation in the existing ponds and new Bella Pond, the Discharger indicates solids will be removed from the effluent stored in the Bella Pond using the recently constructed centrifuge and the retention time for wastewater in the Bella Pond and others will be less than two hours. The retention time is calculated as the volume of the treatment unit divided by the flowrate of the liquid. However, process flow rates are variable and fluctuate depending primarily on the tonnage of the pistachios processed. Setton has developed a flow balance/schedule that will be used to determine the appropriate rates that wastewater can be pumped out of the Bella Pond to achieve the two-hour retention time maximum and to avoid odor generation.

Existing Facilities and Discharges

Citrus Facility

25. The Citrus Facility normally operates from October to July. The Citrus Facility generates three process wastewater streams: flume wash, high pressure wash, and water rinse wastewater streams. Treatment of the citrus wastewater is minimal with the process wastewater being collected in the New Citrus Pit and screened using sloped screens and a sand filter prior to being discharged to the LAAs.
26. Historically, the citrus wastewater was commingled with pistachio wastewater and storm water in a gunite-lined hulling pond at the Pistachio Facility. Beginning in January 2022, citrus wastewater and storm water are now pumped into Setton's secondary back-up pipeline (South Pipeline), which can flow directly into the LAAs by subsurface irrigation. If needed, the commingled citrus wastewater and storm water can be directed to the East or West ponds and then to the LAAs. A Process Wastewater Flow Diagram that shows the citrus discharge during the pistachio non-harvest period is included as **Attachment E**.

Pistachio Facility

27. The Pistachio Facility is shown in Attachment B and consists of three office buildings, a maintenance shop, an IT quality assurance laboratory, and a scale house. There are five hand sort rooms just south of the administration office building. There are two hullers (East and West) that preclean and dry incoming pistachios and numerous silos are used to store and fumigate the nuts. Several warehouses are onsite for storage of the nuts in various stages (raw, ready to eat, etc.) and maintenance related operations.

28. The pistachio harvest season is weather dependent but typically runs about 55 days from mid-August to mid-October. Pistachios are harvested and delivered to the Pistachio Facility where they are pre-cleaned to remove small twigs, leaves, and other debris. There are six pre-cleaning lines present at the Pistachio Facility, four at the West huller and two at the newer Eastern huller. A Process Flow Diagram for Setton's harvest period is included as **Attachment F**.
29. Following pre-cleaning, pistachios are hulled and the hulling wastewater, along with the hulls and shells, is discharged to concrete lined hulling wastewater pits (or hulling pits). There are six hulling pits, one for each pre-cleaning line, and each operate up to 20 hours per day during the harvest. Pits 1 through 4 serve the West Huller and each have volumes about 685 cubic feet each. Pits 5 and 6 serve the East Huller and each have volumes of about 1,823 cubic feet.
30. From the pistachio pits, the wastewater is screened to separate the solids using six sloped screens, three with 0.015-inch mesh and three with 0.010-inch mesh. From the sloped screens, wastewater is routed through fiber filtration (FF-30) screens for further solids removal. Effluent from the FF-30 fiber filtration system goes into the "Gunite-Lined Pond," which has a capacity of 2.8-acre-feet (approximately 912,400 gallons). Within the Gunite-Lined Pond, pistachio processing wastewater is commingled with any seasonal storm water from the Pistachio Facility and an adjacent area of the Terra Bella community.
31. From the Gunite-Lined Pond, wastewater is sent through a series of filters (Filtomatic Filters) to further reduce solids content prior to discharge into the "Bella Pond," which contains a high-density polyethylene (HDPE) liner and a storage capacity of 10.5 acre-feet (3.4 million gallon). The Bella Pond was designed such that it slopes downward from the wastewater inlet towards the new centrifuge that was constructed at the opposite end and just outside of the Bella Pond. The September 2025 RWD indicates that this design provides a cascading effect as water enters the pond and then into the centrifuge, reportedly allowing oxygen to be diffused into the water and reduce the potential for odors. Additionally, the RWD indicates that wastewater transfer in and out of the Bella pond is continuous and will reportedly have a shorter than two-hour retention time.
32. From the Bella Pond, wastewater is treated using a centrifuge to further remove solids and then discharged in either the unlined 5.2-acre-foot (1.69 million-gallon) East Pond or the 8.5-acre-foot (2.77 million-gallon) West Pond. From the East or West Ponds, the wastewater is once more sent through Filtomatic Filters and then a sand filter prior to being discharged via subsurface

drip irrigation lines to 961 acres of LAAs that have been divided into 25 blocks cropped in pistachios with a winter wheat cover crop and citrus.

33. To mitigate potential odors created by the storage of wastewater in the Pistachio Facility ponds, the September 2025 RWD proposes using a hydrogen peroxide solution and aerators if needed to keep the dissolved oxygen (DO) concentration in the wastewater at a concentration of 1.0 mg/L or higher. The September 2025 RWD notes that objectionable odors associated with the wastewater in the Bella Pond should not occur as the retention time will be limited to two hours. If needed, the outflow rate from the pond can be increased by using an external pump to transfer water out of the pond to meet the desired two-hour retention time.
34. Solids removed from the waste stream at the sloped screens and those removed during the various screening systems are collected and trucked offsite by a licensed transportation company for disposal at a permitted facility, composting, or used for animal feed.
35. The annual average and daily maximum wastewater discharge from the Facilities since 2023 are shown in Table 1 below.

Table 1 - Average Wastewater Flow

Source	2023		2024		2025	
	Annual (mgy)	Daily Max (mgd)	Annual (mgy)	Daily Max (mgd)	Annual (mgy)	Daily Max (mgd)
Pistachio Facility	57.7	2.21	54.2	1.02	75.7	2.96
Citrus Facility	5.7	0.030	6.03	0.035	4.1	0.036

36. Domestic wastewater from the Facilities is managed by an onsite domestic wastewater system consisting of five septic tanks that are pumped and serviced by a waste management contractor (currently Quik Rooter) once every three years or as needed. The domestic wastewater system is regulated by Tulare County.

Wastewater Quality

37. On 11 September 2020, the Central Valley Water Board issued Revised MRP R5-2019-0802-01 (Revised MRP) to the Dischargers for the collective waste

discharges at the Facilities. The Revised MRP prescribed wastewater sampling requirements for several different monitoring locations throughout the Facilities, including one location for sampling citrus wastewater, and seven monitoring locations associated with the pistachio wastewater. Many of the pistachio wastewater monitoring locations designated in the Revised MRP were points throughout the previous wastewater treatment system.

38. The revised September 2025 RWD noted that Setton uses the following chemicals onsite for equipment cleaning and maintenance.

- Isopropyl alcohol (500 gallons)
- Alka Clean Plus (1,050 lbs)
- Heavy Duty Degreaser (330 lbs)
- Cleantech Ultra-pure hand soap (55 gallons)
- Motor oil (225 gallons)
- Chevron Thinner (solvent) (55 gallons)
- Sodium Hypochlorite (500 gallons)
- Quaternary Ammonia (175 gallons)

Additionally, the Discharger may use a 50 percent hydrogen peroxide solution to increase dissolved oxygen content in the ponds to control potential odors. The September 2025 RWD noted that 1,350 gallons were used for odor control in 2022.

39. The Revised MRP required weekly monthly monitoring for biochemical oxygen demand (BOD₅), total suspended solids (TSS), salinity and nitrogen constituents, and general minerals for the discharges from both Facilities. Observed annual average Citrus Facility effluent quality results for select constituents from 2022 through 2025 are summarized in Table 2.

Table 2 - Citrus Effluent Quality

Constituents	Units	2022	2023	2024	2025
Sodium	mg/L	520	449	527	340
FDS	mg/L	1,138	1,603	1,625	853
BOD ₅	mg/L	470	929	823	603
Nitrate (as N)	mg/L	0.9	1.5	1.7	1.1

Constituents	Units	2022	2023	2024	2025
TKN	mg/L	18.5	24	30	22.6
Total Nitrogen	mg/L	19.4	26	32	23.7
Iron	µg/L	11,489	23,346	13,900	20,225
Manganese	µg/L	274	512	412	478
Boron	µg/L	219	233	138	133

40. The Revised MRP required collection of pistachio processing wastewater samples from several pistachio processing effluent sampling locations, including the hulling pits, the Gunite-Lined Pond, the East and West Ponds, and the discharge to the LAA. The hulling pit sample location serves as an influent sample location for wastewater entering the treatment system and provides for wastewater quality prior to the fiber and Filtomatic screen systems. The results of samples collected from the hulling pits since 2022 are summarized in Table 3.

Table 3 - Pistachio Influent Quality

Constituents	Units	2022 Average	2023 Average	2024 Average	2025 Average
Potassium	mg/L	1,316	2,450	516	1,015
Sodium	mg/L	98	16	14	4.8
FDS	mg/L	2,920	5,600	3,940	2,020
BOD ₅	mg/L	5,200	7,400	8,625	7,468
Nitrate as N	mg/L	0.8	1.5	3.5	1.0
TKN	mg/L	248	502	142	264
Total N	mg/L	249	504	145	264
Iron	µg/L	4,120	5,425	1,288	2,718
Manganese	µg/L	217	415	95	205
Boron	µg/L	2,190	1,024	450	745

41. The Discharger collected samples from Bella Pond in September 2025 for select constituents, and the results are presented in Table 4 below. Reported results for total nitrogen, TKN, and nitrate in the Bella Pond are not summarized in Table 4, and further discussion for these results is included in the following finding.

Table 4 - 2025 Bella Pond Effluent Quality

Parameter	Units	9/5/25	9/19/25	9/26/25	10/10/25	Average
TDS	mg/L	9,500	9,300	7,800	6,000	8,150
FDS	mg/L	6,500	5,100	3,500	3,500	4,650
TSS	mg/L	4,800	6,300	2,400	1,100	3,650
BOD ₅	mg/L	8,000	10,000	7,000	7,100	8,025

42. Sample results from the Bella Pond indicate elevated constituent concentrations for salinity as well as BOD₅. Results reported for total nitrogen and TKN in the Bella Pond were also elevated but do not align with concentrations observed at other monitoring locations during 2025. Total nitrogen averaged 52 mg/L and ranged from 45 to 62 mg/L; while, average total nitrogen concentrations observed during 2025 at the hulling pits was 265 mg/L, as summarized in Table 4 above, 445 mg/L in the Gunite-Lined Pond, and 242 mg/L in effluent discharged to the LAAs, as discussed below. TKN results from 2025 are similar. The cause for the discrepancy between observed nitrogen concentrations in the Bella Pond relative to other monitoring locations is unclear; however, the Dischargers' consultant has indicated that Bella Pond samples were analyzed using a different laboratory, which is a potential factor in the differing results. Additionally, the discrepancy may be due to the variability of the discharge throughout the season and non-temporal sampling events across the differing monitoring locations.
43. Average monitoring results of effluent discharged to the LAAs from 2022 through 2025 are shown in Table 5. The 2025 results for FDS, TDS, nitrate, TKN, total nitrogen, and BOD₅ are from two samples collected on 24 September and 3 October 2025. The remaining constituents for 2025 are the results of one sample collected on 24 September 2025.

Table 5 - Pistachio Wastewater Effluent Quality

Parameters	Units	2022	2023	2024	2025	Average
Potassium	mg/L	1,533	1,341	1,190	170	1,059
Sodium	mg/L	162	45	188	60	114
FDS	mg/L	2,900	2,936	2,771	3,400	3,002
TDS	mg/L	7,367	6,892	8,175	7,750	7,546
BOD ₅	mg/L	5,267	5,523	7,725	7,150	6,416
Nitrate as N	mg/L	<0.8	< 1.0	3.0	<0.9	1.4

Parameters	Units	2022	2023	2024	2025	Average
Ammonia as N	mg/L	70	90	37	62	65
TKN	mg/L	233	518	260	242	313
Total N	mg/L	233	518	260	243	314
TSS	mg/L	293	2,846	2,000	1,180	1,579
Boron	µg/L	470	358	420	490	435
Iron	µg/L	3,300	1,901	2,867	2,500	2,642
Manganese	µg/L	267	152	220	270	228
Chloride	mg/L	200	86	261	110	164

44. The results indicate high strength waste with elevated concentrations of FDS, BOD₅, total nitrogen, and some metals (iron and manganese) are typically discharged to the LAA. Generally, the average BOD and total nitrogen concentrations of effluent discharged to the LAA are slightly lower but similar to hulling pit concentrations. The exception is average annual total nitrogen concentrations from 2022 through 2025, which was 314 mg/L at the discharge to the LAAs and about 290 mg/L at the influent hulling pits, which may be attributed to the variability of the discharge and different sampling events. Iron results are notably elevated, averaging 3,275 µg/L in samples collected at the hulling pits and 2,650 µg/L in samples collected from the discharge to the LAAs. Additionally, while average annual FDS concentrations are typically lower in effluent discharged to the LAA compared to influent quality from the hulling pits, the 2025 data shows that FDS concentration in the discharge to the LAAs was significantly greater than influent.

45. As shown in Table 3 through 5, monitoring results are variable. The first discharge of the season is reported to contain primarily equipment rinse and residual storm water, and constituent concentrations results are often low relative to the remaining process season samples. Comparing the results shown in Tables 3, 4, and 5 indicates the average FDS result for samples of the pistachio influent was lower than anticipated in 2025, averaging 2,020 mg/L. The average 2025 result was calculated using observed results ranging from 180 to 3,200 mg/L. As shown in Table 4, FDS concentrations in filtered wastewater samples collected from the Bella Pond in 2025 averaged 4,650 mg/L and the filtered and centrifuged wastewater discharged to the LAAs in 2025 as shown in Table 5 averaged 3,400 mg/L. Samples from both the Bella Pond and the discharge to the LAAs had higher FDS results than influent samples collected at the outflow from the hulling pits. The cause of the lower FDS result in the influent samples in

2025 is unknown, but it is likely the result of only three to four samples collected during the processing season in which one low result can skew the results. The attached MRP requires weekly sampling of the effluent discharged to the LAAs, which should result in the collection and analysis of approximately eight to ten samples per season. This frequency should provide a more accurate evaluation of FDS concentrations and other constituents in the wastewater discharged to the LAAs.

