CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER R5-2021-0028

WASTE DISCHARGE REQUIREMENTS

FOR FC TRACY HOLDINGS, LLC TRACY HOLDINGS FACILITY SAN JOAQUIN COUNTY

FINDINGS

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

Introduction

- On 14 May 2019, FC Tracy Holdings, LLC submitted a Report of Waste Discharge (RWD) that describes a new corn processing facility (Tracy Holdings Facility or Facility) that will generate process wastewater to be discharged to land in Tracy, California. Additional information was submitted on 18 November 2019, 2 December 2020, and 8 February 2021.
- 2. Tracy Holdings Facility is owned by FC Tracy Holdings, LLC and operated by GloriAnn Farms. FC Tracy Holdings, LLC (Discharger) is responsible for compliance with these Waste Discharge Requirements (WDRs).
- Tracy Holdings Facility is located at 3590 West Lehman Road in Tracy, CA (Section 18, T3S, R6E, MDB&M). The Facility occupies Assessor's Parcel Number (APN) 255-040-200. The facility location is shown on Attachment A, which is incorporated herein.

Planned Facility and Discharge

- 4. Tracy Holdings Facility is a corn processing facility in Tracy, California that is constructed but not yet operational. The Discharger owns and operates a separate corn processing facility (GloriAnn Farms) located approximately 10 miles southeast of the Tracy Holdings Facility and is regulated under WDRs Order R5-2016-0096, which was adopted on 6 December 2016. Processing operations at Tracy Holdings Facility are scheduled to begin in Spring 2021, and will generally have the same operating processes at the GloriAnn Farms facility. For the purpose of comparison, information from the existing GloriAnn Farms facility was used to evaluate the Tracy Holdings Facility treatment system and wastewater quality.
- 5. The 52.2-acre Tracy Holdings Facility is located in an agricultural area surrounded by field crops and tree nut orchards. The processing plant will occupy approximately

16.2 acres, and approximately 25 acres will be used for Land Application Areas (LAAs). The remaining acreage will be used for a treatment/storage wastewater pond and various other site features.

- 6. The Facility will wash and package approximately 26,000 tons/year of fresh corn, and watermelons will be dry brushed and packaged seasonally during the processing season, which is generally May through October. Watermelons will be stored in cold storage, along with various other commodities during the processing season. During the corn and watermelon off-seasons, other commodities may be packed and stored, and equipment cleaned, which will produce wastewater. Finished products are trucked offsite for commercial sale.
- The existing GloriAnn Farms uses chemicals for sanitation of fresh corn and equipment cleaning. The Tracy Holdings Facility is expected to use the same chemicals. Chemicals and approximate volumes for the GloriAnn Farms facility are summarized below.

Product	Use	Active Ingredient	Volume Used (gal/yr)
Biotrol 150	Processing/Ice	Hydrogen Peroxide Acetic Acid	1,500
Enviro Bac #2	Cleaning	Benzalkonium Chloride Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	200
Foam Chlor 50	Cleaning	Potassium Hydroxide Sodium Hypochlorite	200
Enviro Chlor	Cleaning	Sodium Hypochlorite	200
IPA	Cleaning	Isopropyl Alcohol	50
Turbo Kleen	Cleaning	Butoxyethanol	50

Table 1. Potential Chemicals for Tracy Holdings

Table Source: 2019 RWD for Tracy Holdings.

- 8. Supply water for processing corn will be provided from an onsite well drilled to a depth of 690 feet below ground surface (bgs). The well location is shown on Attachment B, incorporated herein. A groundwater sample was collected on 17 February 2021, and the analytical results are shown below. Concentrations of constituents in the water sample are compared to Water Quality Objectives (WQO) or other numerical limits. The numerical WQOs used to compare to source water quality are listed below.
 - Secondary Maximum Contaminant Upper Level for total dissolved solids (TDS).
 - Agricultural water quality goal for electrical conductivity (EC).

