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WASTE DISCHARGE REQUIREMENTS ORDER AND MONITORING AND REPORTING PROGRAM R5-2020-0024



ORDER INFORMATION

Order Types:	Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP)
Status:	Adopted
Program:	Non-15 WDRs
Dischargers:	Sunsweet Dryers, Inc.
Facility:	Madera Prune Dehydration Plant
Address:	28390 Avenue 12
County:	Madera
WDID:	5C202029001
Prior Order(s):	95-195

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the orders adopted by the California Regional Water Quality Control Board, Central Valley Region, on 16 April 2020.

PATRICK PULUPA,
Executive Officer

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Glossary

Antidegradation Policy.....	<i>Statement of Policy with Respect to Maintaining High Quality Waters in California</i> , State Water Board Resolution 68-16
Basin Plan	Water Quality Control Plan for San Joaquin
bgs	Below Ground Surface
BOD ₅	Five-Day Biochemical Oxygen Demand
BPTC.....	Best Practicable Treatment and Control
CEQA	California Environmental Quality Act, Public Resources Code section 21000 et seq.
CEQA Guidelines	California Code of Regulations, Title 14, section 15000 et seq.
C.F.R.....	Code of Federal Regulations
COC[s]	Constituent[s] of Concern
DO.....	Dissolved Oxygen
DTSC	California Department of Toxic Substances Control
DWR.....	California Department of Water Resources
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
lbs/ac/day	Pounds per Acre per Day
µg/L	Micrograms per Liter
µmhos/cm.....	Micromhos per Centimeter
MG[D].....	Million Gallons [per Day]
mg/L	Milligrams per Liter
msl.....	Mean Sea Level
MRP	Monitoring and Reporting Program
MW	Monitoring Well
MCL.....	Maximum Contaminant Level per Title 22

ORP	Oxygen Reduction Potential
N.....	Nitrogen
ND.....	Non-Detect
NE	Not Established
NM.....	Not Monitored
R[O]WD.....	Report of Waste Discharge
RCRA	Resource Conservation and Recovery Act
SPRRs	Standard Provisions and Reporting Requirements for WDRs, 1 March 1991 ed.
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
<i>Unified Guidance.....</i>	<i>Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (USEPA, 2009)</i>
USEPA.....	United States Environmental Protection Agency
VOC[s].....	Volatile Organic Compound[s]
WDRs.....	Waste Discharge Requirements
WQO[s]	Water Quality Objective[s]

Findings

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

Introduction

1. Sunsweet Dryers, Inc. (Sunsweet or Discharger) owns and operates the Madera Prune Dehydration Plant (Facility), which is located approximately three miles south-southeast of Madera (Section 5, T12S, R18E, MDB&M). The Facility's location is depicted on the Site Location Map in Attachment A. The Facility and disposal field are located on Assessor Parcel Number (APN) 47-101-014, owned by Sunsweet.
2. As Facility's owner and operator, the Discharger is responsible for compliance with the Waste Discharge Requirements (WDRs) prescribed in this Order.
3. The following materials are attached to this Order and incorporated herein:
 - a. Attachment A—Site Location Map
 - b. Attachment B—Process Flow Diagram
 - c. Attachment C—Site Plan
 - d. Standard Provisions and Reporting Requirements, dated 1 March 1991
 - e. Information Sheet
4. Also attached is **Monitoring and Reporting Program R5-2020-0024** (MRP), which requires monitoring and reporting for discharges regulated under these WDRs.
5. WDRs Order 95-195, adopted by the Central Valley Water Board on 17 August 1995, originally prescribed requirements for the Madera Prune Dehydration Plant. It allowed an average daily processing seasonal flow of 116,000 gallons per day (gpd) on two fields, a 14-acre field and a 7-acre field. On 30 August 2019 the Discharger submitted a Report of Waste Discharge (RWD), followed by a revised RWD on 28 October 2019. The October 2019 RWD stated the 7-acre field was reportedly never used for wastewater disposal and that the Discharger does not plan to apply wastewater to the 7-acre field in the future. The WDRs for the Facility are being updated to ensure the discharge is consistent with water quality plans and policies and to reflect changes to the Facility. Order 95-195 will be rescinded and replaced with this Order.

Existing Facility and Discharge

6. The Discharger conducts prune dehydrating operations at the Facility, which include washing, dehydrating, storing, and sorting plums/prunes. Equipment at the Facility includes three dipper tanks, three dehydrators, an on-site source water well, three warehouses, and a wastewater treatment and stormwater management system. Facility operations and clean-up typically last 25 days during August and September. All prunes typically leave the Facility by the end of the calendar year.
7. The Facility generates wastewater by washing plums, dehydrating plums, and washing equipment and floors with supply water from an on-site well. Wastewater (after treatment) is discharged to an onsite disposal field. No domestic wastewater commingles with the processing wastewater. All domestic wastewater is collected into a separate piping system and is discharged to an on-site septic tank/leach field, which is permitted by Madera County.
8. The Facility's wastewater process is depicted in the Process Flow Diagram included in Attachment B. Process wastewater is treated prior to discharge. The Facility's wastewater treatment system consists of a rotating drum screen and a 70,000-gallon concrete settling basin with aeration (concrete basin). Treated process wastewater from the concrete basin is pumped to sprinklers on a 14-acre disposal field, shown in the Site Plan included in Attachment C. The disposal field consists of nine irrigation lines, each with five sprinklers (total 45 sprinklers). Wastewater is conveyed to the disposal field, which is activated by a float system set to keep two feet of freeboard. If the wastewater pump to the sprinklers is nonoperational, the wastewater overflows to a 4-acre overflow basin. Typically, the Discharger allows native grasses and forbs to grow on the disposal field and allows farm animals to graze on them. Sunsweet personnel oversee wastewater applications to the disposal field.
9. Source water quality, summarized in the RWD, is shown in Table 1 below. The Facility's supply well is reported to be approximately 500 feet deep with an 8" diameter steel casing, with an estimated capacity in excess of 1,000 gallons per minute.

Table 1 – Source Water Quality (2014 - 2018)

Constituent	Units	Average	Minimum	Maximum
Electrical Conductivity (EC)	µmhos/cm	288	275	328
pH	pH units	7.0	6.63	7.67
Dissolved Oxygen (DO)	mg/L	7.6	6.22	8.06
Total Dissolved Solids (TDS)	mg/L	230	200	300
5-Day Biochemical Oxygen Demand (BOD ₅)	mg/L	ND	ND	ND

10. The wastewater characteristics for 2014 to 2018 are summarized in Table 2 below. The Information Sheet (Table 1) provides a more detailed summary of the effluent data.

Table 2 –Effluent Data (2014 – 2018)

Date	pH (pH units)	BOD ₅ (mg/L)	EC (µmhos/cm)	TDS (mg/L)	DO (mg/L)
Average	5.7	719	363 (See 1 below)	659	6
Count	17	16	13	17	17
Maximum	7.4	2,800	538	3,000	8
Minimum	4.7	49.4	290 (See 1 below)	210	1.75

1. Four EC results (noted in the Information Sheet) were not included in the statistical summary since they appear to be outliers.

11. A comparison of source water and effluent salinity is shown in Table 3 below. The effluent TDS concentration increase is approximately 179% while the effluent EC increase is only approximately 26%. The difference indicates that the increase in TDS is mainly from volatile (organic) dissolved solids added to the source water during prune processing.

Table 3 – Source Water vs. Effluent Salinity Comparison (2014-2018)

Constituent	Source Water	Effluent
TDS (mg/L)	236	659
EC (µmhos/cm)	288	363

12. Table 4 below provides a summary of the Facility’s annual wastewater application for the past four calendar years (2015 – 2018). The wastewater flows were estimated by the number of hours the dehydrators were in operation. The hydraulic loading was calculated assuming wastewater was evenly applied over 14 acres (disposal field).

Table 4 – Wastewater Flows (Estimated)

Year	Wastewater Flow (gpd)	# of Processing Days	Annual Volume Discharged (gallons)	Annual Hydraulic Loading (inches/year)
2015	32,644	25	820,000	2.15
2016	49,222	28	1,380,000	3.63
2017	40,322	29	1,170,000	3.08
2018	37,392	20	750,000	1.97
Average	39,895	25.5	1,030,000	2.67

- Since nitrogen data was not available for the Facility, the October 2019 RWD estimated the Facility's effluent nitrogen averaged around 2.4 mg/L based on data from a similar Sunsweet prune dehydration facility. Based on this concentration and a total volume flow of 4.3 million gallons (flow limitation), the estimated loading rate on the 14-acre disposal field is approximately 6.2 lbs/acre/year.