46. Similarly, for BOD₅, reported wastewater quality data for the Bella Pond and effluent discharged to the LAA during 2025 were not collected on the same day; however, comparison of the average annual concentrations indicates that the centrifuge and downstream filters provided about eleven percent reduction of BOD₅ in the effluent during 2025. This reduction estimate is limited by the availability of similar temporal data for comparison; however, it provides some basis for the BOD₅ reduction capability of the treatment system across one harvest season.

Land Application Areas (LAAs)

47. Since adoption of WDRs Orders 92-191 and 94-302, the Discharger has increased the total acreage of LAAs to 961 acres of farmland consisting of 41 separate parcels (Attachment C) at the locations shown on Attachment D, Land Application Area Map. The LAAs are divided into 25 blocks ranging in size from 32 to 60 acres. Wastewater is applied to each block via subsurface irrigation. The majority of the LAAs consist of 829 acres of pistachio trees that are double cropped with a winter wheat cover crop, while the remaining 132 acres are planted with citrus trees.
48. Aerial images indicate there have been some modifications made to several of the LAA blocks that are not depicted or considered in RWD submittals such as adding new storage and distribution ponds and/or road modification. For instance, LAA Block 8 is west of the Facilities and listed as comprising 49 available acres with a 1-acre residence along its eastern boundary. However, the residence has been removed, and an approximately 2.5-acre irrigation pond is now present. Similarly, an approximately 11-acre storm water pond is now apparently present in the center of Block 16 (60 acres) that is not shown on maps submitted with the September 2025 RWD. The Discharger has stated that the pond is not used for wastewater disposal but collects storm water runoff from east of the Facilities to Block 16 of the LAAs. Also, a 2.5-acre irrigation pond is now present on Block 18 (40 acres) that was not previously identified in RWD submittals. This Order contains Provision J.7.e., which requires the Discharger to

evaluate the irrigable acreage (excluding ponds, structures, roads, etc.) that make up the LAAs.

BOD, Salt, and Nitrogen Loading

49. The September 2025 RWD includes estimated BOD loading from the citrus and pistachio discharges at the Facilities. It was estimated that the citrus discharge results in BOD loading to the LAA of 102 lb/ac/day maximum and a cycle average of 8 lbs/ac/day. For the pistachio discharge, the September 2025 RWD provided estimated cycle average BOD loading rates from Setton's pistachio wastewater discharge ranging from 36 to 101 lbs/ac/day. The values were estimated over a 50-day irrigation schedule scenario considering the average BOD₅ concentration of effluent discharged to the LAAs during the 2023 and 2024 harvest seasons (6,251 mg/L), irrigation cycle days (i.e., irrigation and rest) ranging from 14 to 30 days, and application to irrigation blocks ranging from 32 to 80 acres. The RWD states that concentrations are typically lower in the beginning and end of the harvest season and these samples were omitted from BOD loading estimations. The Discharger's BOD loading estimates are based on the average BOD₅ concentrations calculated from observed concentrations over two harvest seasons, which removes maximum concentrations from consideration. A more conservative estimate of BOD loading would consider wastewater applications and maximum observed effluent concentrations during similar timeframes.
50. Based on the 50-day irrigation schedule included in the RWD, BOD loading reaches its peak between hulling days 15 through 26. During this peak loading timeframe, irrigation cycle days range from 16 to 22 days on 17 LAA blocks consisting of 637 acres, and the Discharger's cycle average BOD loading estimates range from 51 to 101 lbs/ac/day. However, the Discharger's Fourth Quarter 2024 monitoring report included a 30 August 2024 BOD₅ effluent sample of the discharge to the LAA that resulted in a concentration of 7,900 mg/L. This sample date corresponds approximately to the peak loading timeframe indicated by the Discharger's irrigation schedule. Recalculation of the BOD loading estimate considering the same cycle days and acreage the Discharger used in its estimates, and the 30 August 2024 observed BOD₅ of 7,900 mg/L, results in a range of cycle average BOD loads from 126 to 160 lbs/ac/day; however, this only considers wastewater application to approximately two-thirds of the available LAAs. It is expected that even at peak harvest season loading, when greater than average BOD₅ concentrations have been observed, the Discharger should be able to manage the discharge to achieve cycle BOD loading rates less than 100 lbs/ac/day by using the available additional acreage. Additionally, and as indicated in Finding 45, this Order requires weekly sampling of the effluent

discharged to the LAAs, which will allow Setton to better estimate the volume of wastewater to discharge to each individual LAA block to comply with a 100 lb/ac/day cycle average BOD loading limit.

51. The September 2025 RWD includes annual salt and nitrogen loading estimates based on the proposed maximum annual flow to the LAAs (85 million gallons), crop irrigation requirements for 961 acres of available LAA, and average concentrations of FDS and total nitrogen in wastewater applied to the LAAs (3,070 and 286 mg/L, respectively) from 2023 through 2024. In the September 2025 RWD, the Discharger estimated the annual nitrogen load from both the citrus and pistachio discharges, along with the supplemental irrigation water, would be approximately 210 lbs/ac/yr for blocks planted with citrus trees and be approximately 154 lbs/ac/yr for the fields planted with pistachios and winter wheat. The September 2025 RWD included nitrogen uptake rates that note that citrus trees can utilize up to 265 lbs/ac/yr, pistachio trees can utilize 200 to 225 lbs/ac/yr in “on years” and 100 to 113 lbs in “off years”, and winter wheat can uptake 108 lbs/ac/yr. Based on the estimated crop uptake, the annual nitrogen load results in a net negative (i.e., the discharge does not meet crop needs with respect to total nitrogen) as summarized in Table 6 below. Additionally, the RWD estimates are conservative because they are based on 2023 and 2024 data, which show higher nitrogen concentrations than the more recent 2025 data that reflect the recent treatment upgrades.

Table 6 - Estimated Annual Nitrogen Loading

Crop	Total Nitrogen Load (lbs/ac/yr)	Crop Uptake (lbs/ac/yr)	Balance (lbs/ac/yr)
Pistachio and winter wheat cover crop	154	208 - 338	-54 to -184
Citrus	210	265	-55

52. Using the same method, the Setton estimated that the Facilities discharges and supplemental irrigation would result in a total annual FDS load of 3,855 lbs/ac/yr to the LAAs planted with citrus and 2,816 lbs/ac/yr to blocks double cropped with pistachios and winter wheat. While these salt loadings are high, the Discharger is participating in the Salt Control Program, which is focused on salinity control measures and long-term solutions for salt accumulation in the Central Valley. Additionally, this Order includes performance-based FDS limits (calculated as an annual average) for the Facilities’ discharges.
- a. For the Pistachio Facility discharge, this Order sets a performance-based FDS limit of 3,300 mg/L, which is based on the 2022 through 2025

average FDS concentration of the pistachio effluent discharged to the LAAs (3,002 mg/L) and the addition of about one standard deviation.

- b. For the Citrus Facility discharge, this Order sets a performance-based FDS limit of 1,700 mg/L, which is based on the 2022 through 2025 average FDS concentration (1,304 mg/L) and the addition of about one standard deviation.

Storm Water

53. There are currently three storm water sources for the Facilities as follows:
 - Storm water runoff from the Citrus Facility.
 - Storm water runoff from the Pistachio Facility; and
 - Runoff from a portion of the community of Terra Bella west of the Pistachio Facility (west of Road 234).
54. Storm water from the Citrus Facility is commingled with the Citrus Facility wastewater and directly discharges to the LAAs or is routed to the East or West ponds, if needed. During pistachio harvest, storm water runoff from the Pistachio Facility and an adjacent portion of the community of Terra Bella is collected and directed to the gunite-lined pond, where it is commingled with the pistachio hulling wastewater. During non-harvest season, this storm water runoff either evaporates at the gunite-lined pond or is discharged to either the 350 ac-ft lined pond or to all the other ponds using the North pipeline. The non-harvest season storm water can be used for irrigation, and some will evaporate or percolate in the unlined East or West Ponds.
55. Storm water is also collected and controlled in an irrigation/storm water pond located on Block 18 (APN 320-330-007-000) that is about 2 miles south of the Facilities and southwest of the intersection of State Highway 65 and Avenue 80. The Discharger indicated the pond is not used to store pistachio wastewater and provided a map showing the pond collects storm water runoff from farm field east and southeast of the southern LAAs. Runoff flows to the northwest following the natural slope and drainage course that is depicted on Attachment G, a 1929 USGS topographic map of the area.

Site-Specific Conditions

Topography, Climate and Land Use

56. The ground surface at the Facilities and the LAAs has been leveled to control storm water runoff and irrigation flow, but the natural ground surface in the past sloped gently to the northwest as shown on **Attachment G**, 1929 USGS Topo Map. Benchmarks shown indicate the elevation at the southeast corner of Section 4 was 486 feet AMSL and the elevation of the northwest corner is shown as 452 feet AMSL. Three small streams were present flowing from the southeast to the northwest as shown on Attachment G. One was present in the current area of the Facilities and another in the vicinity of LAAs. Surficial stream deposits affect the flow/movement of groundwater within the vadose zone.
57. The nearest natural surface water is Deer Creek, located about a mile north of the Facilities. The Friant-Kern Canal is about 3.5 miles west of the Facilities and the dam for Lake Success is about 10 miles northeast of the Facilities.
58. The revised September 2025 RWD included a Soil Report indicating the primary soil type of the LAAs is the Centerville clay (77 percent) followed by San Joaquin loam (13 percent), and Exeter Loam (10 percent). All three soils are listed as “Farmland of statewide importance.” The Centerville clay is described as well drained with low to moderately high capacity to transmit water and moderate water storage. The San Joaquin loam is listed as moderately well drained with low to moderately low capacity to transmit water and low available water storage. The Exeter loam is described as moderately well drained with a very low to moderately low capacity to transmit water and has low available water storage. The Centerville clay and the Exeter loam are listed as non-saline to very slightly saline.
59. The Facilities are in an arid climate characterized by dry summers and mild winters. According to nearby available data from the California Irrigation Management Information System (CIMIS), the average annual precipitation recorded at the Delano – Station 182 (approximately 22 miles south of Terra Bella) for 2022 to 2024 was 8.8 inches. The annual ET for 2025 was 54.4 inches.
60. According to the revised September 2025 RWD, the Federal Emergency Management Agency’s (FEMA) [Flood Insurance Rate Map \(https://msc.fema.gov/portal\)](https://msc.fema.gov/portal) Tulare County, Community Panels 06107C1958E and 06107C1975E are within Zone X flood area, which indicates an area that is outside the 0.2% annual chance floodplain.
61. Land uses in the vicinity of the Facilities include Industrial/Commercial (Growers Citrus Packing Plant) and residential to the north and east; manufacturing (Sierra Forest Products) to the south; and primarily agriculture with some rural residential to the west.

Groundwater and Subsurface Conditions

62. The Facilities are in the eastern side of California’s Central Valley, adjacent to the Sierra Nevada mountain range. The site is underlain by coalescing alluvial fans that are grouped into five generalized geologic units: unconsolidated continental deposits, Pliocene marine deposits, Santa Margarita Formation, Tertiary sedimentary deposits, and granitic crystalline basement. The youngest geologic unit, the unconsolidated continental deposits, is noted as the primary groundwater reservoir in the subbasin.
63. The various RWD submittals contain some information regarding the depth to groundwater underlying the Facilities. The September 2025 RWD listed April 2008 groundwater elevations and depth to groundwater for eight nearby supply wells, which ranged from 112.8 to 218 feet bgs. Well-construction data for these wells was not provided. More recent regional depth to groundwater information in the Facilities area, available from the Department of Water Resources Sustainable Groundwater Management Act Data Viewer, is summarized in Table 7.

Table 7 - Regional Depth to Groundwater

Season and Year	Depth to Groundwater (Feet bgs)	Direction of Groundwater Flow
Spring 2025	160	Southwest
Fall 2024	135	Southwest
Spring 2024	175	Southwest
Fall 2023	200	Southwest
Fall 2022	265	South
Spring 2022	300	South
Fall 2021	310	South
Spring 2021	300	South

64. Water to the Facilities are provided by the Terra Bella Irrigation District. Source water is supplied via two lines; one is for the pistachio processing operation and is open only during the harvest season, and the other is opened year-round for facility needs (i.e., domestic use) and is chlorinated on-site prior to distribution. The processing supply line is prefiltered by filtomatic filters prior to use at the hullers.

Table 8 - Source Water Quality

Parameters	Units	2022	2023	2024	Water Quality Objectives
EC	µmhos/cm	620	---	10	900
TDS	mg/L	305	60	68	500
FDS	mg/L	290	<10	41	---
Nitrate as N	mg/L	<0.1	0.13	0.14	10
TKN	mg/L	0.8	0.8	---	---
Total Nitrogen	mg/L	0.8	0.93	---	---
BOD ₅	mg/L	---	88	---	---
Sodium	mg/L	108	<7	<1.8	---
Chloride	mg/L	91	1.9	3	250
Potassium	mg/L	<0.5	4.5	0.59	---
Boron	µg/L	312	<100	100	700
Iron	µg/L	<100	849	<31	300
Manganese	µg/L	<20	<30	<3	50

65. Source water quality is generally good, with no exceedances of any water quality objectives (WQOs) reported, with the exception of iron in 2023. Nitrogen and salinity results are less than applicable WQOs. Boron and iron results are high, but much less than the boron and iron results for the citrus and pistachio processing wastewater as shown in Tables 3 and 5.
66. Irrigation water for the LAA is supplied by 12 wells, with Well 8 being the primary irrigation source well, which can sustain a pumping rate up to 800 gpm. Irrigation water quality data from single samples collected in August 2022, September 2023, and September 2024 were included in the September 2025 RWD and are presented in Table 9.