Table 2. Supply Water Quality

Constituent	Unit	Result	WQO
FDS	mg/L	420	NE
TDS	mg/L	530	1,000
EC	µmhos/cm	798	700

Note: EC was detected at a concentration exceeding the WQO of 700 µmhos/cm FDS = fixed dissolved solids mg/L = milligrams per liter

NE = not established

µmhos/cm = microohms per centimeter

- 9. Wastewater from the processing facility will be generated from three main sources: corn processing; equipment cleaning; and defrost condensate.
- 10. Process wastewater will be directed to floor drains and collected in a basin, then piped to an underground sump. Defrost condensate and storm water collected in drains located across the facility will also be directed to the sump. The combined wastewater and storm water will then be pumped to an aerated wastewater pond lined with 40-mil HDPE. The wastewater pond will be used for storage and biochemical oxygen demand (BOD) reduction.
- 11. The wastewater pond is approximately 2.5 acres with 2:1 bank slopes, and a depth of 9.5 feet. At two feet of freeboard, the pond has a capacity of approximately 6.9 million gallons. The pond is equipped with a staff gauge to measure pond freeboard.
- 12. The anticipated wastewater quality for the Facility is based on information and data collected from the lined and aerated wastewater pond at the existing GloriAnn Farms Facility. Monthly grab samples are collected, and yearly averages are summarized below.

Constituent	2016	2017	2018	2019
BOD	240	57	54	81
Total N	16	16	12	16
FDS	530	379	320	301
TDS	780	579	487	486
Sodium	99	65	67	51
Chloride	119	82	80	59

Table 3. Wastewater Quality (mg/L)

13. Wastewater flow rates from the existing GloriAnn Farms Facility are summarized below.

Table 4. Flow Rates	
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Flow Rates	2017	2018	2019
Maximum (gpd)	317,379	199,747	177,915
Average (gpd)	18,103	19,739	25,181
Total (MG)	6.73	7.34	9.37

- 14. A pump station will be used to pump water out of the pond and into the irrigation conveyance system where it will be used to irrigate 25 acres of bermed LAAs to be cropped with forage crop.
- 15. Water balances were submitted on 8 February 2021; one for an average rainfall year and one for a 100-year rainfall event. Based on the water balances, the total crop demand will be greater than the volume of wastewater available for irrigation; therefore, supplemental irrigation will be needed in spring and summer months to maintain crops.
- 16. When supplemental irrigation water is needed to meet crop demands, irrigation water will be supplied by the on-site supply well. If needed, additional water could be obtained from the Banta Carbona Irrigation District (BCID). Average BCID water quality from 2018 is shown below.

Constituent	Result
pH	7.3
EC	492 µmhos/cm
TDS	315
Total Alkalinity as CaCO3	75
Nitrate	6.4
Chloride	65
Sulfate	52
Total Hardness (CaCO3)	110
Boron	0.24
Calcium	23.8
Magnesium	12.2
Sodium	52.3

Table 5. BCID Water Quality (mg/L)

17. Loading rates for BOD, nitrogen, and FDS for the GloriAnn facility, which has 46.3 acres of LAAs cropped with almond trees, are summarized below.

Year	Maximum Loading Rate to LAA (Ib/ac/day)	Maximum Cycle Average (Ib/ac/day)	Flow Volume (gal/ac/day)
2017	15	2	12,471

Year	Maximum Loading Rate to LAA (Ib/ac/day)	Maximum Cycle Average (Ib/ac/day)	Flow Volume (gal/ac/day)
2018	46	7	72,716
2019	37	90	79,130

Year	Nitrogen (lb/ac/year)	FDS (Ib/ac/year)	Hydraulic Loading (Mgal/year)
2017	20	716	10.3 ¹
2018	39	2,141	43.3 ²
2019	20	609	17.6 ²

Table Notes

¹ No supplemental irrigation water was used in 2017.

² Total includes wastewater and supplemental irrigation water.

- 18. Solid waste will be removed from the processing area by belt and auger conveyance. Solids, consisting of corn husks, kernels, and stalks, will be dry and not commingled with process wastewater. All solids are collected in a trailer truck and transported off site generally within two days to prevent any odor issues. No on-site land application of solids is planned.
- 19. The processing facility and LAAs are graded such that all storm water runoff will be directed to onsite storm drains. If wastewater has been applied within 30 days of a storm event, runoff from the LAAs will be contained by berms on the low end of the field and allowed to percolate. No runoff will be allowed to leave the LAA within 30 days of wastewater application.
- 20. Domestic wastewater will be discharged to an on-site septic system and leachfield regulated by the San Joaquin County Environmental Health Department. Domestic wastewater will not be discharged into the process wastewater collection and treatment system.

Site-Specific Conditions

- 21. The land for the proposed facility and LAA is relatively flat, sloping slightly from west to east. Soils in the area are made up of clay, loam, and fine sandy loam and are considered prime farmland if irrigated.
- 22. The site is located in FEMA Zone X: Area of Minimal Flood Hazard.