Site-Specific Conditions

- The Facility and the disposal field are in the eastern portion of the Central Valley of California. Topography in the area is generally level with an approximate elevation between 264 feet and 267 feet above mean sea level (msl). Federal Emergency Management Agency (FEMA) maps show that the Facility and the disposal field are located in an area of Minimal Flood Hazard.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil service maps characterize approximately the top six feet of soils. Soils within the disposal field are predominantly (greater than 90%) Hanford Fine Sandy Loam, 0 to 1% slopes. The remainder of the soils (less than 10%) are Tujunga Loamy Sand, 0 to 3% slopes. Hanford series soils consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite.
- Climate in the Central Valley is characterized by hot dry summers and mild winters. The rainy season generally extends from November through April. Occasional rains occur during the spring and fall months.
- Land use in the vicinity of the site is a mixture of agricultural and residential.

Groundwater Conditions

18. According to the [California Department of Water Resources \(DWR\) Groundwater Information Center Interactive Map Application](https://gis.water.ca.gov/app/gicima/) (<https://gis.water.ca.gov/app/gicima/>), depth to groundwater is approximately 190 feet to 200 feet below site grade (bsg) (70 feet to 80 feet above sea level). Regional groundwater flow in the area is generally to the northeast.
19. Regional groundwater quality data can be found on the Water Quality Portal website, a cooperative service provided by the United State Geological Survey (USGS), the Environmental Protection Agency, and the National Water Quality Monitoring Council. Nearby groundwater quality was considered by reviewing the data of wells close to the site. Three wells were located within two miles of the Facility using the [National Water Quality Monitoring Council's Water Quality Portal website](https://www.waterqualitydata.us/) (<https://www.waterqualitydata.us/>). The data for the three wells (Well #1=012S018E03C002M, Well #2 = 011S018E32N001M, Well #3 = 012S017E01A001M) are summarized in the Table 5 below.

Table 5 – Groundwater Data

Well Number	1	2	3	3
Date Sampled	12/3/2003	5/6/2008	10/23/2001	7/10/2013
Well Depth (feet bgs)	190	330	No Data	No Data
EC (µmhos/cm)	480	460	332	340
NO ₃ as N (mg/L)	6.24	5.96	4.87	4.4
Sodium (mg/L)	28.3	32.1	26.8	25.3
Calcium (mg/L)	38.1	39	26	27.1
Chloride (mg/L)	38.6	22.6	25.6	23.2
Magnesium (mg/L)	13.3	13	8.74	8.68
Iron (µg/L)	23.9	ND	ND	ND
Arsenic (µg/L)	0.64	0.92	0.7	0.9

Legal Authorities

20. 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 Section 13241.

21. Compliance with section 13263, subdivision (a), including implementation of applicable water quality control plans, is discussed in the findings below.
22. The ability to discharge waste is a privilege, not a right, and adoption of this Order shall not be construed as creating a vested right to continue discharging waste. (Wat. Code, § 13263, subd. (g).)
23. This Order and its associated Monitoring and Reporting Program (MRP) are also adopted pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

[T]he regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

24. 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.

Basin Plan Implementation

25. Pursuant to Water Code section 13263, subdivision (a), WDRs must “*implement any relevant water quality control plans..., and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.*”
26. This Order implements the Central Valley Water Board’s *Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin* (Basin Plan), which designates beneficial uses for surface water and groundwater and

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

27. Local drainage is to Cottonwood Creek, which is a tributary to the San Joaquin River. The designated beneficial uses of this segment of the San Joaquin River (per the Basin Plan) include: municipal and beneficial use (MUN); agricultural supply (AGR); industrial process supply (PRO); water contact recreation (REC-1); non-water contact recreation (REC-2); warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD); migration of aquatic organisms (MIGR); and spawning, reproduction and/or early development (SPAWN).
28. Per the Basin Plan, beneficial uses of underlying groundwater at the Facility are: municipal and domestic supply (MUN); agricultural supply (AGR); industrial service supply (IND); and industrial process supply (PRO).
29. The Basin Plan establishes narrative WQO's for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms. The Basin Plan's numeric WQO for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN-designated groundwater.
30. The Basin Plan's narrative WQO's for chemical constituents require MUN-designated water to at least meet the MCLs specified in California Code of Regulations, title 22 (Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
31. The narrative toxicity WQO requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.
32. 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 numerical limitations to implement the narrative objective.
33. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops

are not evident when irrigation water has an electrical conductivity (EC) less than 700 $\mu\text{mhos/cm}$. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 $\mu\text{mhos/cm}$ if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

Special Considerations for High Strength Waste

34. For the purpose of this Order, "high strength waste" is defined as wastewater that contains concentrations of readily degradable organic matter that exceed typical concentrations for domestic sewage. Such wastes contain greater than 500 mg/L BOD. Typical high strength wastewaters include septage, some food processing wastes, winery wastes, and rendering plant wastes.
35. Excessive application of high organic 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, which include planting crops to take up plant nutrients and maximizing oxidation of BOD₅ to prevent nuisance conditions.
36. 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. When insufficient oxygen is present below the ground surface, anaerobic decay of the organic matter can create reducing conditions that convert metals that are naturally present in the soil as relatively insoluble (oxidized) forms to more soluble reduced forms. This condition can be exacerbated by acidic soils and/or acidic 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 beneficial use impacts associated with these metals.
37. Typically, irrigation with high strength wastewater results in high 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.

38. *Pollution Abatement in the Fruit and Vegetable Industry*, published by the United States Environmental Protection Agency, cites BOD₅ loading rates in the range of 36 to 600 lbs/acre-day to prevent nuisance, but indicates the loading rates can be even higher 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 BOD₅ 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 region.
39. 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 BOD₅ 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 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 BOD₅ 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.

40. Although it has not been subject to a scientific peer review process, the *Manual of Good Practice* provides science-based guidance for BOD₅ loading rates that, if fully implemented, are considered a best management practice to prevent groundwater degradation due to reduced metals. This Order sets an irrigation cycle average BOD₅ loading rate for the disposal area of 100 lbs/acre/day.

Compliance with *Antidegradation Policy*

41. The *Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Water Board Resolution 68-16 (*Antidegradation Policy*) prohibits the Central Valley Water Board from authorizing degradation of "high

quality waters” unless it is shown that such degradation: (1) will be consistent with the maximum benefit to the people of California; (2) will not unreasonably affect beneficial uses, or otherwise result in water quality less than as prescribed in applicable policies; and (3) is minimized through the discharger’s best practicable treatment or control (BPTC).

42. Given the unavailability of pre-1968¹ water quality information, compliance with the Antidegradation Policy will be determined based on existing background water quality (Antidegradation Baseline).
43. Constituents of concern (COCs) that have the potential to degrade groundwater include salinity and organics. Salt and BOD₅ loading rates are summarized in Table 6 below. The loading rates are calculated using an average flow of 116,000 gpd for 37 days (4.3 million gallons). For the past four years, the Facility operated, on average, 25.5 (range of 20 to 29 days) days per year.

Table 6 – Salt and BOD₅ Loading Rates

Constituent	Effluent Concentration	Loading Rate
Table Data	659 mg/L	1,685 lbs/acre/year
BOD ₅	719 mg/L	50 lbs/acre/day

- a. **Salinity.** The salinity loading rate in Table 6 was estimated based on TDS results from 2014 to 2018 since FDS data was unavailable. As shown in Table 3 above, a comparison of the source water TDS to effluent TDS shows a substantial increase (approximately 179%) while the increase in EC from the source water to the wastewater is fairly minimal (a 26% increase). This likely indicates that the Facility is not significantly increasing the amount of inorganic (fixed) dissolved solids in the waste stream. Therefore, a significant portion of the total dissolved solids in the Facility’s effluent will likely degrade during land application of the effluent. The associated MRP will require FDS and TDS monitoring (source water and effluent) to further evaluate the Facility’s increase in FDS.