Table 9 - Irrigation Water Quality

Constituent	Units	2022 (Well 8)	2023 (Well 1)	2024 (Well 12)
EC	µmhos/cm	831	---	290
TDS	mg/L	400	350	210

Constituent	Units	2022 (Well 8)	2023 (Well 1)	2024 (Well 12)
FDS	mg/L	380	220	150
Nitrate (NO ₃) as N	mg/L	<0.1	<0.1	0.3
TKN	mg/L	4.4	4.4	---
Total Nitrogen	mg/L	4.4	9.4	---
Sodium	mg/L	147	43	59
Chloride	mg/L	150	56	18
Potassium	mg/L	<0.5	8	0.82
Boron	µg/L	453	120	120
Iron	µg/L	<100	<100	124

67. While there is not a dedicated groundwater monitoring well network present around the Facilities and LAAs, self-monitoring reports from 2016 to 2018 include groundwater monitoring results for eight wells identified as MW-1 through 8. A ninth well is shown (MW-9), but no data was available for review. However, these wells were not installed to monitor first encountered groundwater. They were existing supply and/or domestic wells without construction details. Samples from the wells were collected sporadically and results from June 2016 to August 2018 are shown in Table 10. Table 10 also provides the relative locations of these wells, and as indicated by Table 7, recent groundwater flow direction in the area has been determined to be towards the southwest.

Table 10 - Onsite Groundwater Analytical Results

Well	Date Sampled	Relative Location	pH (s.u.)	EC (µmhos/cm)	TDS (mg/L)	Nitrate as N (mg/L)
MW-1	6/30/16	SE Corner of Facility	7.74	551	340	9.8
	12/7/16		7.79	514	---	8.6
	8/31/17		7.82	603	---	12.0
	12/12/17		8.04	407	---	2.8
MW-1	8/24/18		7.67	---	---	9.9
MW-2	7/20/16	SW & downgradient	7.90	790	520	23
	12/7/16	Blocks 3 & 4	7.97	393	---	4.4
	8/24/18		7.77	---	---	2.9

Well	Date Sampled	Relative Location	pH (s.u.)	EC (µmhos/cm)	TDS (mg/L)	Nitrate as N (mg/L)
MW-3	7/20/16	South & downgradient of Block 12. About 500 feet west of lined lined 350-ac/ft pond	7.85	483	320	6.5
	12/7/16		7.85	407	---	4.3
	8/31/17		7.94	467	---	6.0
	12/12/17		8.09	413	----	4.9
	8/24/18		7.43	---	---	4.0
MW-4	12/7/16	SW & downgradient of Block 13	7.82	710	---	9.9
MW-5	12/12/17	About 500 ft west of East Pond	7.94	758	---	24
MW-6	7/20/16	SE corner and down-to crossgradient Block 5	8.12	416	260	4.1
	8/31/17		7.77	383	---	2.9
MW-7	7/20/16	Southern downgradient edge of Block 2.	7.94	668	420	9.5
MW-8	8/31/17	Within Block 2 near	8.10	541		0.03
	12/12/17	Northern property line.	8.05	672	---	8.7

68. The results are varied but nitrate as nitrogen results from MW-2 and MW-5 have been as high as 23 and 24 mg/L, respectively. Both wells are west of the Facilities, downgradient of LAAs, and both are near the unlined West and East Ponds. MW-2 is about a quarter mile west of the ponds, and MW-5 is about 500 feet west of them. MW-1 has one result of 12 mg/L and two more just below at 9.8 and 9.9 mg/L
69. Staff reviewed the Groundwater Ambient Monitoring Assessment Groundwater Information System (GAMA) database and found 14 wells within two miles of the Facilities, but not all had results of interest (TDS, EC, Nitrate as Nitrogen, etc.). Groundwater results from six wells collected from 1951 through 1958 and situated south of the Facilities are shown in Table 10. The results indicate good groundwater quality and provide background data for EC and nitrate for the area. Groundwater results from four wells dating from 1991 to 2023 had similar to slightly higher results for EC and TDS, but illustrated higher nitrate results than did the results from the 1950's.

Table 11 - Regional Groundwater Monitoring Results

Well ID	Date	EC (µmhos/cm)	TDS (mg/L)	Potassium (mg/L)	NO ₃ -N (mg/L)
USGS-355749119032501	8/6/1958	356	---	2.0	1.0
USGS-355638119031201	8/6/1958	462	---	1.4	0.2
USGS-355747119043201	2/7/1958	280	---	2.2	0.43
USGS-355640119032601	2/7/1957	293	---	1.7	0.1
23S27E05A001M	9/1/1956	---	---	1.6	0.2
USGS-355724119045601	7/31/1951	---	288	---	---
D1061	6/24/2019	---	260	---	6.2
	6/18/2020	---	380	3.8	15
	6/12/2023	---	270	---	7.3
SHOP DOM	1/29/2020	---	---	---	7.0
	11/22/2021	---	---	---	6.8
	11/14/2022	---	---	---	5.5
USGS-355700119040001	12/17/2014	406	263	1.9	4.7
CA5410038-011-011	9/26/1991 to 5/4/2017	694 (520 – 900)	412 (340 – 530)	---	11.1 (6.6 – 18)

70. Comparing available recent and historical groundwater quality data, the local underlying groundwater concentrations of nitrate and, to a lesser degree, salts (EC) have increased. The elevated nitrate results observed in wells near the existing unlined East and West ponds might suggest degradation from the discharge of wastewater to the unlined ponds and/or the LAAs may be contributing to the degradation of the underlying groundwater.

Legal Authorities

71. 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. (Water Code, § 13263, subd. (g).)

72. This Order, in part, and its associated MRP are 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 regarding the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.

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

73. 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 reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of [Water Code] Section 13241.

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

Basin Plan Implementation

Beneficial Uses of Water

74. This Order implements the Central Valley Water Board's Water Quality Control Plan for the Tulare Lake Basin (Basin Plan), which designates beneficial uses for

surface water and groundwater and establishes WQOs necessary to preserve such beneficial uses. (See Wat. Code, § 13241 et seq.)

75. The Facilities are within the Tule Delta Hydrologic Area (No. 558-20), as depicted on interagency hydrologic maps prepared by the State Water Board. Local drainage is to the Tule River. Per the Basin Plan, beneficial uses of underlying groundwater at the Facilities are municipal and domestic supply (MUN); agricultural supply (AGR); industrial service supply (IND); and industrial process supply (PRO).

Water Quality Objectives

76. The Basin Plan establishes a numeric WQO for total coliform organisms in groundwater and narrative WQOs for chemical constituents, tastes and odors, and toxicity in groundwater.
77. The numeric WQO for bacteria is expressed as the most probable number (MPN) of coliform organisms per 100 mL of water. For MUN-designated groundwater, the objective is an MPN of 2.2 organisms over any seven-day period.
78. The narrative WQO for chemical constituents in groundwater generally provides that groundwater shall not contain constituents in concentrations adversely affecting beneficial uses. For MUN-designated waters, the Basin Plan further provides that water, at a minimum, meets the primary and secondary maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22 (Title 22), sections 64431, 64444, and 64449. 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.
79. The narrative WQO for tastes and odors in groundwater provides that groundwater shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
80. The narrative WQO for toxicity provides that groundwater shall be maintained free of toxic substances in concentrations producing detrimental physiological responses in human, animal, plant or aquatic life associated with designated beneficial uses.
81. To the extent necessary, narrative WQOs are quantified, on a site-specific basis, as numeric limits for constituents with potential to adversely impacted designated uses. In determining a site-specific numeric limit, the Central Valley Water Board considers relevant published criteria. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact

water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numeric limitations to implement the narrative objective. In establishing a specific numeric interpretation of a narrative WQO, the Basin Plan methodology is to consider any relevant published criteria.

Salt Control Program

82. 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 (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with [Resolution R5-2020-0057](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf).
83. For the Salt Control Program, dischargers that are unable to comply with the stringent salinity requirements will instead need to meet performance-based requirements and participate in a basin-wide effort known as the Prioritization and Optimization Study (P&O Study) to develop a long-term salinity strategy for the Central Valley. Setton (**CV-SALTS ID 2479**) and Porterville Citrus (**CV-SALTS ID 2392**) received 5 January 2021 Notices to Comply with the Salt Control Program. The Dischargers submitted Notices of Intent (NOIs) on 3 March 2021 electing to participate in the P&O Study, and records indicate that the Dischargers are in good standing with the program. To maintain existing salt discharges and minimize salinity impacts, this Order sets performance-based FDS effluent limitations for the Pistachio Facility and Citrus Facility discharges of 3,300 and 1,700 mg/L, respectively. The basis for these limits are described in previous findings.

Nitrate Control Program

84. The Nitrate Control Program is a prioritized program. The Facilities are within Groundwater Basin 5-022.13 (San Joaquin Valley – Tule Basin), which is a Priority 1 Basin. The Board issued Notices to Comply to dischargers in Priority 1 Basins in May 2020. These notices provided dischargers with a choice to participate in an individual permitting approach (Pathway A) or in a collective permitting approach (Pathway B). Under the collective approach, dischargers jointly form “Management Zones” that fulfill the requirements of the Nitrate

Control Program. In response to the Notice to Comply, the Discharger selected Pathway B and joined the Tule Basin Management Zone.

85. Under the Nitrate Control Program, dischargers that cause or contribute to nitrate pollution in groundwater may apply, individually or collectively, for a limited term “exception” from meeting nitrate limits. Compliance time schedules must be as short as practicable and not exceed 35 years. The Central Valley Water Board will only grant exceptions upon finding that all elements of the Board’s Exceptions Policy are met. For nitrate, the Exceptions Policy dictates that exceptions will not be considered unless an adequate supply of clean, safe, reliable and affordable drinking water is available for those who have been adversely affected by the non-compliant discharge.
86. Management Zones in Priority 1 Basins were required to submit Management Zone Implementation Plans (MZIPs). The Tule Basin Management Zone submitted an MZIP on 5 September 2023. The MZIP was deemed complete by the Board’s Executive Officer in November 2023. The MZIP contains a proposal for how dischargers within the Tule Basin Management Zone will meet requirements of the Nitrate Control Plan and the Exceptions Policy.
87. To meet the requirements of the Nitrate Control Plan, the Tule Basin Management Zone MZIP includes sector-based Nitrate Reduction Programs, including one for Non-15 dischargers, such as the Discharger. The MZIP proposes that the Discharger prepare and submit a facility-specific Nitrate Reduction Work Plan that would characterize the facility’s impact on groundwater, quantify the facility’s nitrate loading to the Upper Zone of groundwater, estimate the necessary improvements to the facility’s discharge to comply with the Management Zone’s Groundwater Protection Target(s) and/or other developed compliance metrics, and provide an implementation schedule that will ensure that the facility complies with the Nitrate Control Program.
88. The Tule Basin Management Zone MZIP proposes to meet the requirements of the Exceptions Policy by, among other things, continuing an interim drinking water program that performs outreach to residents potentially affected by nitrate contamination, offers free nitrate well testing, and provides free replacement water to households whose wells are found to exceed the nitrate drinking water standard.
89. The MZIP will serve as the basis for permit amendments for all dischargers in the Management Zone. The Board proposes considering a package of permit amendments for all dischargers in the Management Zone in a single permitting action, where the Board will also make findings as to whether the requirements of

the Exception Policy are met by the proposals in the MZIP. In the interim, the Discharger is subject to a Conditional Prohibition that requires that the discharger continue to participate in funding and implementing the drinking water program described in the MZIP.

90. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs. As such, this Order may be amended or modified to incorporate any newly applicable requirements to ensure that the goals of the Salt and Nitrate Control Programs are met. More information regarding this regulatory planning process can be found on the Central Valley Water Board's CV-SALTS website (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity).

Special Considerations for High Strength Wastewater

91. For the purpose of this Order, "high strength wastewater" is defined as wastewater that contains concentrations of readily degradable organic matter that exceed typical concentrations for domestic sewage. Such waste contains greater than 500 mg/L BOD₅. Typical high strength wastewaters include septage, some food processing (e.g., slaughterhouse) wastes, winery wastes, and rendering plant wastes.
92. Excessive application of high strength wastewater to land can create objectionable odors, soil conditions that are harmful to crops, and degradation of underlying groundwater with nitrogen species and metals, as discussed below. Such groundwater degradation can be prevented or minimized through implementation of best management practices such as planting crops to take up nutrients or maximizing oxidation of BOD to prevent nuisance conditions.
93. Regarding BOD, excessive application can deplete oxygen in the vadose zone and lead to anoxic conditions. At the ground surface, this can result in nuisance odors and fly breeding. Below the ground surface, when insufficient oxygen is present, anaerobic decay of organic matter can create reducing conditions that convert metals that are naturally present in the soil as relatively insoluble (oxidized) forms into more soluble reduced forms. This condition can be exacerbated by acidic soil and/or wastewater. If the reducing conditions do not reverse as the percolate travels down through the vadose zone, these dissolved metals (primarily iron, manganese, and arsenic) can degrade shallow groundwater quality. Many aquifers contain enough dissolved oxygen to reverse the process, but excessive BOD loading over extended periods may cause degradation and beneficial use impacts associated with these metals.

94. Typically, irrigation with high strength wastewater results in high BOD loading on the day of application. It is reasonable to expect some oxidation of BOD at the ground surface, within the evapotranspiration zone, and below the root zone within the vadose (unsaturated) zone. The maximum BOD loading rate that can be applied to land without creating nuisance conditions or leaching of metals can vary significantly depending on soil conditions and operation of the land application system.
95. Pollution Abatement in the Fruit and Vegetable Industry, published by the United States Environmental Protection Agency (USEPA), recommends BOD loading rates in the range of 36 to 600 lbs/acre/day to prevent nuisance, but indicates that higher loading rates may be appropriate under certain conditions. The studies that supported this report did not evaluate actual or potential groundwater degradation associated with those rates. There are few studies that have attempted to determine maximum BOD loading rates for protection of groundwater quality. Those that have been done are not readily adapted to the varying soil, groundwater, and climate conditions that are prevalent throughout the Central Valley region.
96. The California League of Food Processors' Manual of Good Practice for Land Application of Food Processing/Rinse Water (Manual of Good Practice) proposes risk categories associated with particular BOD loading rate ranges as follows:
 - A. Risk Category 1: (less than 50 lbs/ac/day; depth to groundwater greater than 5 feet) Indistinguishable from good farming operations with good distribution important.
 - B. Risk Category 2: (less than 100 lbs/ac/day; depth to groundwater greater than 5 feet). Minimal risk of unreasonable groundwater degradation with good distribution is more important.
 - C. Risk Category 3: (greater than 100 lbs/ac/day; depth to groundwater greater than 2 feet) Requires detailed planning and good operation with good distribution very important to prevent unreasonable degradation, as well as use of oxygen transfer design equations that consider site specific application cycles and soil properties and special monitoring.