- 23. The nearest surface water is the San Joaquin River, approximately four miles east. Wastewater discharged to the LAA and the San Joaquin River are not expected to come into contact through surface water drainage or flooding.
- 24. The beneficial uses of the Mokelumne River from Camanche Reservoir to the Sacramento/San Joaquin Delta are agricultural supply; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
- 25. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.
- 26. The climate in the San Joaquin Valley region is characterized by hot dry summers and cool moist winters. Annual rainfall for an average year is 10.1 inches and the normalized 100-year rainfall is approximately 26.06 inches, as shown below. Average monthly ETo data is from the California Irrigation Management Information System (CIMIS) Station #71 in Modesto, CA. Monthly rainfall data are from Western Regional Climate Center in Tracy, CA for 1935-1987 and from CIMIS Station #71 for 1988-2017.

Month	Average ETo (inches)	Average Precipitation (inches)	100-Year Precipitation (inches)
Jan	1.11	2.0	3.37
Feb	1.92	1.7	4.54
Mar	3.62	1.5	3.12
Apr	5.26	0.8	1.34
May	6.98	0.4	2.30
Jun	7.89	0.1	0.58
Jul	7.97	0.0	0.26
Aug	6.92	0.0	0.58
Sep	5.12	0.2	1.23
Oct	3.42	0.6	3.12
Nov	1.72	1.1	2.19
Dec	1.12	1.6	3.43
TOTALS	53.05	10.1	26.06

Table 8. Precipitation

Groundwater Conditions

27. Three groundwater monitoring wells (MW-1 to MW-3) were installed at the Tracy Holdings Facility in August 2020, prior to construction of the Facility. Well construction details and depths to groundwater are summarized below and monitoring well locations are shown on Attachment B.

Well ID	MW Designation	Well Depth	Screen Interval	Depth to Groundwater (August 2020)
MW-1	Downgradient	35	20 to 35	10
MW-2	Downgradient	35	20 to 35	17
MW-3	Upgradient	35	20 to 35	15

28. Analytical data collected from the monitoring wells in August 2020 are summarized below. MW-1 and MW-2 are considered downgradient wells, and MW-3 is an upgradient well. Groundwater data represents pre-discharge groundwater quality.

Constituent (mg/L)	MW-1	MW-2	MW-3	WQO / Numeric Limits (reference)
рН	7.3	7.2	11.9	
EC (µmhos/cm)	1,999	2,414	5,448	700 µmhos/cm (Agricultural water quality goal)
Chloride	195	246	65	250 mg/L (Secondary MCL
Nitrate as N	11.6	10.2	0.7	10 mg/L (Primary MCL)
TDS	1,280	1,590	1,320	1,000 mg/L (Secondary Maximum Contaminant Upper Levels)
Sulfate	368	508	20.6	250 mg/L (Secondary MCL)
Boron	1.9	2.4	ND	5 (USEPA Health Advisory)
Iron	13.6	5.72	4.51	0.30 (Secondary MCL)
Manganese	0.29	0.12	0.10	0.05 (Secondary MCL)
Sodium	230	242	98	69 (lowest agricultural water quality goal)

Table 10. Groundwater Quality

29. Shallow groundwater at the facility is considered poor quality with respect to metals (iron and manganese) and salinity, including TDS, EC, sulfate, sodium, and chloride. Generally, concentrations are higher in MW-1 and MW-2 when compared to MW-3.

It appears that groundwater in the vicinity of MW-3 may likely be influenced from the infiltration of better-quality water in the unlined BCID canal, located near the well.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 30. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, rev. May 2018 (Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Water Code section 13263, subdivision (a), WDRs are required to implement the Basin Plan.
- 31. The facility is within the San Joaquin Delta Hydrologic Area. The beneficial uses, as stated in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial service supply; industrial process supply; navigation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
- 32. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
- 33. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
- 34. The Basin Plan's numeric WQO for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.
- 35. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to meet the MCLs in Title 22 of the California Code of Regulations (Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
- 36. 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.
- 37. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative WQO is required to protect specific

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

38. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as Water Quality of Agriculture by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an electrical conductivity (EC) of less than 700 µmhos/cm. There is, however, an eight-to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with groundwater EC up to 3,000 µmhos/cm, if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop. The list of crops in Finding 14 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge, but it is representative of current and historical agricultural practices in the area.