No crop is actively grown on the disposal field. But grasses and forbs do grow on the field. The Discharger cited a study completed for the Sunsweet prune dehydrating facility in Glenn County (Hamilton City Facility) where they measured the field uptake of salts by a similarly

¹ The *Antidegradation Policy* was adopted by the State Water Board in 1968.

managed field. The average salt uptake rate by the vegetation was 1,522 lbs/acre/year for 2013 through 2015.

- b. **Organics.** As shown in Table 6, the estimated BOD₅ loading rate is approximately 50 lbs/acre/day assuming a flow rate of 116,000 gpd, average effluent BOD₅ concentration of 719 mg/L, and 14 acres for disposal. As stated in Finding 39, a BOD loading rate of 50 lbs/acre/day is classified as a Risk Category 1 in the Manual of Good Practice. The Manual of Good Practice states Category 1 is "*indistinguishable from good farming operations...*" This Order includes a cycle average daily BOD₅ loading rate of 100 lbs/acre/day and a maximum daily BOD₅ loading rate of 300 lbs/acre/day to ensure the Discharger applies wastewater at reasonable rates. Considering the volume of discharge, limited duration of discharge (approximately 25 days), disposal acreage, and the conditions stipulated in this Order, the Discharger is not expected to cause nuisance conditions or unreasonably degrade groundwater with constituents related to organic overloading.
44. The Discharger implements, or will implement, as required by this Order, the following BPTC measures:
 - a. Wastewater treatment including a rotating screen for suspended solids removal and 70,000-gallon aerated tank for solids settling;
 - b. Development and implementation of a Wastewater Management Plan;
 - c. Development and implementation of an Operations and Maintenance Manual;
 - d. Source water and effluent water quality monitoring;
 - e. Limited use of chemicals at the Facility (minimal increase in inorganic dissolved solids);
 - f. Application of wastewater at rates that will not allow wastewater to stand for more than 24 hours;
 - g. Limited duration of discharge;
 - h. Daily inspection of the disposal field when applying wastewater; and
 - i. Application of wastewater at BOD₅ loading rates limited to a cycle average of 100 lbs/acre/day and a maximum day limit of 300 lbs/acre/day.
 45. The Discharger's implementation of the above-listed BPTC measures will minimize the extent of water quality degradation resulting from the Facility's continued operation.

46. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the state and, therefore, sufficient reason exists to accommodate growth and limited groundwater degradation around the Facility, provided that the terms of the Basin Plan are met. Degradation of groundwater by some typical waste constituents released with discharge from the Facility after effective source reduction, treatment and control, and considering the best efforts of the Discharger and magnitude of degradation, is of maximum benefit to the people of the state. The Facility contributes to the economic prosperity of the region by providing employment, income to numerous aligned businesses, and a tax base for local and county governments. Economic prosperity of Valley communities and associated industries is of maximum benefit to the people of the state and, therefore, sufficient reason to accommodate growth and limited groundwater degradation provided terms of the Basin Plan are met. Accordingly, to the extent that any degradation occurs as the result of the Facility's continued operation, such degradation is consistent with the maximum interest of the people of the State of California.
47. Based on the foregoing, the adoption of this Order is consistent with the State Water Board's *Antidegradation Policy*.

Salt and Nitrate Control Programs Reopener

48. The Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative. The Basin Plan Amendments were conditionally approved by the State Water Board on 16 October 2019 and the Office of Administrative Law on 15 January 2020.
49. For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers could comply with the new nitrate program either individually or collectively with other dischargers. For salinity, dischargers that are unable to comply with stringent salinity requirements would instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs to ensure the goals of the Salt and Nitrate Control Programs are met.

Compliance with CEQA

50. The issuance of this Order, which prescribes requirements and monitoring of waste discharges at an existing facility, with negligible or no expansion of its existing use, is exempt from the procedural requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to California Code of Regulations, title 14, section 15301 (CEQA Guidelines). The discharges authorized under this Order are substantially within parameters established under prior WDRs, particularly with respect to character and volume of discharges.
51. This Order is further exempt from CEQA procedural requirements insofar as it is adopted for protection of the environment and does not authorize construction activities or the relaxation of standards allowing for environmental degradation, in accordance with California Code of Regulations, title 14, section 15308 (CEQA Guidelines).

Other Regulatory Considerations

52. 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 maximum contaminant levels (MCLs) for drinking water, which are designed to protect human health and ensure that water is safe for domestic use.
53. For the purposes of California Code of Regulations, title 23 (Title 23), section 2200, the Facility has a threat-complexity rating of 2-B, where:
 - 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; and
 - 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 waste management units.
54. This Order, which prescribes WDRs for discharges of wastewater, is exempt from the prescriptive requirements of California Code of Regulations, title 27, section 20005 et seq. (See Cal. Code Regs., tit. 27, § 20090, subd. (b)).

55. Because all storm water at the Facility is collected and disposed onsite, the Discharger is not required to obtain coverage under the *Statewide General Permit for Storm Water Discharges Associated with Industrial Activities*, State Water Board Order 2014-0057-DWQ (Industrial General Permit) at this time.

Scope of Order

56. This Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized herein.
57. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges (i.e., process wastewater) authorized herein, without filing a new Report of Waste Discharge (RWD) per Water Code section 13260.
58. Failure to file a new RWD before initiating material changes to the character, volume or timing of discharges authorized herein, shall constitute an independent violation of these WDRs.
59. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as “Discharger,” subject only to the discretion to designate or substitute new parties in accordance with this Order.

Procedural Matters

60. 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.
61. The Discharger, 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. (Wat. Code, § 13167.5.)
62. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
63. 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 Order 95-195 is rescinded (except for enforcement purposes) and that the Discharger shall comply with the following.

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.
3. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the Standard Provisions and Reporting Requirements for WDRs, 1 March 1991 ed. (SPRRs), which are incorporated herein.
4. Discharge of waste at a location or in a manner different from that described in the Findings herein is prohibited.
5. Discharge of toxic substances into any wastewater treatment system or the disposal field such that biological treatment mechanisms are disrupted is prohibited.
6. Discharge of domestic wastewater to the process wastewater treatment system, overflow basin, and/or the disposal field is prohibited.

B. Flow Limitations

1. The processing season wastewater discharge to the treatment system (described in Finding 8) shall not exceed the following (monitored at EFF-001):
 - a. A monthly average daily flow of 116,000 gallons per day, or
 - b. A total annual flow of 4.3 million gallons.

C. Discharge Specifications

1. The cycle average BOD₅ loading rate shall not exceed 100 lbs/acre/day to the disposal field. The cycle average BOD₅ loading rate shall be calculated as determined by the method described in the attached Monitoring and Reporting Program.

2. The maximum daily BOD₅ loading to the disposal area shall not exceed 300 lbs/acre/day. The daily BOD₅ loading rate shall be calculated as determined by the method described in the attached Monitoring and Reporting Program.
3. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order (Section D).
4. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.
5. The resulting effect of the discharge on soil shall not exceed the buffering capacity of the soil profile.
6. Disposal of wastewater shall be managed to minimize erosion.
7. The disposal field and overflow basin shall be managed to prevent breeding of mosquitoes or other vectors. In particular:
 - a. There shall be no standing water 48 hours after the irrigation ceases;
 - b. Tailwater ditches shall be maintained essentially free of emergent, marginal, or floating vegetation; and
 - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitos shall not be used to store recycled water.
8. Discharge to the disposal field shall only occur when appropriately trained personnel are on duty.
9. The disposal field and overflow basin should be inspected as frequently as necessary to ensure continuous compliance with the requirements of this Order.
10. Spray irrigation with wastewater is prohibited when wind speed (including gusts) exceeds 30 mph.
11. Sprinkler heads shall be designed, operated and maintained to create a minimum amount of mist.
12. Any runoff of wastewater or irrigation water shall be confined to the disposal field or returned to a containment system and shall not enter any surface water drainage course or storm water drainage system.

13. The discharge shall remain within the permitted waste treatment/containment structures and the disposal field at all times.
14. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
15. 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.
16. Objectionable odors, as a result of this discharge, shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.
17. 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.
18. 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.

D. Groundwater Limitations

1. Release of waste constituents from any treatment unit, storage unit, delivery system or disposal location associated with the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of natural background quality, whichever is greater.
 - a. Nitrate as nitrogen of 10 mg/L.