The Manual of Good Practice recommends allowing a 50 percent increase in the BOD loading rates in cases where sprinkler irrigation is used but recommends that additional safety factors be used for sites with heavy and/or compacted soils.

97. Although it has not been subject to a scientific peer review process, the Manual of Good Practice provides science-based guidance for BOD loading rates that, if fully implemented, are considered a best management practice to prevent groundwater degradation due to reduced metals. Projected BOD loading rates to the LAAs less than 100 lbs/ac/day, as discussed in Findings 49 and 50. These WDRs establish a BOD cycle average loading rate limit of 100 lbs/ac/day to prevent odor conditions from occurring and to prevent groundwater degradation due to reduced metals.

Antidegradation Policy

98. State Water Board Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy), which is incorporated as part of the Basin Plan, prohibits the Central Valley Water Board from authorizing degradation of "high-quality waters" unless it is shown that such degradation will be consistent with the maximum benefit to the people of California; will not unreasonably affect present and anticipated future beneficial uses; and will not result in water quality less than as prescribed in applicable policies. Resolution 68-16 further requires that any discharge to existing high quality waters be required to meet WDRs that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution and/or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the state will be maintained.
99. The Antidegradation Policy applies when the Central Valley Water Board authorizes an activity that will result in discharges of waste to high-quality waters that will degrade the quality of those waters. "High-quality waters" are those waters where water quality is more than sufficient to support beneficial uses designated in the Basin Plan. Whether a water is a high-quality water is established on a constituent-by-constituent basis, which means that an aquifer can be considered a high-quality water with respect to one constituent, but not for others (State Water Board Order No. WQ 91-10). If the activity will not result in the degradation of high-quality waters, the Antidegradation Policy does not apply, and the discharger need only demonstrate that it will use "best efforts" to control the discharge of waste.
100. Groundwater quality monitoring at the Facilities dates to 1951, but is limited. Given the availability of source water data, irrigation data, and GAMA data from after 2000, compliance with the Antidegradation Policy will be determined based partly on post-1968 water quality, as discussed below (Antidegradation Baseline).

101. For the purposes of this Order, constituents in the effluent that have the potential to degrade groundwater quality and/or affect beneficial uses include organics, salts (e.g., TDS, FDS, EC, potassium), nitrogen, iron, and manganese. Table 12 below provides a comparison of effluent averages since 2022 and irrigation and source water results from samples collected by the Dischargers, and from regional groundwater results found on the GAMA web site dating from July 1951 to December 2020.

Table 12 - Constituents with Potential for Degradation

Constituent (see 1 below)	Citrus Wastewater	Pistachio Wastewater	Up- gradient	Down- gradient	1950s Quality	Source Water	Irrigation Water
BOD ₅	603	6,416	---	---	---	88	---
TDS	2,549	7,546	380	400	288	144	320
FDS	1,305	3,002	---	---	---	114	250
EC (µmhos/cm)	--	7,909	536	753	348	315	561
Nitrate as N	1.1	1.4	5.0	10.7	1.0	0.1	0.2
Total Nitrogen	24	314	---	---	1.0	1.0	6.9
Potassium	28	1,059	1.4	2.9	1.8	1.9	3.0
Iron (µg/L)	12,427	2,334	---	659	---	414	108
Manganese (µg/L)	478	278	----	----	---	<30	<30

1. Units in mg/L unless otherwise specified.

- a. **Salinity (TDS, FDS, Potassium, and EC).** Available groundwater data for the site shows groundwater underlying the Facilities are high quality with regards to saline constituents. The average observed effluent TDS concentrations is greater than 7,000 mg/L and could degrade the underlying groundwater if not applied agronomically. FDS is the non-volatile fraction of TDS that has the potential to percolate or leach into shallow groundwater, while EC is a measure of the capacity of water to conduct electrical current and is an indicator of salinity. FDS is a conservative measure for salinity in the process wastewater and makes up approximately 40 percent of the effluent TDS. The anticipated effluent FDS concentration is more than ten times the observed concentrations of FDS in source well. The concentrations of TDS and FDS observed in average process wastewater

exceed the receiving water concentrations and, therefore, the discharge may degrade receiving water regarding salinity.

While potassium in the citrus discharge is relatively low, the average potassium concentration of the pistachio discharge is high (1,059 mg/L) and makes up about one-third of the total FDS concentration discharged from the Pistachio Facility. As such, the combined discharge from the Facilities has the potential to degrade underlying groundwater with respect to potassium. However, the maximum observed potassium concentration from onsite irrigation and source water is 3 mg/L, indicating that the discharge has not impacted underlying groundwater with regard to potassium.

Additionally, potassium is an important nutrient for crops and, if it is readily available, plants will take it up in excess of their needs. Additionally, the positively charged potassium ion binds readily to soils, allowing for greater retention time in the root zone for crop uptake. Therefore, the application of wastewater with elevated potassium to crops is not considered to increase the potential for groundwater quality degradation and is potentially beneficial from an agricultural perspective.

- b. **Nitrogen.** Available groundwater quality data indicates that groundwater nitrate and total nitrogen underlying the Facilities are generally below the nitrate WQO of 10 mg/L, and is, therefore, the groundwater is considered high quality with regard to nitrate. Observed nitrate concentration in effluent is typically low at the point of discharge; however, total nitrogen concentrations in effluent are high. Total nitrogen in the discharge averages about 314 mg/L, and as such, it can degrade the underlying groundwater quality with respect to total nitrogen.

As discussed in previous findings, the discharge to cropped LAAs may be managed so that total nitrogen is applied below agronomic rates. The Discharger estimated nitrogen loading to the LAAs cropped with citrus to be about 151 lbs/ac/yr and 110 lbs/ac/yr to blocks double cropped with pistachios and winter wheat, which are less than crop needs. Regardless, nitrate as nitrogen in groundwater has been reported as high as 24 mg/L in a former supply well just west of the unlined East and West Ponds. While most of the ponds used to temporarily store wastewater are lined, the East and West Ponds, used to store centrifuge treated wastewater are unlined. Elevated nitrogen levels in nearby wells may be associated with the storage of effluent in these unlined ponds.

To aid in mitigating potential impacts to the underlying groundwater the Dischargers are participating in the CV-SALTS Nitrate Control Program. Both Setton (CV-SALTS ID 2479) and Porterville Citrus (CV-SALTS ID 2392) selected Pathway B and joined the Tule Basin Management Zone.

The current MRP requires only one sample per month to be collected during the 55- to 60-day pistachio processing season. This results in typically only three samples being collected and used to estimate loading. The results vary considerably in concentration with the first sample of the season having low values as it is comprised of a significant amount of equipment wash water and storm water. In 2024 three effluent samples were collected and analyzed for total nitrogen and the results were 99 mg/L, 270 mg/L, and 410 mg/L. In two samples collected in 2025, total nitrogen ranged from 55 to 430 mg/L. Increasing the frequency of sampling from monthly to weekly would provide more data to even out the variability of the results and allows for a more accurate loading estimate.

The associated MRP will require weekly sampling of total nitrogen of the treated pistachio wastewater discharged to the LAAs, and the Discharger shall use all the results to better track the concentrations in the discharge and to estimate the salt, BOD, and nitrogen loadings to the LAAs.

- c. **Organics** - Overapplication of wastewater with high BOD concentrations could result in reducing conditions that have the potential to mobilize metals, such as iron, manganese, and arsenic in soils and impact groundwater. BOD loading was discussed in Finding 49. The September 2025 RWD includes estimated BOD loading to range from 36 to 101 lbs/ac/day in 2024. However, Staff identified that additional samples collected in 2024 should have been used in Setton's RWD estimates. Using the additional data collected on 30 August 2024 and 13 September 2024 resulted in the loadings exceeding 100 lbs/ac/day and ranging from 126 to 160 lbs/ac/day. If the cycle average target is 100 lbs/ac/day, then Setton will need to discharge less to each LAA block to achieve cycle averages that are equal to or less than 100 lbs/ac/day. The proposed expansion of the LAAs along with further solids and organic removal from the new centrifuge will help in keeping the discharge below 100 lbs/ac/day for BOD.
- d. **Metals (Iron and Manganese)**. Available source and irrigation supply quality data indicates that underlying groundwater quality for iron and manganese is poor and exceeds the WQOs of 50 and 300 ug/L, respectively. As such, the Antidegradation Policy does not apply with

respect to the iron and manganese discharge from the Facilities. Regardless, both iron and manganese are elevated in effluent and exceed receiving water concentrations by an order of magnitude. It's unclear the reason(s) for such elevated metals concentrations iron in the effluent. However, it is expected that metals within the effluent will oxidize prior to reaching groundwater due to the large vadose zone and depth to groundwater underlying the Facilities.

102. The Dischargers implement, or will implement, as required by this Order the following measures, which the Central Valley Water Board has determined constitute BPTC. These measures will minimize the extent of water quality impacts resulting from the Facilities' discharge:
 - a. Treatment of the Facilities' process wastewater utilizing sloped bar screens, FF-30 fiber screens, Filtomatic screening systems, and centrifuge to remove/reduce solids.
 - b. Storage of process wastewater, in all but the West and East Ponds, in lined ponds/structures.
 - c. Wastewater application to LAAs at agronomic rates.
 - d. BOD cycle average loading limit of 100 lbs/acre/day
 - e. Requiring wastewater retention times in all the onsite ponds be 2-hours or less.
 - f. Compliance with Performance-Based Effluent Limits for FDS.
 - g. Participation in and compliance with the Salt and Nitrate Control Programs; and
 - h. Preparation and implementation of a Wastewater and Nutrient Management Plan.
103. The discharge authorized by this Order is consistent with the maximum benefit to the people of the state. The Facilities aid in the economic prosperity of the area through direct employment of approximately 650 full-time employees year-round and up to 1,200 employees during the harvest season. The Facilities provide a local market for suppliers including farmers and truckers and numerous aligned businesses as well as local and county governments"

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

California Environmental Quality Act

105. In accordance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., on 8 October 2024, the Tulare County Resource Management Agency certified a final Environmental Impact Report (EIR) (State Clearinghouse No. 2023030410) evaluating the following changes to the Pistachio Facility's discharge and its LAAs:
- a. Increasing the LAAs to 961-acres.
 - b. Increasing the annual wastewater flow to 85 mgd.
 - c. Infrastructure and wastewater treatment system improvements to improve effluent quality.
106. The Central Valley Water Board, as a "responsible agency" under CEQA, was consulted in the lead agency's development and adoption of the EIR. The discharges and other activities authorized under this Order fall within the scope of the project evaluated in the EIR) and, thus, has determined that further CEQA review of the activities authorized by this Order is not necessary. To the extent that this Order authorizes any changes to the Facilities' treatment systems or operations, such authorization is exempt from further CEQA review because those changes constitute minor alterations to an existing facility with minimal or no expansion of the uses contemplated in the 2024 EIR. (See Cal. Code Regs., tit. 14, § 15301.)

Other Regulatory Considerations

Water Code Section 13149.2

107. These WDRs regulate Facilities that may impact a disadvantaged community and/or tribal community and includes an alternative compliance path that allows the Discharger time to come into compliance with certain WQOs (i.e., nitrate). The Discharger has selected the Alternative Salinity Permitting Approach for the Salt Control Program, which provides an alternative approach for compliance with salinity limits through implementation of specific requirements (i.e. support facilitation and completion of the Salinity P&O study). The Central Valley Water Board has satisfied the outreach requirements set forth in Water Code section 189.7 by conducting outreach in affected disadvantaged and tribal communities through its notice and comment procedures. Additionally, the Central Valley

Water Board sent a letter of 17 September 2025 to potentially impacted disadvantaged and tribal communities for planned program actions, including preparation of this Order, to solicit consultation. Pursuant to Water Code section 13149.2, and as discussed in the following finding, the Central Valley Water Board reviewed readily available information and information raised to the Board by interested persons concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of these WDRs. The Board also considered environmental justice concerns within the Board's authority previously raised by interested persons with regard to those impacts.

108. The Central Valley Water Board anticipates that the issuance of these WDRs will result in water quality impacts within the scope of the Board's authority. Specifically, these WDRs authorize the discharge of wastewater with salinity concentrations that may cause degradation or exceedances of applicable WQOs in the near-term. The BPTC measures required by this Order, as described above, are intended to minimize and, in the longer term, mitigate the impacts of the Facilities' discharges to nearby disadvantaged communities in Tulare County. Although this Order may result in limited increases to salinity concentrations in groundwater in the near-term, the Salt Control Program is intended to achieve long-term balance and restoration, where possible, of salt-impacted groundwater basins across the region.

Human Right to Water

109. 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 subject to Water Code section 106.3, as it does not revise, adopt, or establish a policy, regulation, or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes the policy by requiring discharges to meet MCLs for drinking water (excluding salinity and nitrate), which are designed to protect human health and ensure that water is safe for domestic use. For salinity and nitrate, this Order requires compliance with the SCP and NCP, respectively. Although the Basin Plans' Exceptions Policy for Salinity, Nitrate, and/or Boron allows participants in these Programs to obtain limited-term exceptions from MCLs for salinity, nitrate, and/or boron, these Programs are consistent with the Human Right to Water Policy because their over-arching management goals and priorities include short-term provision of safe drinking water to impacted users and long-term restoration of impacted groundwater basins and sub-basins where reasonable, feasible, and practicable.