Salt and Nitrate Control Programs Reopener

- 39. The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting. The Basin Plan amendments were conditionally approved by the State Water Board on 16 October 2019 (Resolution 2019-0057) and by the Office of Administrative Law on 15 January 2020 (OAL Matter No. 2019-1203-03).
 - a. For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers may comply with the new nitrate program either individually or collectively with other dischargers. For the Nitrate Control Program, the Facility falls within Groundwater Basin 5-022.15 (San Joaquin Valley), which is not currently a prioritized basin.
 - b. For the Salt Control Program, the Discharger will be issued a Notice to Comply with instructions and obligations for Salt Control Program. Upon receipt of the Notice to Comply, the Discharger must submit a Notice of Intent by the deadline included in the notice informing the Central Valley Water Board of their choice between Option 1 (Conservative Option for Salt Permitting) or Option 2 (Alternative Option for Salt Permitting). Dischargers that are unable to comply with stringent salinity requirements for EC of 700 µmhos/cm to protect AGR beneficial uses or 900 µmhos/cm to protect MUN beneficial uses will need to meet performance-based requirements and participate in a basin-wide planning effort to develop a long-term salinity strategy for the Central Valley (i.e., participate in the Priority and Optimization Study per Option 2).

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

40. This Order may be amended or modified to incorporate newly applicable requirements.

Antidegradation Policy and Analysis

- 41. State Water Resources Control Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:
 - a. The degradation is consistent with the maximum benefit to the people of the state.
 - b. The degradation will not unreasonably affect present and anticipated future beneficial uses.
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and
 - d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.
- 42. On-site groundwater monitoring wells were installed in 2020 as part of the overall facility construction. Therefore, it is not possible to determine pre-1968 groundwater quality. Determination of compliance with Resolution 68-16 for this facility is based on existing groundwater quality.
- 43. Constituents of concern in wastewater that have the potential to degrade groundwater include salts (primarily FDS/TDS, sodium, and chloride), and nitrate as nitrogen, based on processing and cleaning activities and wastewater quality for the GloriAnn Farms facility. Flow weighted averages from 2016-2019 for GloriAnn Farms are show below.

WQOs or other numerical limits are based on the following: Secondary Maximum Contaminant Upper Level for TDS; Primary Maximum Contaminant Level for nitrate as nitrogen; Lowest agricultural water quality goal for sodium; Secondary Maximum Contaminant Level for chloride; and agricultural water quality goal for electrical conductivity.

Effluent ¹ (mg/L)	Downgradient Groundwater Quality (MW-1 and MW-2) ²	WQOs (mg/L)
829	1,435	1,000
882	2,206	700
781	NA	NE
11.8	11 (nitrate as nitrogen)	10
66.4	236	69
80.1	221	250
	(mg/L) 829 882 781 11.8 66.4	Effluent 1 (mg/L) Groundwater Quality (MW-1 and MW-2) 2 829 1,435 882 2,206 781 NA 11.8 11 (nitrate as nitrogen) 66.4 236

Table 11. Antidegradation Summary

Table Notes:

¹ To calculate flow weighted averages, effluent quality data from the pond at GloriAnn Farms, source water quality for Tracy Holdings, and projected flow volumes for Tracy Holdings were used.

² Groundwater quality data are from monitoring wells located at the Tracy Holdings Facility (groundwater sample was collected in August 2020). Data from MW-3 were not included in the analysis due the influence of the adjacent BCID canal.

NA = not analyzed

NE = not established

- a. Electrical Conductivity. Electrical conductivity is a measure of the capacity of water to conduct electrical current and is an indicator of salinity. EC effluent concentration of 882 µmhos/cm GloriAnn Farms exceeds the WQO of 700 µmhos/cm and is lower than the groundwater concentrations at Tracy Holdings of 2,206 µmhos/cm. Because EC concentrations are anticipated to be less than the groundwater concentrations, discharges to land from Tracy Holdings is not expected to degrade groundwater beyond existing conditions. The quality of groundwater at Tracy Holdings is considered poor with respect to salts. For the protection of groundwater, this Order establishes a groundwater limit for EC.
- b. Total Dissolved Solids. For the purposes of evaluation, TDS is representative of overall salinity. The best measure for total salinity in groundwater is TDS. FDS is the inorganic fraction of TDS that have the potential to percolate or leach into shallow groundwater. Therefore, the best measure for salinity of process wastewater is FDS. To calculate flow weighted averages, effluent quality data from the GloriAnn Farms facility and the projected flow volumes for the Tracy Holdings facility were used. The average flow weighted FDS concentration of 361.5 mg/L using analytical data from the existing GloriAnn Farms. Based on the 2019 RWD, the projected annual FDS flow weighted concentration for Tracy Holdings is 781 mg/L.