- b. For constituents identified in Title 22 of the California Code of Regulations, the MCLs quantified therein.

E. Solids Disposal Specifications

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

1. Sludge, solid waste, and residual solids shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal operation and adequate storage capacity.
2. Any handling and storage of sludge, solid waste, and residual solids shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.
3. If removed from the site, sludge, solid waste, and residual solids shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for reuse as animal feed, or land disposal at facilities (i.e., landfills, composting facilities, soil amendment sites operated in accordance with valid waste discharge requirements issued by a Regional Water Board) will satisfy this specification.
4. Any proposed change in solids use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

F. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991 (SPRRs), which are a part of this Order. This attachment and its individual paragraphs are referred to as Standard Provisions.
2. The Discharger shall comply with the separately issued **Monitoring and Reporting Program (MRP) R5-2020-0024**, and any revisions thereto as ordered by the Executive Officer. The submittal dates of Discharger

self-monitoring reports shall be no later than the submittal date specified in the MRP.

3. A copy of this Order (including Information Sheet, Attachments and SPRRs) and the MRP, shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with their contents.
4. By **16 October 2020**, the Discharger shall submit an **Operation and Maintenance Manual**. At a minimum, the manual must include:
 - a. Procedures for monitoring Facility operations, discharge, and how to properly operate the Facility;
 - b. Procedures, schedules, and record-keeping for conducting routine maintenance;
 - c. Measures to ensure even application of wastewater on the disposal field;
 - d. Procedures to minimize overflows of wastewater from the concrete basin to the overflow basin; and
 - e. Procedures for logging, investigating the cause, and reporting overflows to the overflow basin.
5. By **16 October 2020**, the Discharger shall submit a **Wastewater Management Plan**. The main objective of the Plan is to identify and utilize site specific data to demonstrate how wastewater loading will occur at reasonable rates. Wastewater loading at reasonable rates will preclude degradation of groundwater, exceedance of water quality objectives, and adverse effects on beneficial uses. At a minimum, the Plan must include:
 - a. An action plan to deal with objectionable odors and/or nuisance conditions;
 - b. Supporting data and calculations for monthly and annual hydraulic, nitrogen, and salinity loading rates; and
 - c. Management practices that will ensure wastewater, irrigation water, fertilizers, solids, and salts are applied at reasonable rates to the disposal field.

6. By **16 October 2020**, the Discharger shall install an effluent flow meter that measures the effluent flow rate continuously at Monitoring Location EFF-001.
7. 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.
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. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
10. 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 includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the

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

11. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.
12. Per 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.
13. In the event that the Discharger reports toxic chemical release data to the State Emergency Response Commission (SERC) pursuant to section 313 of the Emergency Planning and Community Right to Know Act (42 U.S.C. § 11023), the Discharger shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
14. In the event of any change in control or ownership of the Facility or the disposal field, 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.
15. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California 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.
16. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day,

depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this 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

Order Attachments:

Attachment A—Site Location Map

Attachment B—Process Flow Diagram

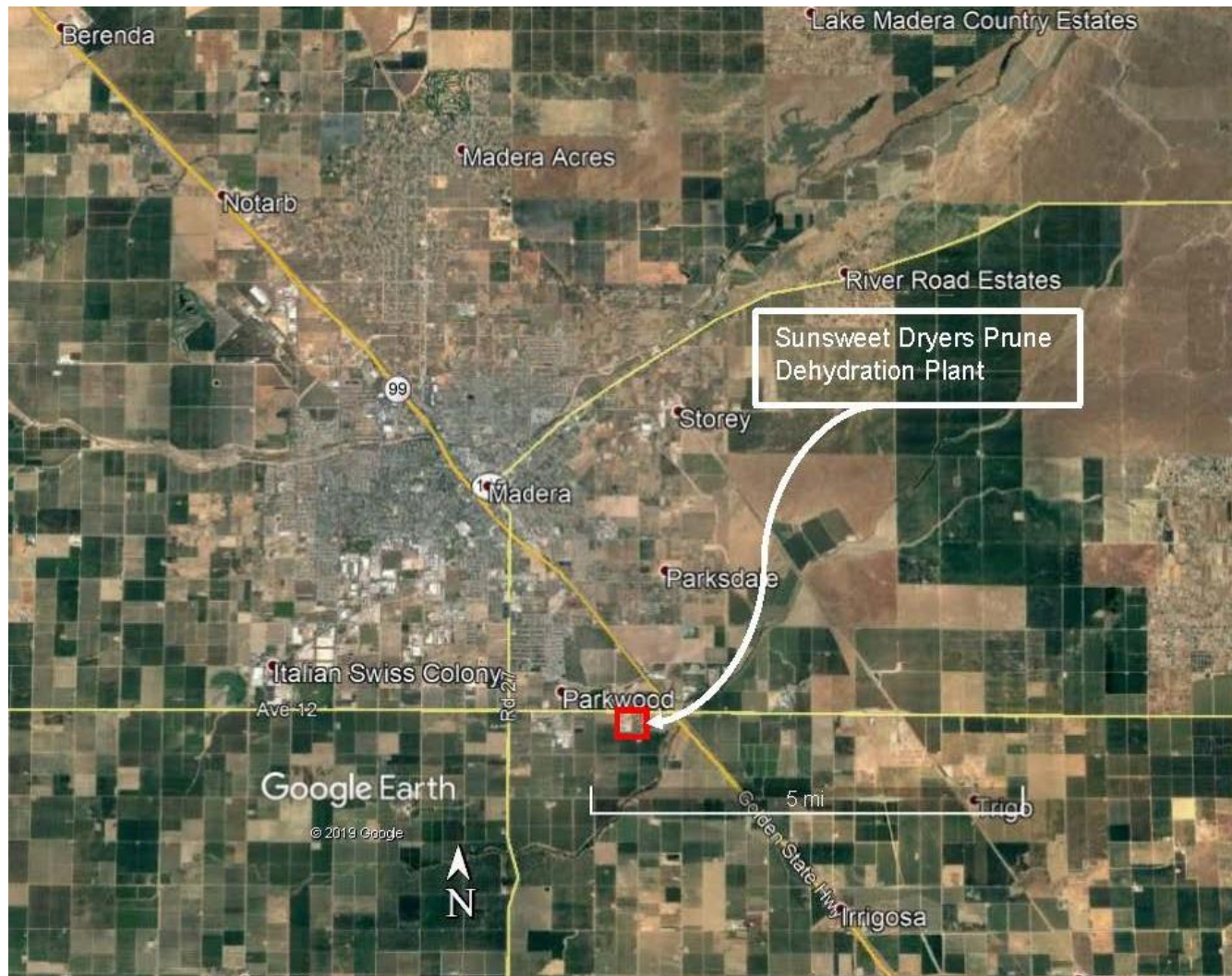
Attachment C—Site Plan

Monitoring and Reporting Program R5-2020-0024 (and attachments thereto)