Threat-Complexity Rating

110. For the purposes of California Code of Regulations, title 23 (Title 23), section 2200, the Facilities have a threat-complexity rating of **2-B**.
- a. Threat Category “2” reflects waste discharges that can impair receiving water beneficial uses, cause short-term water quality objective violations, cause secondary drinking water standard violations, and cause nuisances.
 - b. Complexity Category “B” reflects any discharger not included in Category A, with either (1) physical, chemical or biological treatment systems (except for septic systems with subsurface disposal), or (2) any Class II or Class III WMUs.

Title 27 Exemption

111. This Order, which prescribes WDRs for discharges of nonhazardous wastewater to land, 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, subd. (b).)

Storm Water

112. State Water Board Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifies WDRs for discharges of storm water associated with industrial activities and requires submittal of a Notice of Intent from all affected industrial dischargers. Activities at the Facilities fall under the Standard Industrial Classification (SIC) Code 0723 for Crop Preparation for Market. Water associated with industrial activities will not be allowed to discharge off-site or into surface waters. Based on SIC Code and management of the water, enrollment, and coverage under General Order 2014-0057-DWQ is not required at this time.

Scope of Order

113. This Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized herein. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as “Dischargers.”
114. Pursuant to Water Code section 13264, subdivision (a), the Dischargers are 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 (ROWD) per Water Code section 13260.

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

Procedural Matters

116. All of the above information, as well as the information contained in the attached Information Sheet (incorporated herein), was considered by the Central Valley Water Board in prescribing the WDRs set forth below.
117. The Dischargers, interested agencies and other 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. (See Wat. Code, § 13167.5.)
118. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
119. 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 WDRs Orders 92-191 and 94-302 are rescinded (except for enforcement purposes) and that the Discharger and their agents, employees and successors shall comply with the following.

A. Standard Provisions

Except as expressly provided herein, the Discharger shall comply with the Standard Provisions and Reporting Requirements dated 1 March 1991 (1 March 1991 SPRRs), which are incorporated herein.

B. Discharge Prohibitions

1. Discharge of waste to surface waters or surface water drainage courses is prohibited.
2. Waste classified as "hazardous" (see Title 22, § 66261.1 et seq.) shall not be discharged at the Facilities under any circumstance.
3. Bypass or overflow the Facilities' wastewater treatment and containment structures is prohibited.

4. Waste constituents shall not be discharged or otherwise released from the Facilities (including during treatment and storage activities) in a manner that results in:
 - a. Violations of the Groundwater Limitations of this Order; or
 - b. Conditions of “nuisance” or “pollution,” as defined per Water Code section 13050.
5. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
6. Discharge of process wastewater to the domestic wastewater treatment system is prohibited.
7. Discharge of domestic wastewater to the LAAs is prohibited.
8. Storage of residual solids on areas not equipped with a means to prevent storm water infiltration, or a paved leachate collection system, is prohibited.
9. Discharge of sewage, including gray water, to surface waters is prohibited.

C. Conditional Discharge Prohibitions

1. During Phase I of the Salt Control Program, the Discharger is prohibited from discharging salts at concentrations exceeding the salinity numeric value of 700 $\mu\text{mhos/cm}$ (as a monthly average) and 900 $\mu\text{mhos/cm}$ (as an annual average) unless the Discharger is implementing the Phase I requirements of the Salt Control Programs Alternative Permitting Approach (i.e., full participation in the P&O Study).
2. The Discharger is prohibited from discharging nitrate and other forms of nitrogen speciation (e.g., total inorganic nitrogen and total Kjeldahl nitrogen) unless the Discharger implements the requirements of the Nitrate Control Program Management Zone Approach.

D. Flow Limitations

1. Discharges of wastewater from the Facilities shall not exceed the following:

Flow Limitations

Source	Annual Flow	Daily Maximum
Setton Pistachio Facility at EFF-002	85 MG	3 mgd
Porterville Citrus Facility at EFF-001	---	0.08 mgd

E. Performance-Based Salinity Limit

1. To comply with the Salt Control Program, the Dischargers have selected the Alternative Salinity Permitting Approach (i.e., Path 2, participation in the P&O Study). Therefore, as discussed in the Findings, these WDRs establish the following performance-based annual effluent limitations:
 - 1,700 mg/L for the Citrus Facility discharge monitored at EFF-001
 - 3,300 mg/L for the Pistachio Facility discharge monitored at EFF-002

As required per the MRP, the Dischargers shall evaluate the annual average effluent FDS concentrations in the discharge with these performance-based salinity limits.

F. Discharge Specifications

1. Process wastewater shall be treated as proposed in the September 2025 RWD (i.e., filtration, centrifugation, and aeration) prior to discharge to the LAAs.
2. Waste discharges shall remain within authorized LAAs and authorized waste treatment and/or containment structures and LAAs at all times.
3. All systems and equipment shall be operated to optimize discharge quality.
4. Objectionable odors shall not be perceivable beyond the limits of the Facilities' property at an intensity that creates or threatens to create nuisance conditions. As a means of ensuring compliance with this specification, the Discharger shall comply with the following:

- a. The dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events. Notwithstanding the DO monitoring frequency specified in the monitoring and reporting program, if the DO in any single pond is below 1.0 mg/L for any single sampling event, the Discharger shall implement daily DO monitoring of that pond until the minimum DO concentration is achieved for at least three consecutive days. If the DO in any single pond is below 1.0 mg/L for three consecutive days, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 14 days of the first date of violation.
 - b. The total retention time of pistachio wastewater in the Bella Pond, determined daily as the ratio of the discharge volume and flowrate, shall not be more than two (2) hours. If the retention time is greater than two hours twice or more in a three-day period, the Discharger shall implement odor mitigation measures described in the Operations and Maintenance Plan (see Provision J.6).
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. With the exception of wastewater in the East and West Ponds, all wastewater and/or wastewater solids shall be contained in or stored on an engineered lined surface. The engineered lined surface shall meet a hydraulic conductivity standard of 1×10^{-6} centimeters per second or less using one of the following:
 - a. A compacted clay liner, with a minimum clay thickness of two feet.
 - b. A Portland cement concrete liner, designed to minimize cracking and infiltration.
 - c. A synthetic liner, consisting of 40 thousandths of an inch (mil) synthetic geomembrane or a 60-mil high-density polyethylene liner installed over a prepared base or a secondary clay or concrete liner.
 - d. An engineered equivalent.

7. The Dischargers 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.
8. 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 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.
9. On or about 1 October of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications F.7 and F.8.
10. 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.
11. 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.

12. Wastewater contained in any unlined pond shall not have a pH less than 4.5 or greater than 9.0.

G. Land Application Area Specifications.

For the purposes of this Order, “land application area” or “LAAs” refers to the discharge areas described in the Findings and shown in Attachment C.

1. Crops shall be grown on the LAAs. Crops shall be selected based on nutrient uptake, consumptive use of water, irrigation requirements to maximize crop uptake of nutrients.
2. Application of waste constituents to the LAAs shall be at reasonable agronomic rates to preclude creation of nuisance or unreasonable degradation of groundwater, considering the crop, soil, climate, and irrigation management system. The annual nutritive loading of the LAA, including the nutritive value of the process wastewater, supplemental irrigation water, organic and chemical fertilizers, and screened solids shall not exceed the annual crop demand.
3. BOD loading to the LAAs, calculated as a cycle average as determined by the methods described in the MRP, shall not **exceed 100 pounds per acre per day**.
4. The Discharger shall ensure that all water is applied and distributed with reasonable uniformity across each LAA block. The perimeter of the LAAs shall be graded to prevent ponding along public roads or other public areas and prevent runoff or overspray onto adjacent properties not owned or controlled by the Discharger.
5. Wastewater from the Facilities’ shall not be applied within:
 - a. 50 feet of a domestic water supply well,
 - b. 50 feet from any surface water or surface water drainage course, or
 - c. 25 feet from a property line or public right-of-way unless the irrigation system is designed to prevent runoff or overspray, in which case a minimum setback of 5 feet shall be maintained.
6. Hydraulic loading of combined wastewater and supplemental irrigation water shall be managed to:
 - a. Provide water only when water is needed and in amounts consistent with crop needs.

- b. Maximize crop nutrient uptake.
- c. Maximize breakdown of organic waste constituents in the root zone; and
- d. Minimize the percolation of waste constituents below the root zone.

The Central Valley Water Board recognizes that some leaching of salts is necessary to manage salt in the root zone of the crops. Leaching shall be managed to minimize degradation and maintain or reduce, to the extent practicable, concentrations of saline constituents and nitrate (and other forms of nitrogen speciation) in receiving waters.

7. The resulting effect of the discharge on soil pH shall not exceed the buffering capacity of the soil profile.
8. Land application of wastewater shall be managed to minimize erosion.
9. The LAAs shall be managed to prevent breeding of mosquitoes. More specifically:
 - a. All applied irrigation water must infiltrate completely within 48 hours.
 - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation; and
 - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store wastewater.
10. Irrigation of the LAAs shall occur only when appropriately trained personnel are on duty.
11. Discharge to the LAAs shall not be initiated when the ground is saturated (e.g., during or after significant precipitation).
12. Any irrigation runoff (i.e., tailwater) shall be confined to the LAA, captured in the tailwater pond and recycled to the LAA or returned to the process wastewater treatment system, and shall not enter any surface water or surface water drainage course.
13. The LAA shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Discharger shall temporarily stop land application use immediately and implement corrective actions to ensure compliance with this Order.

H. Groundwater Limitations

1. Release of waste constituents of the combined or individual waste streams from any treatment, storage, delivery system, or LAA associated with the Facilities' discharges shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or natural background groundwater quality, whichever is greater:
 - a. Concentrations that exceed either the Primary or Secondary MCLs established in California Code of Regulations, title 22, sections 64431, 64444, and 64449, excluding salinity provided the Discharger complies with the Salt Control Program (see Conditional Prohibitions C.1).
 - b. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses, (e.g., by creating off-tastes and/or odor, producing detrimental physiological responses in human, plant, animal, or aquatic life [i.e., toxicity]).

I. Solids Disposal Specifications

1. For the purpose of this Order, residual solids include organic matter removed by screens and filters and soil sediments removed during the treatment or end of harvest pond cleanout processes. Residual solids mean organic processing byproducts such as leaves, twigs, hulls and shells, that will not be subject to treatment prior to disposal.
2. Residual solids shall be removed from screens, pits, and ponds as needed to ensure optimal operation, prevent nuisance conditions, and maintain adequate storage capacity.
3. Treatment solids shall be removed from the ponds immediately following harvest season, and ponds shall be cleaned out. Solids removed during the end-of-harvest cleanout process shall be stored in accordance with Discharge Specification F.6 and disposed within a reasonable timeframe so as not to cause or contribute to nuisance odor conditions.
4. Any handling and storage of 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

5. If removed from the site, solid waste and residual solids shall be disposed of in a manner consistent with Title 27, division 2. Removal for reuse as animal feed, biofuel feedstock, 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 Quality Control Board) will satisfy this specification
6. Any proposed change in residual solids use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

J. Provisions

1. The Discharger shall comply with the separately issued **Monitoring and Reporting Program Order (MRP) R5-2026-xxxx**, and any revisions thereto as ordered by the Central Valley Water Board or the Executive Officer. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP
2. A copy of this Order (including the Information Sheet, Attachments, and SPRRs) and the MRP shall be kept at the Facilities for reference by operating personnel. Key operating personnel shall be familiar with its contents
3. The Discharger shall comply with the applicable provisions of the Salt and Nitrate Control Programs adopted in Resolution R5-2018-0034 (as revised per Resolution R5-2020-0057), as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, to address ongoing salt and nitrate accumulation in the Central Valley.
4. The Discharger shall participate in the Tule Basin Management Zone Nitrate Control Program activities. This includes collaborating with the Management Zone to collect the necessary monitoring data to refine the MZIP preliminary nitrogen load estimate and support development of the Management Zone Groundwater Protection Values and Groundwater Protection Targets
5. Per the Tule Basin Management Zone MZIP, the Discharger is identified as a Group 3 discharger. Upon approval of the MZIP the Discharger will be required to submit a Nitrate Reduction Workplan. Details regarding the timeline for submitting the Work Plan will be included in a future amendment.

6. By **17 July 2026** the Discharger shall submit an updated Operations and Maintenance Plan (O&M Plan) that describes monitoring, operation, and maintenance of the lined ponds and containment structures at the Facilities and the overall wastewater treatment facility. The O&M Plan shall include triggers and conceptual plan(s) for installing aerators in ponds and for the use of hydrogen peroxide to control odors, as necessary (i.e., the 2-hour retention limit is exceeded).
7. By **19 October 2026**, the Discharger shall submit an updated Wastewater and Nutrient Management Plan that includes a description of how the Discharger will manage the LAA and apply wastewater in accordance with these WDRs. At a minimum, the Wastewater and Nutrient Management Plan must include the following:
 - a. Procedures for monitoring Facilities' operations and discharge.
 - b. Practicable measures to ensure reasonable even application of wastewater. The Plan shall also detail how the Facilities will not discharge wastewater to the LAA when soils are saturated (e.g., during and after significant precipitation events).
 - c. An action plan to deal with objectionable odors and/or nuisance conditions.
 - d. Details on how wastewater and irrigation water will be blended.
 - e. A detailed evaluation of the actual irrigable acres available in all of the LAAs that excludes roads, buildings, ponds and non-planted/irrigated areas.
 - f. A detailed map of the LAA fields to be used each year to facilitate tracking annual wastewater application and nutrient release to the land.
 - g. Management practices that will ensure that wastewater, irrigation water, and fertilizers, compost, or other amendments are applied at agronomic rates to the LAA including but not limited to adjusting wastewater application and spreading based on consideration of soil available nutrients and/or plant tissue sampling results.
8. 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.

9. 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 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.
10. 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 comply. 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.
11. 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 when the operation is necessary to achieve compliance with the conditions of this Order.
12. The Discharger shall use the best practicable cost-effective control technique(s), including proper operation and maintenance, to comply with this Order.

13. 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.
14. 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. section 11023), the Discharger shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
15. 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.
16. In the event of any change in control or ownership of the Facilities, 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.
17. 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 people responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of SPRRs 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. The Discharger shall provide the requisite funding and personnel to implement the pretreatment program, conduct inspections and sampling and analysis of industrial discharges as needed, and use any available legal means to ensure compliance with the pretreatment program.