TDS in groundwater at the Tracy Holdings Facility exceeds the WQO of 1,000 mg/L, indicating poor quality groundwater in the area. Long-term agricultural activities in the area are likely responsible for the degradation in groundwater since the Tracy Holdings Facility is not yet operating. For the protection of groundwater, this Order establishes a performance-based FDS effluent limit as a flow-weighted annual average and sets a groundwater limit for TDS.

- c. **Nitrate.** For nutrients such as nitrate, the potential for groundwater degradation depends on wastewater quality; crop uptake, and the ability of the vadose zone below the LAAs to support nitrification and denitrification to convert nitrogen to nitrogen gas before it reaches the water table. Therefore, this Order requires that nutrients associated with the wastewater and other sources be applied to the LAAs at agronomic rates consistent with crop demand, and sets a groundwater limit for the protection of groundwater.
- d. **Sodium and Chloride.** Sodium and chloride are known to be key salinity constituents in food processor wastewater. Average concentrations of sodium in groundwater at Tracy Holdings are higher than the lowest agricultural water quality goal. Chloride concentrations are slightly less than Secondary Maximum Contaminant Upper Level. Because TDS and EC represent overall salinity in groundwater, which will capture sodium or chloride concentration increases, TDS and EC groundwater limits are established in this Order for the protection of groundwater. However, sodium and chloride will be monitored in the effluent and groundwater.
- 44. Degradation of groundwater by some of the typical waste constituents associated with discharges from food processors, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The Discharger's operation will provide approximately 209 jobs. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.
- 45. The Discharger will provide treatment and control of the discharge that incorporates:
 - a. the capture, segregation, and off-site disposal of solids.
 - b. the use of a lined wastewater pond equipped with aerators to reduce BOD and nitrogen concentrations in wastewater.
 - c. the even application of wastewater over the LAAs.

The Discharger's implementation of these practices is considered BPTC for the wastes in the discharge. This Order requires the Discharger to maintain these practices consistent with the State Antidegradation Policy.

California Environmental Quality Act

46. In accordance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., on 1 November 2019, the San Joaquin County Community Development Department adopted a Mitigated Negative Declaration (MND) for the facility.

Other Regulatory matters

- 47. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Although this Order is not subject to section 106.2, it nevertheless promotes that policy by requiring discharges to meet Title 22 MCLs designed to protect human health and ensure that water is safe for domestic use.
- 48. This Order implements the Central Valley Water Board's Basin Plan, which designates beneficial uses for surface water and groundwater and establishes WQOs necessary to preserve such beneficial uses. (Wat. Code, § 13241 et seq.)
- 49. Based on the threat and complexity of the discharge, the facility is determined to be classified as 3C as defined below:
 - a. Category "3" Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.
 - b. Category "C" Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.
- 50. As authorized under this Order, discharges of wastewater and decomposable food processing residual solids to land are exempt from the prescriptive requirements of California Code of Regulation, title 27 (Title 27) (Title 27, §20090, subds. (b)-(d).)
- 51. Statistical data analysis methods set forth in the USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (Unified Guidance) are appropriate for determining whether the discharge complies with Groundwater Limitation of this Order.
- 52. All storm water at the Facility is collected in the storm water basin or commingled with process wastewater and discharged to the LAAs. Because storm water is not

discharged offsite or discharged to waters of the U.S., coverage under the NPDES General Permit CAS000001 is not required at this time.

53. Water Code section 13267, subdivision (b)(1) provides as follow:

"[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 within its region... shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports."

- 54. The technical reports required by this Order and the attached **Monitoring and Reporting Program R5-2021-0028** are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.
- 55. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (DWR Well Standards), as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 94-81 (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.
- 56. In accordance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., on 1 November 2019, San Joaquin County adopted a Mitigated Negative Declaration (MND).
- 57. The action to adopt WDRs for this Facility is exempt from the provisions of the California Environmental Quality (CEQA), in accordance with the California Code of Regulations, title 14, section 15301. This Order does not authorize any expansions, negligible or otherwise, in existing operations at the Facility. Although discharges authorized herein may vary from those previously authorized under WDRs Order R5-2004-0035, such changes are already being lawfully implemented by the Discharger in accordance with Water Code section 13264, subdivision (a).
- 58. Pursuant to Water Code section 13263, subdivision (g), the ability to discharge waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

PROCEDURAL MATTERS

- 59. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
- 60. The Discharger, interested agencies, and interested persons were notified of the Central Valley Water Board's intent to prescribe the WDRs in this Order, and provided an opportunity to submit their written views and recommendations at a public hearing. (Water Code, §13167.5.)
- 61. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.