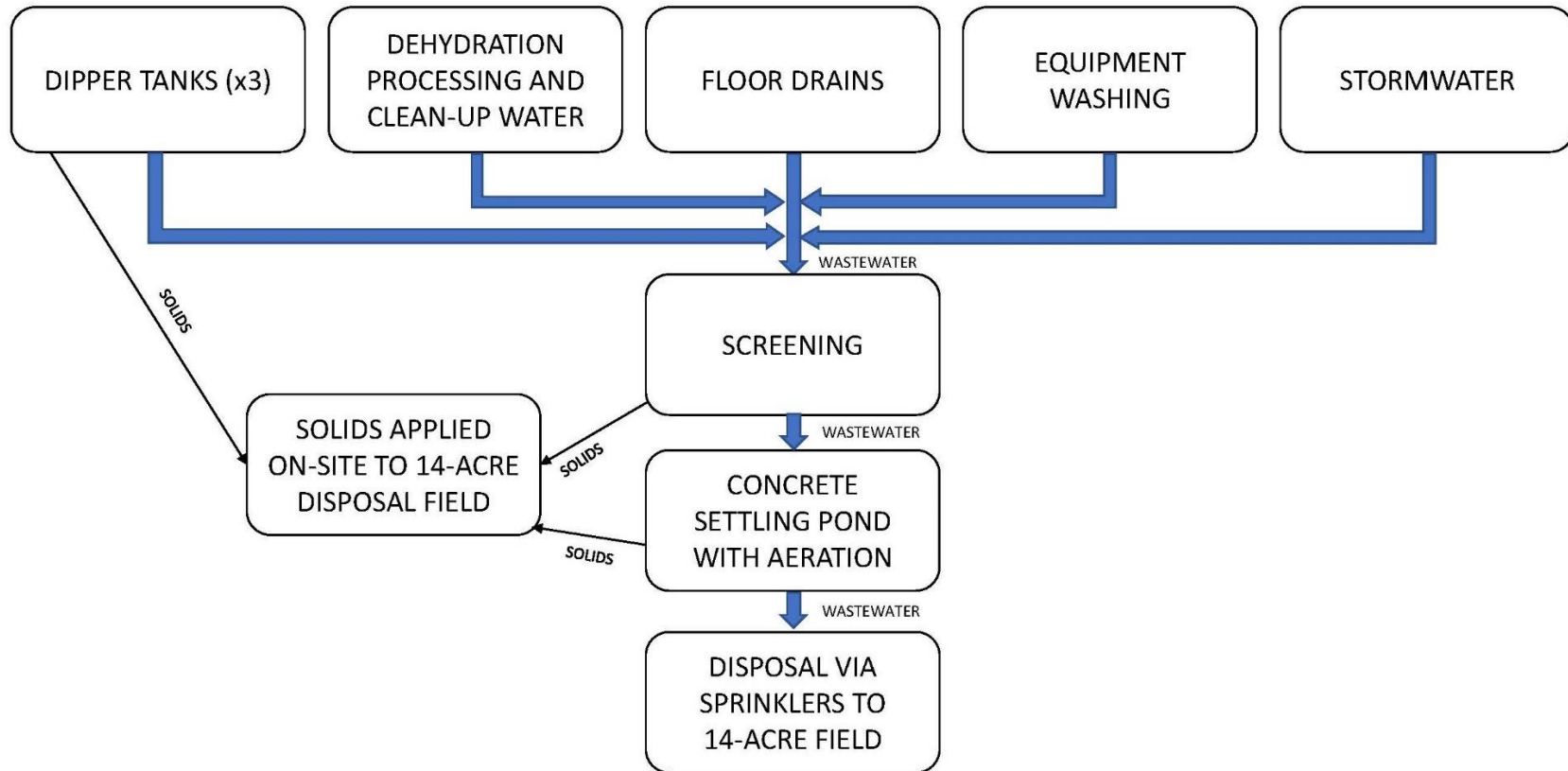
Information Sheet

Standard Provisions and Reporting Requirements (SPRRs), dated 1 March 1991

Attachment A—Site Location Map

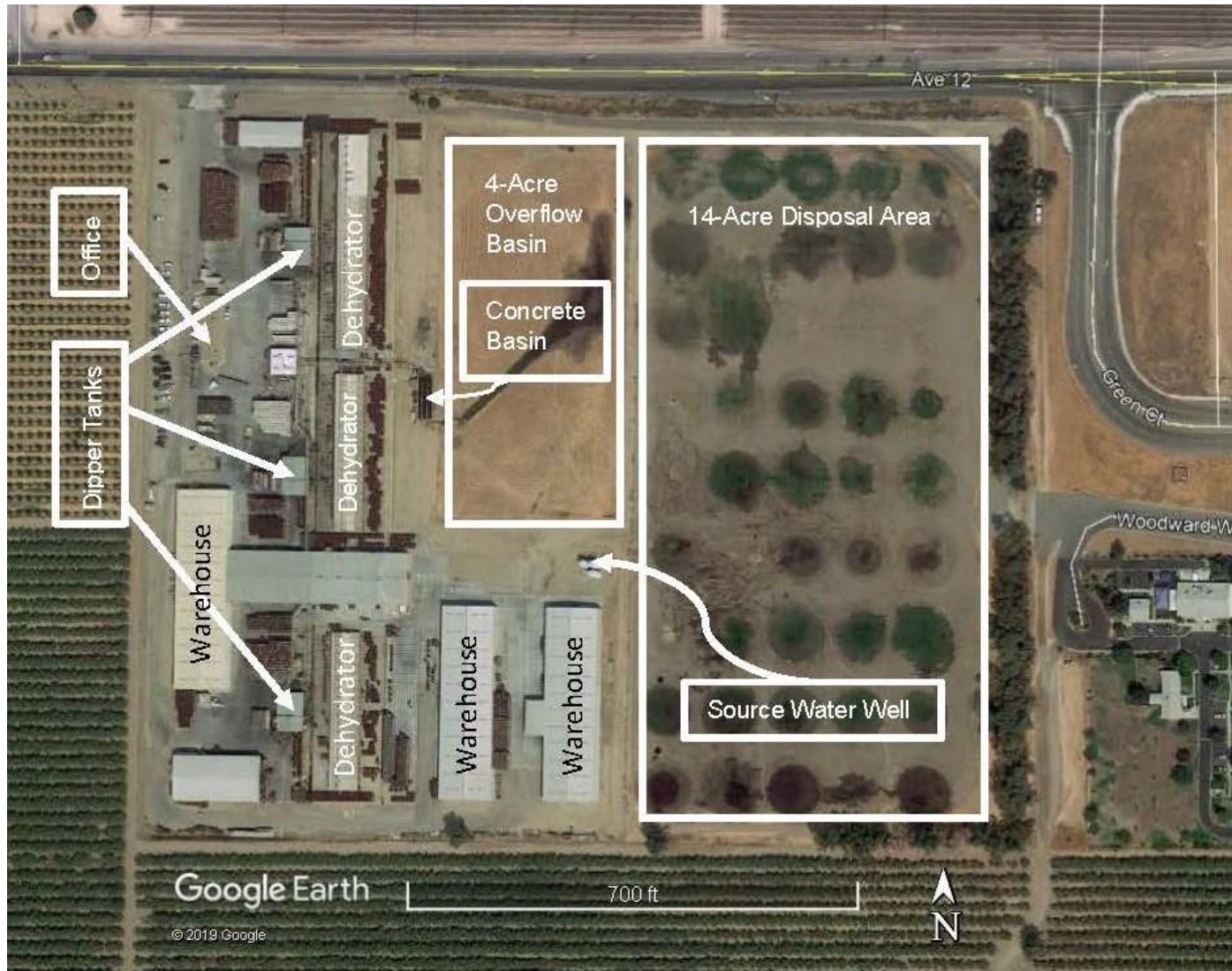


Attachment B—Process Flow Diagram



Drawing Reference: October 2019 Report of Waste Discharge
Modified by Central Valley Water Board Staff

Attachment C—Site Plan



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2020-0024

FOR
SUNSWEEP DRYERS, INC.
MADERA PRUNE DEHYDRATION PLANT
MADERA COUNTY

This Monitoring and Reporting Program (MRP), which is separately issued pursuant to Water Code section 13267, subdivision (b)(1), establishes monitoring and reporting requirements related to the waste discharges regulated under Waste Discharge Requirements Order R5-2020-0024 (WDRs Order). Each of the Findings set forth in the WDRs Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP.

Sunsweet Dryers, Inc. (hereafter Sunsweet or Discharger) owns and operates the Madera Prune Dehydration Plant that is subject to the WDRs Order. Sunsweet shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopts, or the Executive Officer issues, a revised MRP. Pursuant to Water Code section 13267, Sunsweet shall implement this MRP and shall submit the monitoring reports described herein.

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

This MRP Order may be separately revised by the Executive Officer, in accordance with their delegated authority under Water Code section 13223.

A. General Monitoring Requirements

1. Flow Monitoring

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

2. Monitoring Sampling Locations

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

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

Table 1 – Monitoring Location Designations

Monitoring Location Name	Monitoring Location Description
INF-001	Location where a representative sample of the influent (process wastewater) can be obtained prior to treatment (before screening).
EFF-001	Location where a representative sample of the effluent (process wastewater) can be obtained prior to discharge to the disposal field.
DF-001	14-Acre Disposal field
OB-001	4-Acre Overflow basin.
SPL-001	Existing source water well and any other source water wells added to the source water well network.