18. 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.
19. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
20. 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 ensure 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 ensure full compliance with this Order.
21. In the event of any change in control or ownership of the WWTF, 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.
22. 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 people 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.
23. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facilities for reference by operating personnel. Key operating personnel shall be familiar with its contents.

ENFORCEMENT

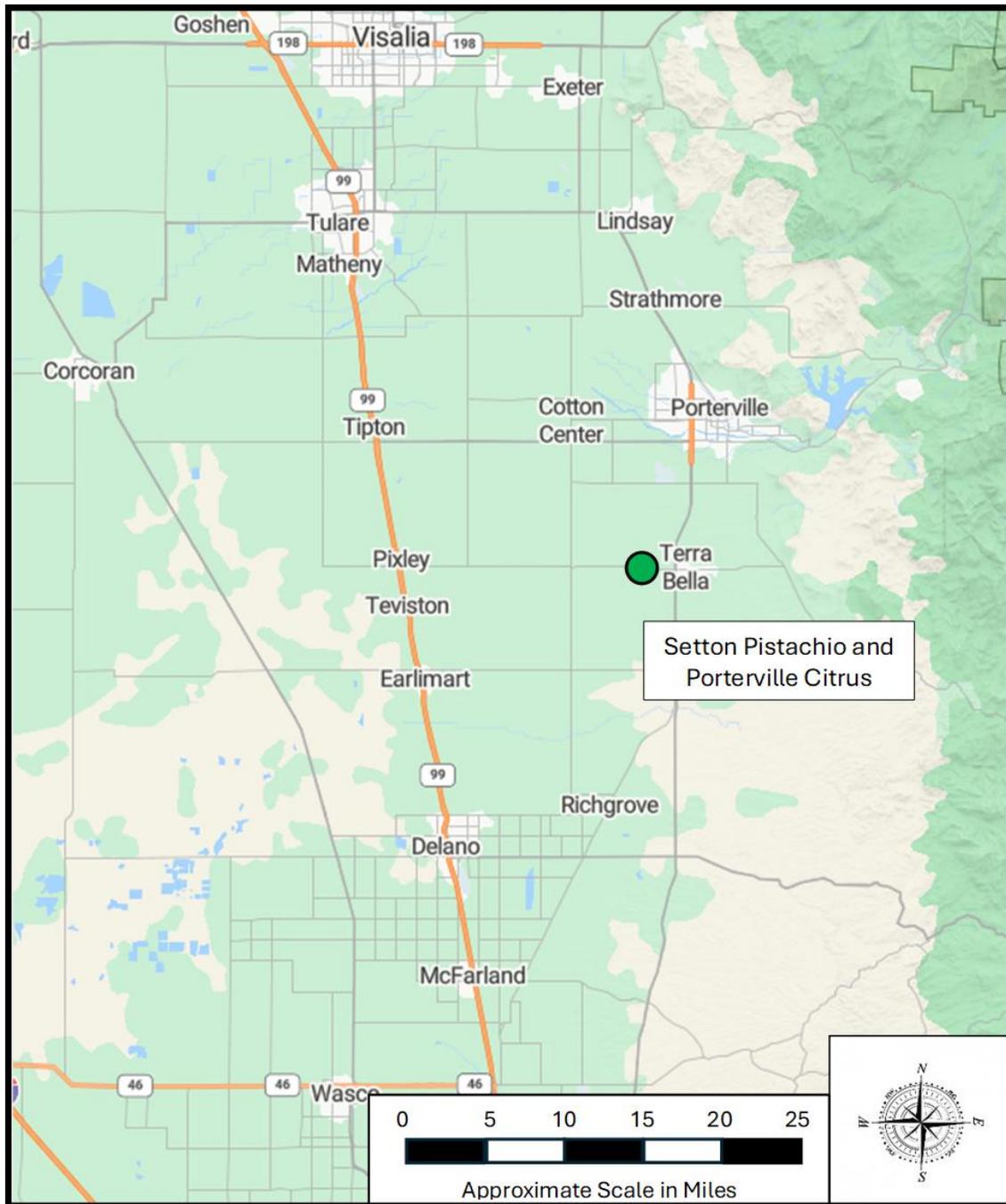
If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. 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

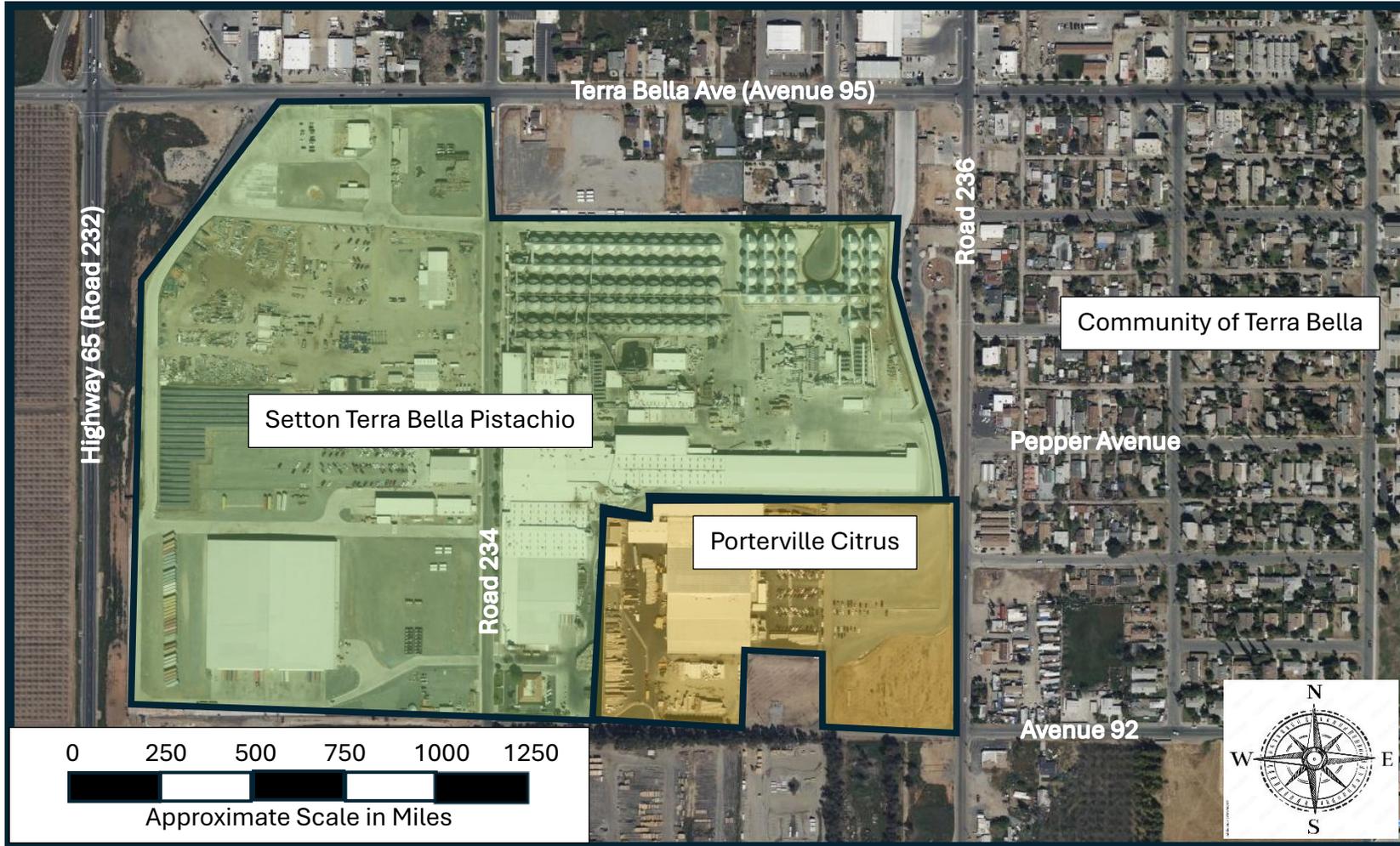
Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; 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 filing petitions](#) are available on the Internet (at the address below) and will be provided upon request.

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

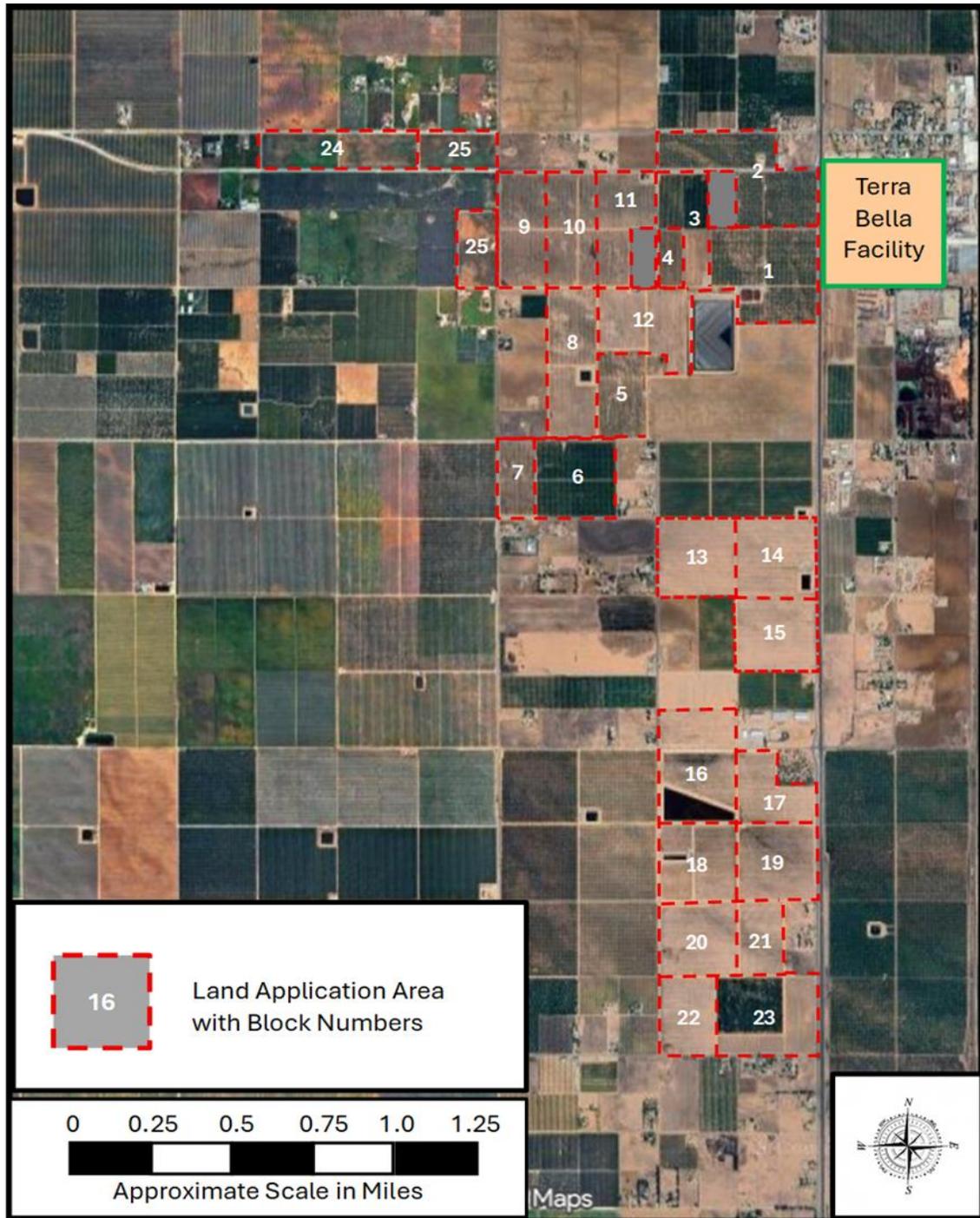
Attachment A – Facilities Location Map



Attachment B – Facilities Site Map



Attachment C – Facilities LAA Map



Attachment D – LAA Ownership and Acreage

LAA APNS

APN	BLOCK	ACRES	OWNER
320-060-025	1	10	Setton Pistachio Co., Inc.
320-060-026	1	10	Rainbow Orchards, V, LLC
320-060-027	1	5	Rainbow Orchards, V, LLC
320-060-028	1	5	Rainbow Orchards, V, LLC
320-060-029	1	10	Setton Pistachio Co., Inc
320-070-008	1	18	Setton Pistachio Co., Inc
320-060-005	2	10	Setton Pistachio Co., Inc
320-060-006	2	20	Setton Pistachio Co., Inc
320-060-009	2	10	Setton Pistachio Co., Inc
320-060-010	2	10	Setton Pistachio Co., Inc
320-060-035	2	10	Setton Pistachio Co., Inc
320-060-012	3	30	Deer Creek Citrus, LLC
320-060-024	4	10	Deer Creek Citrus, LLC
320-070-010	5	29	Setton Pistachio Co., Inc
320-080-028	6	40	Deer Creek Citrus, LLC
320-080-027	7	18	Setton Pistachio Co., Inc
320-070-003	8	10	Rainbow Orchards IX, LLC
320-070-004	8	10	Rainbow Orchards IX, LLC
320-070-020	8	30	Rainbow Orchards IX, LLC
320-060-037	9	38	Rainbow Orchards IX, LLC
320-060-036	10	35	Rainbow Orchards IX, LLC
320-060-013	11	34	Rainbow Orchards IX, LLC
320-070-005	12		Rainbow Orchards IX, LLC
320-070-014	12	20	Rainbow Orchards IX, LLC
320-070-023	12	8.4	Rainbow Orchards IX, LLC
320-070-024	12		Rainbow Orchards X, LLC

Setton Pistachio of Terra Bella, Inc. and Porterville Citrus, Inc.