REQUIREMENTS

IT IS HEREBY ORDERED that pursuant to Water Code sections 13263 and 13267, the Dischargers, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, shall comply with the following:

Discharge Prohibitions

- 1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
- 2. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.
- 3. Discharge of waste classified as 'designated', as defined in Water Code section 13173, in a manner that causes violation of Groundwater Limitations, is prohibited.
- 4. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Section E.2 of the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, 1 March 1991 edition (Standard Provisions or SPRRs).
- 5. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
- 6. Discharge of toxic substances into any wastewater treatment system or land application area such that biological treatment mechanisms are disrupted is prohibited.
- 7. Application of residual solids to the LAAs is prohibited.

- 8. Discharge of domestic wastewater to the process wastewater treatment system is prohibited.
- 9. Discharge of process wastewater to the domestic wastewater treatment system (septic system) is prohibited.
- 10. Discharge of domestic wastewater to the process wastewater ponds, LAAs or any surface waters is prohibited.

Flow Limitations

1. Effluent flows from the wastewater treatment pond to the LAAs shall not exceed the following limits:

Table 12. Flow Limits

Flow Measurement	Flow Limit ¹
Total Annual Flow (As determined by the total flow for the calendar year)	49 MG
Maximum Average Monthly Flow	6.3 MG/month

Note 1: Flows will be calculated as a portion of the total flow, which will include storm water and process wastewater and excludes supplemental irrigation water.

Effluent Limitations

 The total volume of treated wastewater and contact storm water applied to the LAA shall not exceed an **FDS annual average concentration of 1,000 mg/L**. The FDS flow weighted annual average is based on total flow and concentration of wastewater discharged.

Mass Loading Limitations

1. The blend of treated wastewater, storm water, and supplemental irrigation water applied to the LAAs shall not exceed the following effluent and mass loading limits:

Table 11. Loading Limits

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

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

Discharge Specifications

- 1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.
- 2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.
- 3. The discharge shall remain within the permitted waste treatment/containment structures and land application areas at all times.
- 4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
- 5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 6. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.
- 7. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any pond shall never be less than **two** feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
- 8. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 9. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications E.8 and E.9.
- 10. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

- a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
- b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
- c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
- 11. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
- 12. The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least every five years beginning in **2026**, and shall periodically remove sludge as necessary to maintain adequate storage capacity.
- 13. Storage of residual solids on areas not equipped with means to prevent storm water infiltration, or a paved leachate collection system is prohibited.

Groundwater Limitations

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

1. Contain any of the specified constituents in a concentration statistically greater than the maximum allowable concentration tabulated below. The wells to which these requirements apply are specified as compliance wells in **Monitoring and Reporting Program R5-2021-0028 (MRP)**, which is incorporated herein.

Constituent	Maximum Allowable Concentration	
TDS	Current groundwater quality or 1,000 mg/L,	
	whichever is greater	
EC	Current groundwater quality or 700 µmhos/cm,	
	whichever is greater	
Nitrate as	Current groundwater quality or 10 mg/L,	
Nitrogen	whichever is greater	

Table 12.	Groundwater	Limits
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2. For all compliance monitoring wells, except as specified in F.1 above, contain constituents in concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations.

- 3. For all compliance monitoring wells, except as specified in F.1 above, contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.
- 4. Compliance with these limitations shall be determined annually as specified in the Monitoring and Reporting Program using approved statistical methods.

Land Application Area Specifications

- 1. The Discharger shall ensure that all water is applied and distributed with reasonable uniformity across each LAA field, consistent with good agricultural irrigation practices.
- 2. Crops or other vegetation (which may include, but is not limited to pasture grasses, native grasses, orchard trees, and/or ornamental landscaping) shall be grown in the LAAs.
- 3. Land application of wastewater shall be managed to minimize erosion.
- 4. The LAAs shall be managed to prevent breeding of mosquitoes or other vectors.
- 5. LAAs shall be designed, maintained, and operated to comply with the following setback requirements:

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

Table 13. Setbacks

- 6. LAAs shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Dischargers shall temporarily stop discharging immediately in the area of concern and implement corrective actions to ensure compliance with this Order.
- 7. Sprinkler heads shall be designed, operated, and maintained to create a minimum amount of mist.
- 8. Discharge to the LAAs shall not be initiated when the ground is saturated.
- 9. Any irrigation runoff (tailwater) shall be confined to the LAAs or returned to the treatment system and shall not enter any surface water drainage course or storm water drainage system.