3. **Sampling and Sample Analysis**

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

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

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

- a. The operator is trained in proper use and maintenance of the instruments;
- b. The instruments are field calibrated at the frequency recommended by the manufacturer;
- c. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and

- d. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

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

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

Approved editions shall be those that are approved for use by the United States Environmental Protection Agency (EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water’s Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

B. Specific Monitoring Requirements

1. Influent Monitoring (INF-001)

The Discharger shall monitor the influent to the treatment system at INF-001 during the processing and cleaning season. Influent, at a minimum, shall be monitored as specified in Table 2 below.

Table 2 – Influent Monitoring

Constituent/Parameter	Units	Sample Types	Monitoring Frequency
pH	pH Units	Grab	1/Week
Electrical Conductivity	µmhos/cm	Grab	1/Week
Total Dissolved Solids	mg/L	Grab	1/Quarter

2. Effluent Monitoring (EFF-001)

Effluent samples shall be collected at monitoring location EFF-001 after all treatment prior to discharge to the disposal field during the processing and cleaning season. Samples should be representative of the volume and nature of the discharge. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.

At a minimum, effluent shall be monitored as specified in Table 3 below:

Table 3 – Effluent Monitoring

Constituent/Parameter	Units	Sample Type	Monitoring Frequency
Flow	gallons	Meter Reading (See 1 below)	Continuous
BOD ₅	mg/L	Grab	1/Week
pH	pH Units	Grab	1/Week
Electrical Conductivity	µmhos/cm	Grab	1/Week
Total Kjeldahl Nitrogen	mg/L	Grab	1/Week
Nitrate as Nitrogen (NO ₃ -N)	mg/L	Grab	1/Week
Ammonia as Nitrogen	mg/L	Grab	1/Week
Total Nitrogen	mg/L	Grab	1/Week
Total Suspended Solids	mg/L	Grab	1/Week
Total Dissolved Solids	mg/L	Grab	1/Week
Fixed Dissolved Solids	mg/L	Grab	1/Week
Volatile Dissolved Solids	mg/L	Grab	1/Week
Standard Minerals	mg/L	Grab	1/Quarter

1. Pursuant to Provision F.6 of the WDRs Order, the Discharger shall begin continuous effluent flow metering within six months of the adoption of the WDRs Order. Until such time, the Discharger may continue to estimate the flow.

3. Disposal Field Monitoring (DF-001)

The Discharger shall inspect the disposal field at least once daily prior to and during irrigation events. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in the Facility’s logbook and included as part of the quarterly monitoring report.

In addition, the Discharger shall perform the routine monitoring and loading calculations identified in the table below for each discrete irrigation

area within the disposal field each day when water is applied. If supplemental irrigation water is used, samples shall be collected from its source (e.g., SPL-001). The data shall be collected and presented in both graphical (map) and tabular format and shall include the following:

Table 4 – Disposal Field Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Daily	Application Area	Acres	Calculated
Daily	Wastewater flow	Gallons	Metered (see 1 below)
Daily	Wastewater loading	Inches/day	Calculated
Daily	Supplemental Irrigation Flow	Gallons	Metered
Daily	Supplemental Irrigation Loading	Inches/day	Calculated
Daily	Precipitation	Inches	Rain gage (see 2 below)
1/Month	Total Hydraulic Loading (see 3 below)	Inches/acre/month	Calculated
BOD₅ Loading (see 4 below)			
Table Data	Day of Application	lbs/acre/day	Calculated
Cycle	Cycle Average (see 5 below)	lbs/acre/day	Calculated
Nitrogen Loading (see 4 below)			
Annually	From wastewater	lbs/acre/yr	Calculated
Annually	From fertilizers	lbs/acre/yr	Calculated
Annually	From supplemental irrigation water	lbs/acre/yr	Calculated
Salt Loading (see 4 below)			
Annually	From wastewater	lbs/acre/yr	Calculated
Annually	From supplemental irrigation water	lbs/acre/yr	Calculated

1. Pursuant to Provision F.6 of the WDRs Order, the Discharger shall begin continuous effluent flow metering within six months of the adoption of the WDRs Order. Until such time, the Discharger may continue to estimate the flow.
2. National Weather Service or CIMIS data from the nearest weather station is acceptable.
3. Combined loading from wastewater, storm water, irrigation water, and precipitation.
4. The BOD₅, nitrogen, and salt loading rates shall be calculated as specified in Section C of this MRP.
5. A cycle average is calculated by taking the pounds of BOD₅ applied to a disposal field in a given period, divided by the sum of the total days wastewater was applied plus the number of days of rest (no application of wastewater). See Section C.1. of this MRP for the calculation.

4. **Overflow Basin Monitoring (OB-001)**

When the Facility is in operation, the 4-acre overflow basin must be monitored daily for overflows. A log must be kept noting any overflow events. Any occurrence of wastewater overflowing to the basin must be discussed in the quarterly reporting, including the volume and duration of discharge, cause of the overflow, and action(s) taken to prevent a similar event from occurring again.

5. **Water Supply Monitoring (SPL-001)**

A sampling station shall be established where a representative sample of the source water supply can be obtained. If the source water is from more than one well, the results shall also be presented as a flow-weighted average of all the wells used. Water supply monitoring shall include at least the following:

Table 5 – Water Supply Monitoring

Constituent/Parameter	Units	Monitoring Frequency
Total Dissolved Solids	mg/L	Annually
Fixed Dissolved Solids	mg/L	Annually
Electrical Conductivity	µmhos/cm	Annually
Total Nitrogen	mg/L	Once every three years (see 1 below)
Nitrate as Nitrogen	mg/L	Once every three years (see 1 below)
Total Kjeldahl Nitrogen	mg/L	Once every three years (see 1 below)
Standard Minerals	various	Once every three years (see 1 below)

1. Samples shall be collected once every three years starting in 2020.

6. **Solids Monitoring**

The Discharger shall monitor the sludge, solid waste, and residual solids generated and disposed of on a monthly basis. The following shall be monitored and reported:

- a. **Volume of Solids Generated.** Solids may include pomace, seeds, stems, diatomaceous earth, screenings, pond solids, and sump solids, or other material.

- b. **Volume of Solids Disposed of Off-site.** Describe the disposal method (e.g. animal feed, land application, off-site composting, landfill, etc.); the amount disposed (tons); and the name of the hauling company.
- c. **Volume of Solids Disposed On-site.** Describe the disposal method (e.g. animal feed, land application, etc.) and the amount disposed (tons).

C. Reporting Requirements

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

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

Central Valley Regional Water Quality Control Board
Region 5 – Fresno Office
1685 “E” St.
Fresno, California 93706

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Program: Non-15
WDID: 5C202029001
Facility: Sunsweet Dryers, Inc., Madera Prune Dehydration Plant
Order: R5-2020-0024
County: Madera
Place ID: 259595

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

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, etc.), and reported

analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

Laboratory analysis reports should be included in the monitoring reports. In addition, all laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3. of the SPRRs. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

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

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

1. **Quarterly Monitoring Reports**

Quarterly monitoring reports shall be submitted to the Central Valley Water Board by the **1st day of the second month after the quarter** (i.e., the January-March quarterly report is due by May 1st). Each Quarterly Monitoring Report shall include the following:

- a. Results of **Influent Monitoring** specified in Section B.1.
- b. Results of the **Effluent Monitoring**, specified in Section B.2., including:
 - i. Calculation of the average total nitrogen concentration for each month;
 - ii. Calculation of the 12-month rolling average EC of the discharge for each month of the quarter using the EC value for that month averaged with the EC values for the previous 11 months;

- iii. Calculation of the maximum daily flow, monthly average flow, and cumulative annual flow, for each month of the quarter.
- c. Results of **Disposal Field Monitoring** specified in Section B.3., including:
 - i. A summary of the inspection activities conducted by the Discharger at the disposal field;
 - ii. Calculated daily BOD₅ loading rate for the disposal field;
 - (A) The mass of BOD₅ applied to the disposal field on a daily basis (when wastewater is applied) shall be calculated using the following formula:

$$M = \frac{8.345(CV)}{A}$$

- Where:
- M = Mass of BOD₅ applied to a disposal field in lbs/ac/day
 - C = Concentration of BOD₅ in mg/L based on the most recent monitoring result collected
 - V = Volume of wastewater applied to the disposal field in millions of gallons per day
 - A = Area of the disposal field irrigated in acres
 - 8.345 = Unit conversion factor.