Terra Bella Processing

Tulare County

APN	BLOCK	ACRES	OWNER
320-070-025	12		Rainbow Orchards IX, LLC
320-080-006	13	40	Rainbow Orchards IX, LLC
320-080-005	14	40	Rainbow Orchards IX, LLC
320-090-006	15	40	Rainbow Orchards IX, LLC
320-009-009	16	20	Rainbow Orchards X, LLC
320-330-007	16	40	Rainbow Orchards IX, LLC
320-330-007	17	32	Rainbow Orchards IX, LLC
320-330-007	18	40	Rainbow Orchards IX, LLC
320-330-007	19	40	Rainbow Orchards IX, LLC
320-340-004	20	40	Rainbow Orchards IX, LLC
320-340-008	21	24	Rainbow Orchards IX, LLC
320-340-006	22	29	Rainbow Orchards IX, LLC
320-340-006	23	49	Deer Creek Citrus, LLC
320-040-004	24	10	Rainbow Orchards III, LLC
320-040-005	24	10	Rainbow Orchards III, LLC
320-040-006	24	10	Rainbow Orchards III, LLC
320-040-007	24	10	Rainbow Orchards III, LLC
320-040-008	25	10	Rainbow Orchards III, LLC
320-040-009	25	10	Rainbow Orchards III, LLC
320-040-034	25	19	Rainbow Orchards III, LLC

Facilities APNs

APN	ACRES	OWNER
320-130-005	16.0	Setton Pistachio Co., Inc.
320-130-007	1.0	Terra Bella Irrigation District
320-130-009	1.0	Terra Bella Agland, LLC
320-130-010	5.1	Terra Bella Agland, LLC
320-130-011	10.2	Setton Properties, Inc.
320-130-015	6.8	Setton Properties, Inc.
320-130-021	9.6	Porterville Citrus, Inc.

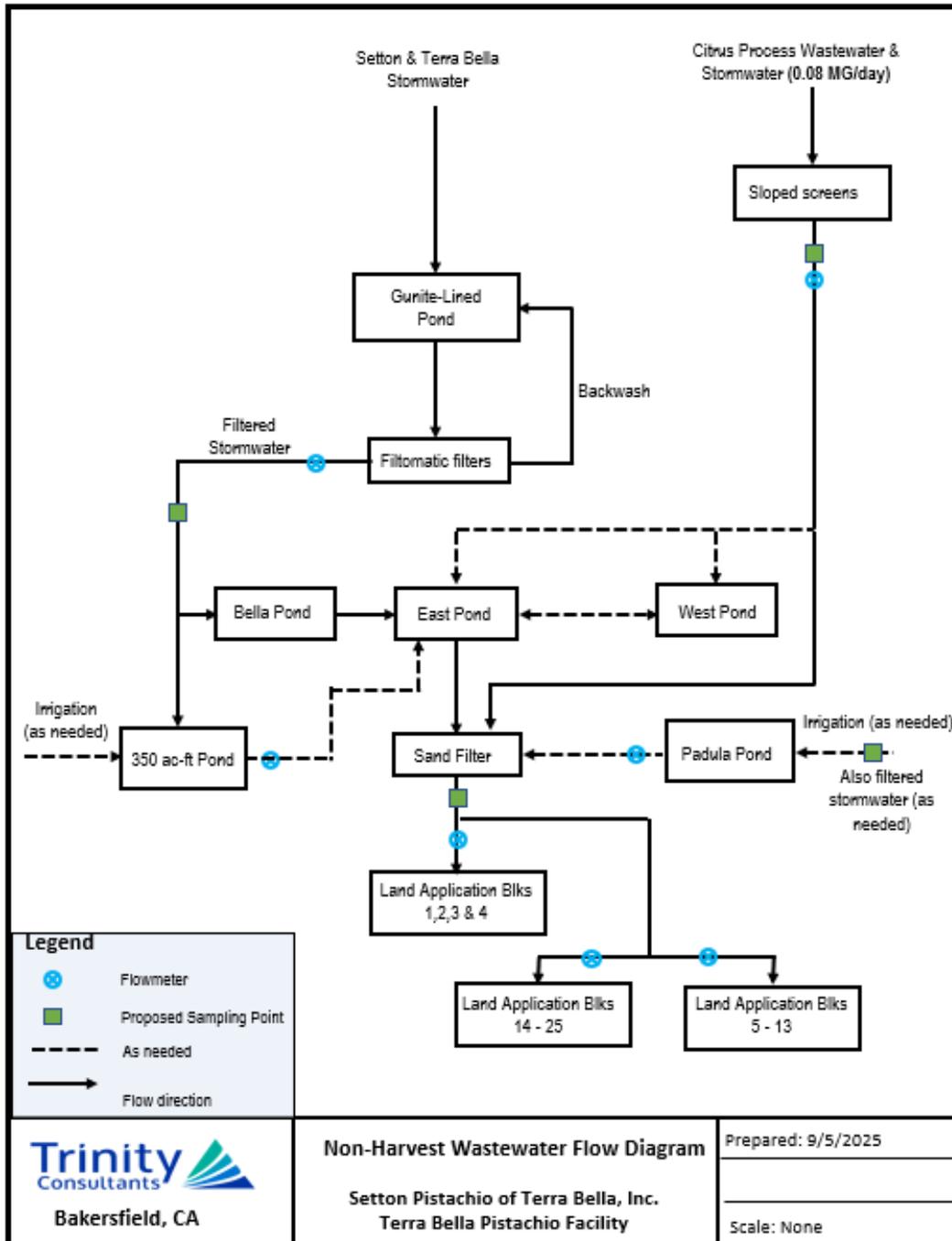
Setton Pistachio of Terra Bella, Inc. and Porterville Citrus, Inc.

Terra Bella Processing

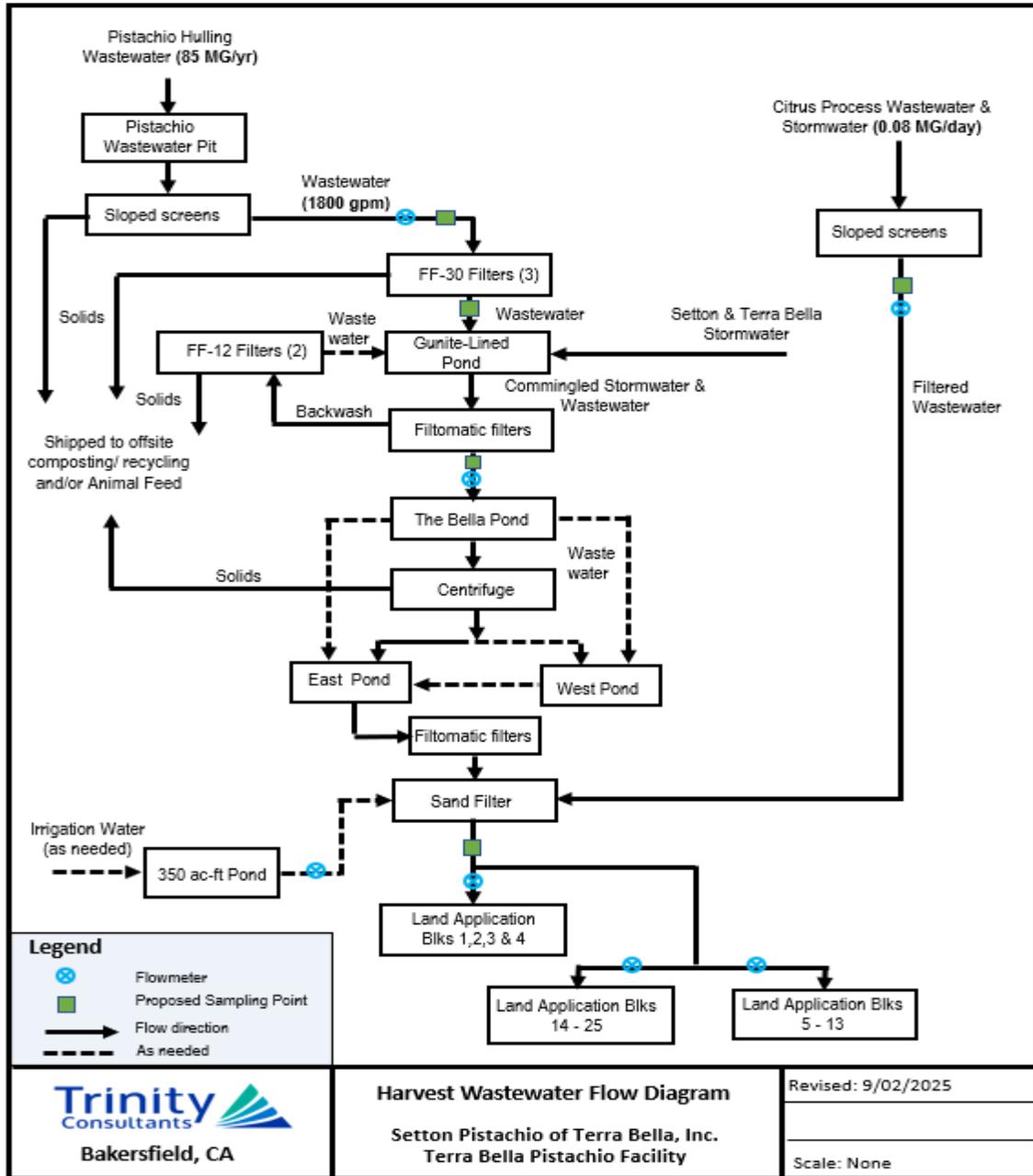
Tulare County

APN	ACRES	OWNER
320-130-024	3.8	Setton International Foods of Brooklyn
320-130-025	8.9	Setton Properties, Inc.
320-130-026	7.7	Terra Bella Parkland Corp.
320-130-027	7.1	Porterville Citrus, Inc.
320-354-009	1.6	Porterville Citrus, Inc.
320-355-032	6.8	Setton Properties, Inc.
320-356-009	0.4	Terra Bella Agland, LLC
320-356-010	0.3	Terra Bella Agland, LLC
320-356-011	1.1	Terra Bella Agland, LLC
320-356-021	0.2	Terra Bella Agland, LLC
320-356-022	0.2	Terra Bella Agland, LLC
320-356-023	2.2	Terra Bella Agland, LLC
320-356-024	0.7	Terra Bella Agland, LLC
320-356-025	6.3	Terra Bella Agland, LLC

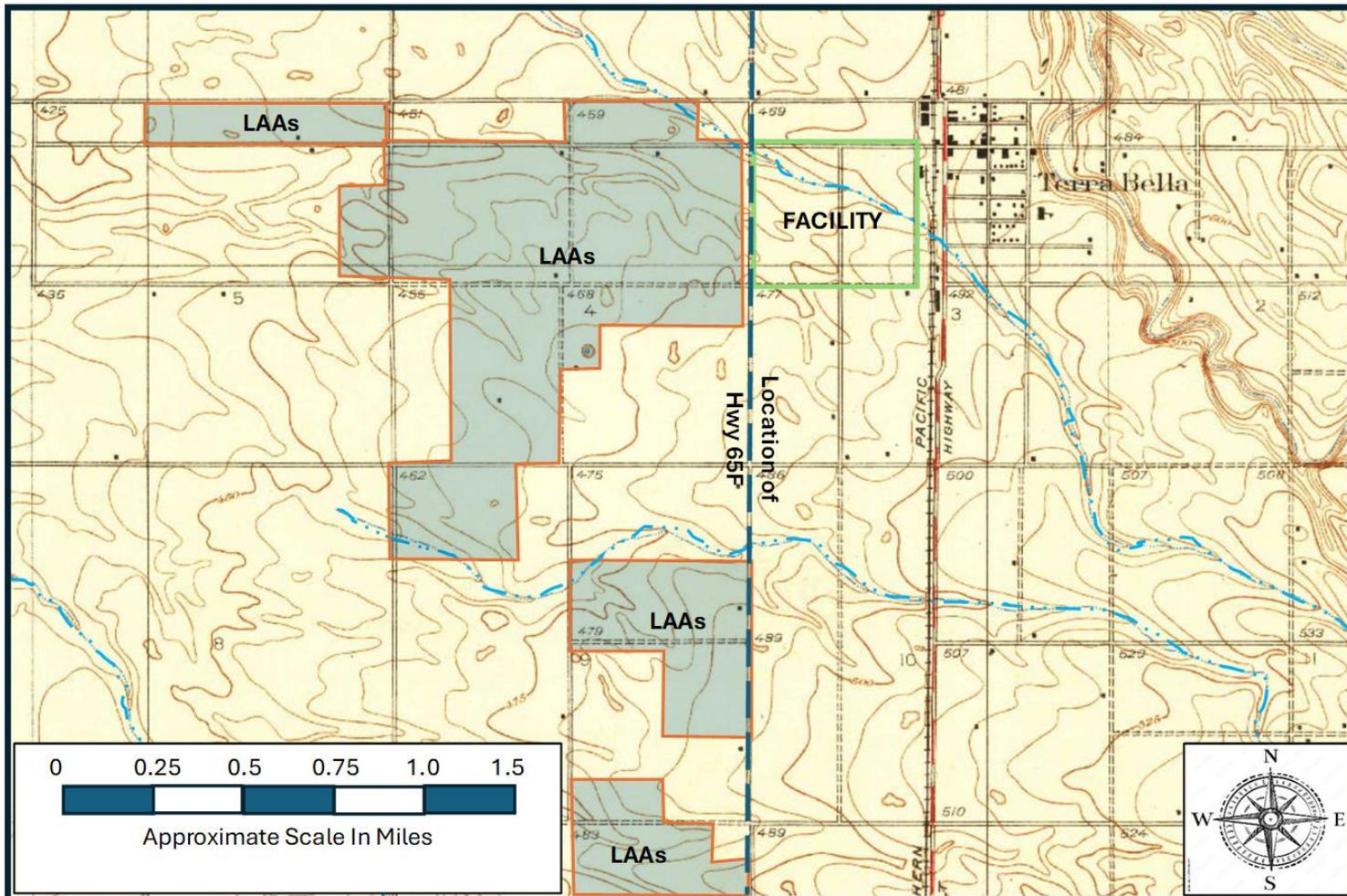
Attachment E – Non-Pistachio Harvest Process Flow Diagram



Attachment F – Pistachio Harvest Process Flow Diagram



Attachment G – USGS Topographic Map



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

[Tentative] Waste Discharge Requirements Order R5-2026-XXXX
for

Setton Pistachio of Terra Bella, Inc. and Porterville Citrus, Inc.
Terra Bella Processing
Tulare County

INFORMATION SHEET

BACKGROUND

Setton Pistachio of Terra Bella, Inc. (Setton) owns and/or operates the Terra Bella Pistachio processing facility (Pistachio Facility) and Porterville Citrus, Inc., (Porterville Citrus) owns and operates the Porterville Citrus Packing House (Citrus Facility) in Terra Bella, Tulare County. Setton processes pistachios at the Pistachio Facility, while Porterville Citrus processes citrus at the Citrus Facility. Process wastewater from both Facilities are discharged to Land Application Areas (LAAs) owned by Setton.