Solids Disposal Specifications

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

- 1. Sludge and solid waste shall be removed from screens, sumps, and ponds, 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. 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.

Provisions

- 1. The following reports shall be submitted pursuant to Water Code section 13267:
 - a. By **1 December 2021** the Discharger shall submit a *Groundwater Limitations Compliance Assessment Plan.* The Plan shall propose and justify the statistical methods used to determine "current groundwater quality" (as defined in Groundwater Limitations F.1) for each of the compliance wells listed in the MRP using intrawell evaluations. Compliance shall be determined using appropriate statistical methods that have been selected based on site-specific information and the U.S. EPA Unified Guidance document cited in Finding 51 of this Order.
 - b. **By 1 February 2022,** the Discharger shall submit an *Operation and Maintenance* (*O&M*) *Plan*, which shall include all aspects of managing the discharge to the wastewater treatment system. The *O&M Plan* shall provide the following:
 - i. A description of the wastewater treatment equipment; operational controls; treatment requirements/effluent limitations; flow diagrams including valve/gate locations; operation of the treatment systems during start-up, normal

operation, by-pass, shut-down, and draining procedures; potential operational problems including a troubleshooting guide.

ii. Maintenance procedures, equipment record system, scheduling and use of the maintenance record system, inventory system, special tools, warranty provisions and expiration dates, maintenance cost and budgeting system, maintenance schedule of all equipment, operation to comply with the terms and conditions of this order and how to make field adjustments as necessary to preclude nuisance conditions.

A copy of the *O&M Plan* shall be kept at the facility for reference by operating personnel and they shall be familiar with its contents.

- c. **By 1 February 2022**, the Discharger shall submit *Sample and Analysis Plan* that documents sampling procedures and analytical methods for sample analyses.
- d. **By 1 February 2022**, the Discharger shall submit a *Salt and Nutrient Management Plan* that describes all BPTCs implemented to ensure compliance with this Order and reduce or minimize effluent salt concentrations.
- e. At least **180 days** prior to any sludge removal and disposal, the Discharger shall submit a *Sludge Cleanout Plan*. The plan shall include a detailed plan for sludge removal, drying, and disposal. The plan shall specifically describe the measures to be used to control runoff or percolate from the sludge as it is drying, and a schedule that shows when solids are removed from the site prior to the onset of the rainy season
 - (1 October).
- 2. If groundwater monitoring results show that the discharge of waste is causing groundwater to contain any waste constituents in concentrations statistically greater than the Groundwater Limitations of this Order based on intrawell evaluation, within 120 days of the request of the Executive Officer, the Discharger shall submit a BPTC Evaluation Workplan. The Workplan shall set forth the scope and schedule for a systematic and comprehensive technical evaluation of each component of the facility's waste treatment and disposal system to determine best practicable treatment and control for each waste constituent that exceeds a Groundwater Limitation. The workplan shall contain a preliminary evaluation of each component of the wastewater treatment, storage and disposal system and propose a time schedule for completing the comprehensive technical evaluation. The schedule to complete the evaluation shall be as short as practicable, and shall not exceed one year. Alternatively, if it can be shown that the increase is the result of activities outside the Discharger's control, a technical report shall be submitted that justifies and supports that determination.
- 3. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed

by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.

- 4. The Dischargers shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
- 5. The Discharger shall comply with the separately-adopted **Monitoring and Reporting Program R5-2021-0028 (MRP)** and any revisions to the MRP, which shall be incorporated herein. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.
- 6. The Discharger shall comply with the Standard Provisions, incorporated herein.
- 7. 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.
- 8. 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.
- 9. The Discharger shall use the best practicable control technique(s) including proper operation and maintenance, to comply with this Order.

- 10. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
- 11. 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.
- 12. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
- 13. In the event of any change in control or ownership of the facility, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
- 14. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
 - 15. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
 - 16. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

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

the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board for administrative review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. To be timely, the State Water Board must receive the petition by 5pm on the 30th day after the date of this Order, except that if the 30th day falls on a Saturday, Sunday or State Holiday, the petition must be received by the State Water Board by 5pm on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet on the Water Boards Public Notice web page

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

I, PATRICK PULUPA, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order issued by the California Regional Water Quality Control Board on 22 April 2021.