- iii. Calculated cycle average BOD₅ loading rate for the disposal field.
 - (A) The mass of BOD₅ applied to the disposal field on a cycle average basis shall be calculated using the following formula:

$$M = \frac{8.345(CV)}{AT}$$

- Where:
- M = Mass of BOD₅ applied to a disposal field in lbs/ac/day
 - C = Concentration of BOD₅ in mg/L based on the two most recent monitoring results
 - V = Total volume of wastewater applied to the disposal field during the irrigation cycle, in millions of gallons
 - A = Area of the irrigated in acres
 - T = Irrigation cycle length in days (from the first day water was applied to the last day of the drying time)
 - 8.345 = Unit conversion factor.

- d. Results of **Overflow Basin Monitoring** as specified in Section B.4.
- e. Results of **Water Supply Monitoring** as specified in Section B.5.
 - i. If multiple sources are used, the Discharger shall calculate the flow-weighted average concentrations for each constituent monitored. Results must include supporting calculations.
- f. Results of **Solids Monitoring** as specified in Section B.6.
- g. A comparison of monitoring data to the flow limitations and discharge specifications and an explanation of any violation of those requirements.
- h. A copy of calibration log page(s) verifying calibration of all hand-held monitoring instruments performed during the quarter.

2. **Fourth Quarter Monitoring Reports**

In addition to the above information, the fourth quarter monitoring report due 1 February of each year shall include the following:

- a. Total annual effluent flow, and the average monthly flows for each month of the year, compared to the total annual flow limitation of the WDRs.
- b. Calculated flow-weighted annual average FDS concentration for the disposal field.
 - i. The flow-weighted annual average FDS concentration shall be calculated using the following formula:

$$C_a = \frac{\sum_1^{12} [(C_{Pi} \times V_{Pi}) + (C_{Si} \times V_{Si})]}{\sum_1^{12} (V_{Pi} + V_{Si})}$$

- Where: C_a = Flow-weighted average annual FDS concentration in mg/L
 i = The number of the month (e.g., January = 1, February = 2, etc.)
 C_{Pi} = Monthly average process wastewater FDS concentration for calendar month i in mg/L
 C_{Si} = Monthly average supplemental irrigation water FDS concentration for calendar month i in mg/L (considering each supplemental source separately)
 V_{Pi} = Volume of process wastewater applied to the disposal field during calendar month i in million gallons
 V_{Si} = Volume of supplemental irrigation water applied to the disposal field during calendar month i in million gallons (considering each supplemental source separately)

c. Calculated total nitrogen loading rate for the disposal field for each month and total annual loading.

i. The mass of total nitrogen applied to the disposal field on an annual basis shall be calculated using the following formula:

$$M = \sum_{i=1}^{12} \frac{(8.345(C_i V_i) + M_x)}{A}$$

- Where: M = Mass of nitrogen applied to the disposal field in lbs/ac/yr
 C_i = Monthly average concentration of total nitrogen for month i in mg/L
 V_i = Volume of wastewater applied to the disposal field during calendar month i in million gallons
 A = Area of the disposal area irrigated in acres
 i = The number of the month (e.g., January = 1, February = 2, etc.)
 M_x = Nitrogen mass from other sources (e.g., fertilizer and compost) in pounds
 8.345 = Unit conversion factor

d. A summary of information on the disposal of solids during the calendar year.

- e. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
- f. Monitoring equipment maintenance and calibration records, as described in Standard Provision C.4.
- i. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

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

Any person aggrieved by this 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)

MRP Glossary

BOD ₅	Five-day biochemical oxygen demand at 20° C
CaCO ₃	Calcium carbonate
CIMIS	California Irrigation Management Information System
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
FDS	Fixed dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite Sample	shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Daily	Once per calendar day
1/Week	Once per week.
2/Week	Twice per week on non-consecutive days.
1/Month	Once per calendar month
2/Month	Twice per month during non-consecutive weeks.
1/Quarter	Once per calendar quarter.
1/Year	Once per year.
mg/L	Milligrams per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
Standard Minerals	Alkalinity (as CaCO ₃), aluminum, bicarbonate (as CaCO ₃), boron, calcium, carbonate (as CaCO ₃), chloride, iron, magnesium, manganese, phosphorus, potassium, sodium, sulfate, TDS, and verification that the analysis is complete (i.e., anion/cation balance).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS
ORDER R5-2020-0024

FOR

SUNSWEEET DRYERS, INC.
MADERA PRUNE DEHYDRATION PLANT
MADERA COUNTY

INFORMATION SHEET

BACKGROUND INFORMATION

The Sunsweet Dryers, Inc. (Discharger or Sunsweet) Madera Prune Dehydration Plant (Facility) is reported to have been in operation since approximately 1971. The Facility is located on Avenue 12, approximately one-half of a mile west of California Route 99 and about three miles south-southeast of the center of Madera (a Site Location Map is included in Attachment A). In 1987 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff issued a waiver to Sunsweet for a discharge of 50,000 gallons per day (gpd) during the processing season, and 1,500 gpd during the remainder of the year, to 14 acres. In July 1994 the Discharger submitted a Report of Waste Discharge (RWD) for an expansion of the discharge from an average of 76,000 gpd to 116,000 gpd and an expansion of the disposal area from 14 acres to 21 acres. Waste Discharge Requirements (WDRs) Order No. 95-195 was issued on 17 August 1995, which authorized the discharge of 76,000 gpd to the 14-acre field and 40,000 gpd to a 7-acre field, for a total of 116,000 gpd on to 21 acres. Although it is listed in Order No. 95-195 as a disposal field, the 7-acre field reportedly never was used for disposal of prune dehydration plant wastewater.

On 23 August 2019, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff conducted an inspection of the Facility to familiarize themselves with the Facility prior to drafting revised WDRs for the Facility. On 30 August 2019 the Discharger submitted a RWD followed by a revised RWD on 28 October 2019. The RWD did not propose major material changes, expansions, or changes in processes compared to the current WDR Order 95-195. The only change is that 7 of the 21 acres designated for wastewater disposal (the West Disposal Field identified in Order 95-195) were not proposed to be used for disposal.

FACILITY OPERATION

The Facility washes, dehydrates, stores, and sorts plums/prunes. The initial stage of processing plums occurs by washing them in one of three 1,500-gallon “dipper tanks.” The dipper tank water is replaced approximately two times per day. Leaving the dipper tanks, the plums are arranged on a dehydrator cart in individual layer trays of fruit. Next the carts are moved into the dehydrators where the plums are dehydrated at approximately 185°F for 19 hours. The dried plums (now prunes) are next put in wooden crates, stored, and sorted.

The prune dehydrating processing season consists of approximately 25 days during August and September. During the processing season the dipping tanks typically operate 11 hours per day. The dehydrators typically operate 24 hours per day. The plums are reportedly placed in the dehydrator within 24 hours of arriving at the Facility. All fruit typically leaves the facility by 31 December.

WASTEWATER TREATMENT SYSTEM

An overview of the wastewater treatment facilities, as described in the 28 October RWD, is shown in the Process Flow Diagram (Attachment B). Plum wash water from the dipper tanks, water collected from floor drains troughs, dehydration processing and cleanup wastewater, equipment washing wastewater, and stormwater are all collected and conveyed to the wastewater treatment facility. At the treatment facility, the wastewater is screened by a rotating drum screen and then passed through a 70,000-gallon concrete settling basin with aeration (concrete basin). Water from the concrete basin is pumped to sprinklers on a 14-acre disposal area. There is a total of nine irrigation lines, each with five sprinklers (total 45 sprinklers). The pump is activated by a float system set to keep two feet of freeboard in the concrete basin.

The 70,000-gallon concrete basin has an overflow to a 4-acre basin that reportedly has a volume of 1.9 million gallons. Wastewater/stormwater overflows when the 300-gpm pump cannot pump fast enough, the pump breaks down, or if there is a power failure and the pump is not operating. The overflow water is contained in the basin. It only leaves the area by evaporation, percolation, or plant uptake. The water balance calculations provided in the RWD calculations include this basin as part of its analysis.

During the wet season, stormwater is handled in the same manner as plum processing wastewater. It travels through the concrete basin and is pumped to the sprinklers on the 14-acre disposal field. However, the aerators in the concrete basin are not turned on for the stormwater during the rainy season.