The discharge of pistachio processing wastewater was previously regulated by WDRs Order No. 92-191, which authorized a discharge of 1.5 million gallons per day (mgd) of pistachio process wastewater to LAAs. The discharge of citrus packing wastewater was previously regulated by WDRs Order No. 94-302 that authorized the discharge of 0.08 mgd of citrus processing wastewater to land. Both facilities apply their wastewater to the same LAAs. The volume of Setton's discharge has increased, new treatment methods have been implemented, and the LAAs have increased in acreage since the adoption of WDRs Order No. 92-191 and Order 94-302 in the 1990's. Updated WDRs are warranted as the existing orders are old, outdated, and do not reflect the operations or disposal of wastewater at the Facilities.

SITE REGULATORY HISTORY

The Facilities have a long history as use as a processing/packing facilities as shown below:

- Terra Bella Citrus Association, Central Valley Water Board Resolution 71-78
- Citrus Packing Company (CVC) and the California Association of Pistachio Producers (CAPP), WDRs Order 78-11
- T.M. Duche Nut Company (TMD), WDRs Order 78-11 (1981).
- CVC, WDRs Order No. 82-072.
- The Dole Dried Fruit and Nut Company (Dole), WDRs Order No. 92-191.

- WDRs Order 94-302, Dole Citrus and Central Valley Citrus (Dole).

Setton acquired the Pistachio Facility in 1995 from Dole, including property containing the citrus pond regulated under Waste Discharge Requirements (WDRs) 94-302. Setton assumed operation of the pond and discharge of the citrus wastewater. The Setton and Porterville Citrus processing facilities share a collective process wastewater disposal system.

The Facilities were issued a Revised Monitoring and Reporting Program R5-2019-0802-01 on 11 September 2020 that specifies joint monitoring and reporting requirements for both the Pistachio Facility and Citrus Facility discharges (Facilities, collectively).

ODOR ISSUES

The Facilities have a long history of the discharge of wastewater creating nuisance odors. The Central Valley Water Board issued Setton Cease and Desist Order (CDO) R5-2020-0038 in August 2020. Setton changed disposal practices and expanded the LAAs, and odor complaints decreased. In April 2025, the Central Valley Water Board adopted Order R5-2025-0017 rescinding the CDO in April 2025.

Setton submitted a March 2023 Report of Waste Discharge (RWD) and a May 2023 RWD Addendum that proposed an increase in the maximum annual and daily discharge of pistachio wastewater up to 85 mg/l and 3 mgd, respectively. The RWD proposed adding an additional 89 acres of LAAs to increase the total acres to 961 and proposed revising the lower pH limit from 6.5 to 4.5. The RWD identified three primary treatment processes employed at the Facility prior to disposal to be:

- Filtration,
- Dissolved air flotation (DAF), and
- Aeration.

Central Valley Central Water Board staff sent a 9 June 2023 letter to the Discharges indicating the May 2023 was complete and staff would begin work on updating WDRs.

MAY 2025 ADDENDUM TO MAY 2023 REVISED RWD

Following rescission of CDO, Setton submitted a 20 May 2025 Addendum to the May 2023 RWD that described several changes made to the wastewater treatment disposal system that were previously proposed.

The changes reported in the 20 May 2025 Addendum to the May 2023 Revised RWD included:

- Removal of the Dissolved Air Flootation (DAF) units after the 2022 processing season and replacement with the Fiber Filter System (FFS) proposed in the May 2023 RWD. Previously, both the DAF system and FFS were to be used in conjunction, with the FFS preceding the DAF in the treatment process.
- Construction of a new, lined wastewater retention pond (Bella Pond) upstream of the current East and West ponds that will serve as a holding pond for the new proposed centrifuge. The Pond was completed in August 2025.
- A proposal to add a centrifuge to increase solids removal prior to discharge to the LAAs.

Staff had concerns that the proposed changes would increase the potential for the discharge and effluent stored in the newly lined Bella Pond to create odors and nuisance conditions.

Based on review of the May 2025 Addendum, Staff requested a revised RWD with additional supporting information and justification for the changes.

SEPTEMBER 2025 RWD

Setton provided a revised September 2025 RWD that addressed Staff concerns with the May 2025 Addendum. Setton noted the DAF was removed due to the equipment maintenance, ongoing repair/replacement of parts, and the required labor to operate a DAF system for the wastewater processing at Setton was cost prohibitive.

While analytical results for certain effluent constituents stored in the East Pond without DAF treatment were higher in 2023 and 2024 than those recorded in 2022 following DAF treatment, Setton indicates solids would be removed from the effluent stored in the Bella Pond using a centrifuge and the retention time of wastewater in the Pond will be less than two hours, which Setton stated should decrease the potential for nuisance odors to occur. The Discharger piloted a centrifuge during the 2024 processing season and then later installed the permanent centrifuge for full operation during the 2025 processing.

CURRENT AND PROPOSED FACILITY OPERATION AND DISCHARGE

Porterville Citrus - Porterville Citrus normally operates from October to July. The citrus discharge has been separated from the pistachio wastewater transfer line and now is applied directly to the LAAs by subsurface irrigation. During the non-harvest pistachio

harvest season, only citrus wastewater and some comingled storm water is discharged into the LAAs. While no longer co-mingled with the pistachio wastewater in the ponds, both facilities discharge to the existing land applications areas.

The quality of the Porterville Citrus discharge is shown in Table 1.

Table 1 - Citrus Effluent Quality

Constituents	Units	2022	2023	2024	2025
Sodium	mg/L	520	449	527	340
FDS	mg/L	1,138	1,603	1,625	853
BOD ₅	mg/L	470	929	823	603
Nitrate as Nitrogen	mg/L	0.9	1.5	1.7	1.1
TKN	mg/L	18.5	24	30	22.6
Total Nitrogen	mg/L	19.4	26	32	23.7
Iron	µg/L	11,489	23,346	13,900	20,225
Manganese	µg/L	274	512	412	478
Boron	µg/L	219	233	138	133

Setton Pistachio- The pistachio harvest season is typically about 55 days from mid-August to mid-October depending upon weather. The pistachio processing wastewater is discharged through a series of ponds and various fiber and sand filters, before being discharged to one of the 25 blocks that make up the 961-acre land application area. The quality of the filtered effluent discharged to the new lined Bella Pond prior to treatment with the centrifuge is summarized in Table 2.

Table 2 - 2025 Bella Pond Effluent Quality

Parameter	Units	9/5/25	9/19/25	9/26/25	10/10/25	Average
TDS	mg/L	9,500	9,300	7,800	6,000	8,150
FDS	mg/L	6,500	5,100	3,500	3,500	4,650
TSS	mg/L	4,800	6,300	2,400	1,100	3,650
Total Nitrogen	mg/L	46	62	45	54	52
TKN	mg/L	41	58	41	54	49
Nitrate as Nitrogen	mg/L	4.7	3.6	4.4	<0.65	4.2

Parameter	Units	9/5/25	9/19/25	9/26/25	10/10/25	Average
BOD ₅	mg/L	8,000	10,000	7,000	7,100	8,025

The quality of the effluent treated by the centrifuge and discharged to the LAAs is summarized in Table 3.

Table 3 - Pistachio Wastewater Quality

Parameters	Units	2022	2023	2024	2025	Averages
TDS	mg/L	7,367	6,892	8,175	7,750	7,546
FDS	mg/L	2,900	2,936	2,771	3,400	3,002
TSS	mg/L	293	2,846	2,000	1,180	1,579
Nitrate as N	mg/L	<0.8	< 1.0	3.0	<0.9	1.4
TKN	mg/L	233	518	260	242	313
Total N	mg/L	233	518	260	243	314
BOD ₅	mg/L	5,267	5,523	7,725	7,150	6,416
Potassium	mg/L	1,533	1,341	1,190	170	1,059
Iron	µg/L	3,300	1,901	2,867	2,500	2,642
Manganese	µg/L	267	152	220	270	228

The Bella Pond averages in 2025 for TDS, TSS, and BOD₅ are lower than the 2025 samples of the pistachio wastewater discharged to the LAAs indicating the centrifuge appears to have been successful in lowering the concentrations of FDS, TSS, and BOD₅.

To address potential odors emanating from the Pistachio Facility's wastewater ponds, the September 2025 RWD indicates a Venturi Aerator will be used in the East Pond, and paddle wheel aerators will be available for installation in the Bella Pond and the West Pond, if needed. Additionally, the RWD notes that extra oxygen may be provided to the ponds with the addition of hydrogen peroxide.

The September 2025 RWD also indicates the retention time in the Bella Pond will be less than two hours, and that the slope of the pond and short retention time will result in constant agitation of the wastewater within the pond, allowing atmospheric oxygenation to prevent septicity and odor generation. The retention time is calculated as the volume of the treatment unit divided by the flowrate of the liquid. However, process flow rates are variable and fluctuate depending primarily on the tonnage of the pistachios processed. Setton has had issues in the past with being able to meet short retention

times, but Setton indicates it has developed a flow balance/schedule that will be used to determine the appropriate rates that wastewater can be pumped out of the Bella Pond to achieve the 2-hour retention time maximum and to avoid odor generation.

GROUNDWATER CONSIDERATIONS

Groundwater conditions are discussed in Findings 62 to 70 of the Order.

ANTIDegradation

Antidegradation analysis and conclusions are discussed in Findings 98 to 104 of the Order.

DISCHARGE PROHIBITIONS, EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS, AND PROVISIONS

For Porterville Citrus, this Order sets a monthly average maximum daily flow limit of 0.08 mgd for the Citrus Facility's discharge to the land application areas (LAAs). For Setton, this Order sets a monthly average maximum daily flow limit of 3.0 mgd and an Annual total of 85 MGY for the Pistachio Facility.

The Order also specifies a Performance-Based Effluent Limits of 1,700 and 3,300 mg/L FDS (as an annual average) for the citrus and pistachio discharges, respectively, and a cycle average BOD loading limit to the LAAs of 100 lbs/ac/day.

This Order also contains the following provisions:

- Provision J.6 requires the Discharger to submit an Operations and Maintenance Plan.
- Provision J.7 requires the Discharger to submit an updated Wastewater and Nutrient Management Plan.

Groundwater limitations establish that the release of waste constituents from any portion of the Facilities shall not cause or contribute to the exceedance of water quality objectives (WQOs) in the receiving water. If the Facility's discharge contains waste at a level greater than a WQO but the groundwater receiving the waste remains below the WQO, the limitation would not be violated. However, if the same discharge contains waste at a level greater than the WQO and causes the receiving water to exceed a WQO, the groundwater limitation would be violated. Similarly, if the same discharge contains waste above the WQO and the receiving water is above the objective, the Facility's discharge would be contributing to an exceedance of the WQO and would be violating the receiving water limitation, if the receiving water natural background concentration is less than the WQO.

In the scenario where the level of waste in the Facility's discharge is below the WQO and the receiving water exceeds the WQO, the limitation would not be violated. Where natural background conditions exceed the WQO, compliance would be evaluated considering the established natural background concentration instead of the WQO. Only discharges causing or contributing to the exceedance of the WQO or natural background concentration (if greater than the WQO) in the groundwater would be in violation of the limitation.

The Basin Plan contains the following in Section 3 Water Quality Objectives:

The objectives contained in this plan, and any State or Federally promulgated objectives applicable to the basins covered by the plan, are intended to govern the levels of constituents and characteristics in the main water mass unless otherwise designated...

Any analysis of the above factors to determine exceedances of groundwater limitations would consider this and other guidance from the Basin Plan (e.g., hydrogeologic and background characterization studies, regional groundwater flow and dilution, etc.).

MONITORING REQUIREMENTS

Section 13267 of the California Water Code authorizes the Central Valley Water Board to require monitoring and technical reports as necessary to investigate the impact of waste discharges on Waters of the State. Water Code Section 13268 authorizes assessment of civil administrative liability where appropriate. The Order includes influent, effluent, pond, source water supply, land application area, soil, supplemental irrigation water, and solids monitoring requirements. This monitoring is necessary to characterize the discharge and evaluate compliance with the requirements and specifications in the Order.

SALT AND NITRATE CONTROL PROGRAMS REGULATORY CONSIDERATIONS

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. These Basin Plan amendments became effective on 17 January 2020 and were subsequently revised by the Central Valley Water Board in 2020 to make targeted revisions required by the State Water Board through adoption of Resolution R5-2020-0057, which became effective 10 November 2021.

Setton (**CV-SALTS ID 2479**) and Porterville Citrus (**CV-SALTS ID 2392**) received 5 January 2021 Notices to Comply with the Salt Control Program. The Dischargers

submitted Notices of Intent (NOIs) on 3 March 2021 electing to participate in the P&O Study, and records indicate that the Dischargers are in good standing with the program.

For the Nitrate Control Program, dischargers may comply with the new nitrate program either individually (Path A) or collectively with other dischargers (Path B). The Facility's are in a Priority 1 subbasin (Tule Basin Management Zone) and the Dischargers are participating collectively in the Tule Basin Management Zones (Path B).

The CV-SALTS initiative will result in regulatory changes that will be implemented through conditional prohibitions and modifications to many WDRs regionwide, including the WDRs that regulate discharges from the Facilityies. [More information regarding the CV-SALTS 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 Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. The Order sets limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the Order.

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

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