PATRICK PULUPA, Executive Officer

ORDER NO. R5-2021-0028

ATTACHMENT A



ORDER NO. R5-2021-0028

ATTACHMENT B





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.

- 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:

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.

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

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

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

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

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

Note: Current addresses for all three Regional Board offices may be found on the 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

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, Division3, 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

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:

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

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

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

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

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

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

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

7. Annual Pretreatment Report Requirements:

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

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

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

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

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

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 inddustrial 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 that 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.

- 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

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER R5-2021-0028 FOR FC TRACY HOLDINGS, LLC TRACY HOLDINGS FACILITY SAN JOAQUIN COUNTY

INFORMATION SHEET

Background

FC Tracy Holdings, LLC (Discharger) owns and operates the Tracy Holdings Facility (Facility), located in Tracy in San Joaquin County. The Facility was constructed in 2020 and will begin operating in 2021. The Facility will wash and package approximately 26,000 tons/year of fresh corn, and watermelons will be dry brushed and packaged seasonally during the processing season, which is generally May through October. Watermelons will be stored in cold storage, along with various other commodities during the processing season. During the corn and watermelon off-seasons, other commodities may be packed and stored, and equipment cleaned, which will produce wastewater. Finished products are trucked offsite for commercial sale.

The Discharger submitted a Report of Waste Discharge (RWD), dated 30 April 2019, which described Facility operations and the land application of wastewater. Additional information was submitted on 18 November 2019, 2 December 2020, and 8 February 2021.

Wastewater Generation and Disposal

The Facility consists of a corn processing plant, cold storage facilities, land application areas, and a wastewater treatment pond.

Wastewater will be generated from corn processing, equipment cleaning, and defrost condensate. Wastewater, including storm water, will be collected in drains which discharge to a sump. The sump will discharge to a lined and aerated wastewater pond for treatment and storage. The wastewater will be used to irrigate 25 acres of land application areas cropped with almond trees. The Facility is projected to generate up to 6 million gallons of wastewater per month. All solids will be captured and hauled offsite.

Groundwater Considerations

Three groundwater monitoring wells (MW-1 to MW-3) were installed in August 2020 to determine pre-discharge groundwater conditions. Groundwater was determined to be of poor quality with respect to metals (iron and manganese) and salinity, including TDS, EC, sulfate, sodium, and chloride. Concentrations of these constituents exceed the concentrations protective of beneficial use. Generally, concentrations are higher in MW-1 and MW-2 when compared to MW-3. It appears that groundwater in the vicinity of MW-3 may be influenced from the better-quality water recharging groundwater from the

BCID canal, located near the well. Data collected from MW-3 may not be representative of groundwater quality changes as a result of discharges to land.

Antidegradation

Discharges from the Tracy Holdings Facility have not yet occurred. As a comparable operation, the Discharger owns and operates a similar corn processing facility in San Joaquin County (GloriAnn Farms). Effluent data from GloriAnn Farms were used to evaluate potential conditions at the Tracy Holdings Facility because both facilities will use the same cleaning chemicals and will have the same operating processes.

Flow-weighted average concentrations reported in the wastewater from GloriAnn are less than the concentrations detected in groundwater at the Tracy Holdings Facility. It does not appear that discharges from the Tracy Holdings Facility will impact groundwater beyond existing conditions. This Order sets groundwater and effluent limitations for the continued protection of groundwater.

Discharge Prohibitions, Effluent Limitations, Discharge Specifications, and Provisions

The Order limits the maximum monthly average and annual flow to 6.3 MG/month and 49 million gallons, respectively. The Orders sets an FDS annul average effluent limit concentration of 1,000 mg/L and a cycle average BOD loading limit of 100 lbs/ac/day. In addition, this Order requires wastewater and supplemental irrigation water be applied to the LAAs at agronomic rates.

This Order requires the Discharger to submit the following reports:

- Groundwater Limitations Compliance Assessment Plan
- Operations and Maintenance Plan
- Sample and Analysis Plan
- Salt and Nutrient Management Plan

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 effluent, LAA, solids, groundwater, 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 Programs Regulatory Considerations

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the waters and soils of 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 conditionally approving the Central Valley Water Board Basin Plan amendments and directing 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 (OAL) 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. Upon receipt of the Notice to Comply, the Discharger 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 5-022.15 (San Joaquin Valley), which is currently not a prioritized basin. 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. <u>More information regarding the CV-SALTS regulatory planning process</u> 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.