Solids removed from the Facility primarily consist of solids collected during processing, which consist mostly of twigs and leaves, and solids removed from the bottom of the concrete basin. Solids from the concrete basin are removed approximately once every two to three years, when approximately 12 inches of solids accumulate on the bottom. All solids are either disposed of on the 14-acre disposal field or are used as compost on home lawns and vegetable gardens. The solids containing twigs and leaves are available to be eaten by cattle and goats grazing on the 14-acre disposal field. Eventually all the remaining solids on the 14-acre disposal field are disked into the soil.

Finding 6 of the Order 95-195 states forage crops (grasses) are grown and harvested in the disposal area for nitrogen removal. However, the RWD states no crops are grown in 14-acre disposal field, only native grasses. Farm animals graze on the 14-acre disposal field. Based on staff's August 2019 inspection of the Facility, it appears no crop is currently grown/harvested from the 14-acre disposal field.

FACILITY FLOWS

Wastewater flows were estimated in the self-monitoring reports by measuring number of hours the dehydrators were in operation and using a conversion factor to estimate flow. The estimates are presented in Table 4 of the Order. The estimated wastewater flow over the past four years is about 40,000 gallons per day (gpd). Provision F.6 requires the Discharger to install a flow metering device and begin monitoring effluent flow within six months of the adoption of the WDRs Order.

WASTEWATER CHARACTERIZATION

Effluent water quality data from 2014 to 2018 are summarized in Finding 10 (Table 2) of the Order. The full data set is presented in Table 1 below. The average BOD₅ for the five-year period, 719 mg/L, was significantly lower than the BOD₅ value listed in WDRs Order 95-195 (1,600 mg/L). At 1,600 mg/L and 116,000 gpd the BOD₅ loading rate on 14 acres would be approximately 111 lbs/acre/day. The lower 2014-2018 average BOD₅ effluent value (719 mg/L) results in BOD₅ loading rates of approximately 50 lbs/acre/day, assuming a discharge flow of 116,000 gpd to the disposal field.

Table 1 –Effluent Data (2014 – 2018)

Date	pH (pH units)	BOD ₅ (mg/L)	EC (µmhos/cm)	TDS (mg/L)	DO (mg/L)
7-Aug-2014	7.41	1,320	385	1,120	6.58
22-Aug-2014	6.91	1,040	317	320	6.43
29-Aug-2014	7.28	ND	290	230	8.01
6-Aug-2015	6.16	538	332	510	6.20
13-Aug-2015	5.36	517	32.5	490	2.58
			(see 1 below)		
20-Aug-2015	6.62	785	340	720	6.50
24-Aug-2015	4.70	341	538	400	4.66
11-Aug-2016	6.82	350	3.11	420	7.22
			(see 1 below)		
15-Aug-2016	5.29	1,240	6.13	1,070	4.92
			(See 1 below)		
24-Aug-2016	6.73	796	342	690	7.13
17-Aug-2017	7.09	699	314	580	7.03
23-Aug-2017	6.29	220	393	300	5.57
8-Sep-2017	6.43	49.4	315	210	7.58
17-Aug-2018	6.52	543	360	450	6.64
7-Sep-2018	6.51	144	398	350	7.00
20-Sep-2018	6.10	2,800	57.6	3,000	6.94
			(see 1 below)		
28-Sep-2018	6.63	126	390	340	1.75

Date	pH (pH units)	BOD ₅ (mg/L)	EC (µmhos/cm)	TDS (mg/L)	DO (mg/L)
Average	5.7	719	363	659	6
Count	17	16	13	17	17
Maximum	7.4	2800	538	3000	8
Minimum	4.70	49.4	290	210	1.75

1 These readings could not be confirmed and were determined to be outliers. They were not used in determining the average, maximum, and minimum.

WATER BALANCE

The Discharger included a water balance for the Facility as part of the RWD. The analysis assumed a wastewater flow rate of 142,700 gallons per day (gpd) for 37 days compared to the permitted flow of 116,000 gpd and the actual average daily flow of 39,895 gpd (based on the run times for the dehydrators) for the past four years. The analysis assumed a 100-year rainfall return season with 23.0 inches of rain in one year. The water balance considered two conditions: 1) the 300-gpm discharge pump is operational and all wastewater and stormwater is pumped to the 14-acre disposal field, and 2) the 300-gpm discharge pump is not operational due to power or pump failure, which means water would overflow to the 4-acre overflow basin. The analysis concluded the wastewater treatment system, overflow basin, and disposal field are capable of providing storage/disposal, as well as treatment, for all processing wastewater (142,700 gpd for 27 days in August and 10 days in September) during the 100-year return season.

GROUNDWATER CONDITIONS

According to the California Department of Water Resources (DWR) Groundwater Center Interactive Map Application, the depth to groundwater was 190' to 200' using the Fall 2018 data. The elevation of the groundwater was 70' to 80' above sea level. The direction of flow, based on groundwater elevation above sea level contour lines, was to the northeast. Central Valley Water Board staff found nearby groundwater quality data within two miles using the [National Water Quality Monitoring Council's Water Quality Portal website](https://www.waterqualitydata.us/portal/) (https://www.waterqualitydata.us/portal/). The data is shown in Finding 19 (Table 5) of the WDRs Order. The sampling dates ranged from 23 December 2001 to 10 July 2013. EC levels were 332 to 480 µmhos/cm. NO₃ as nitrogen levels were 4.4 to 6.24 mg/L.

ANTIDEGRADATION

Antidegradation analysis and conclusions are discussed in Findings 41 through 47 of the Order.

DISCHARGE PROHIBITIONS, EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS, AND PROVISIONS

The Order limits the maximum monthly average daily discharge flow to 116,000 gallons per day and the total annual flow to 4.3 million gallons of process wastewater (116,000 gpd x 37 days = 4.3 million gallons). The Order sets a cycle average BOD₅ loading limit of 100 lbs/acre/day for the disposal field and does not allow the BOD₅ load to exceed 300 lbs/acre/day on any single day.

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, disposal field, overflow basin, solids, and water supply 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 REGULATORY PROGRAM 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. On 16 October 2019, the State Water Resources Control Board adopted Resolution No. 2019-0057 approving the Central Valley Water Board Basin Plan amendments and also directed the Central Valley Water Board to make targeted revisions to the Basin Plan amendments within one year from the approval of the Basin Plan amendments by the Office of Administrative Law. The Office of Administrative Law approved the Basin Plan amendments on 15 January 2020 (OAL Matter No. 2019-1203-03).

Pursuant to the Basin Plan amendments, dischargers will receive a Notice to Comply with instructions and obligations for the Salt Control Program within one year of the effective date of the amendments (17 January 2020). Upon receipt of the Notice to Comply, Sunsweet will have no more than six months to inform the Central Valley Water Board of their choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). The level of participation required of dischargers whose discharges do not meet stringent salinity requirements will vary based on factors such as the amount of salinity in the discharge, local conditions, and type of discharge. For the Nitrate Control Program, the Facility falls within Groundwater Basin 5-22.06 (San Joaquin Valley – Madera), a Priority 2 Basin. Notices to Comply for Priority 2 Basins will be issued within two to four years after the effective date of the

Nitrate Control Program. 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 Facility. More [information regarding the CV-SALTS regulatory planning process](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/) 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.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

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

Waste Discharge to Land

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

B. General Reporting Requirements:

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

Waste Discharge to Land

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

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

This plan shall:

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

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

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

Waste Discharge to Land

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

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

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

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

Note: Current addresses for all three Regional Board offices may be found on the Central Valley Waterboard website (http://www.waterboards.ca.gov/centralvalley/about_us/contact_us) or the current address if the office relocates.

C. Provisions for Monitoring:

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

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

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

Waste Discharge to Land

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

Record of monitoring information shall include:

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

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

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

Waste Discharge to Land

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

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

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

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

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

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

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

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

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.
5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
6. Definitions
 - a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.
 - b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.
 - c. The monthly average concentration is the arithmetic mean of measurements made during the month.
 - d. The "daily maximum" **discharge** is the total discharge by volume during any day.

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

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

7. Annual Pretreatment Report Requirements:

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

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

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

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

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

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

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

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

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

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

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

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

and

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

Revised January 2004 to update addresses and phone numbers