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CENTRAL VALLEY REGION

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**WASTE DISCHARGE REQUIREMENTS  
ORDER R5-2026-XXXX**

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**ORDER INFORMATION**

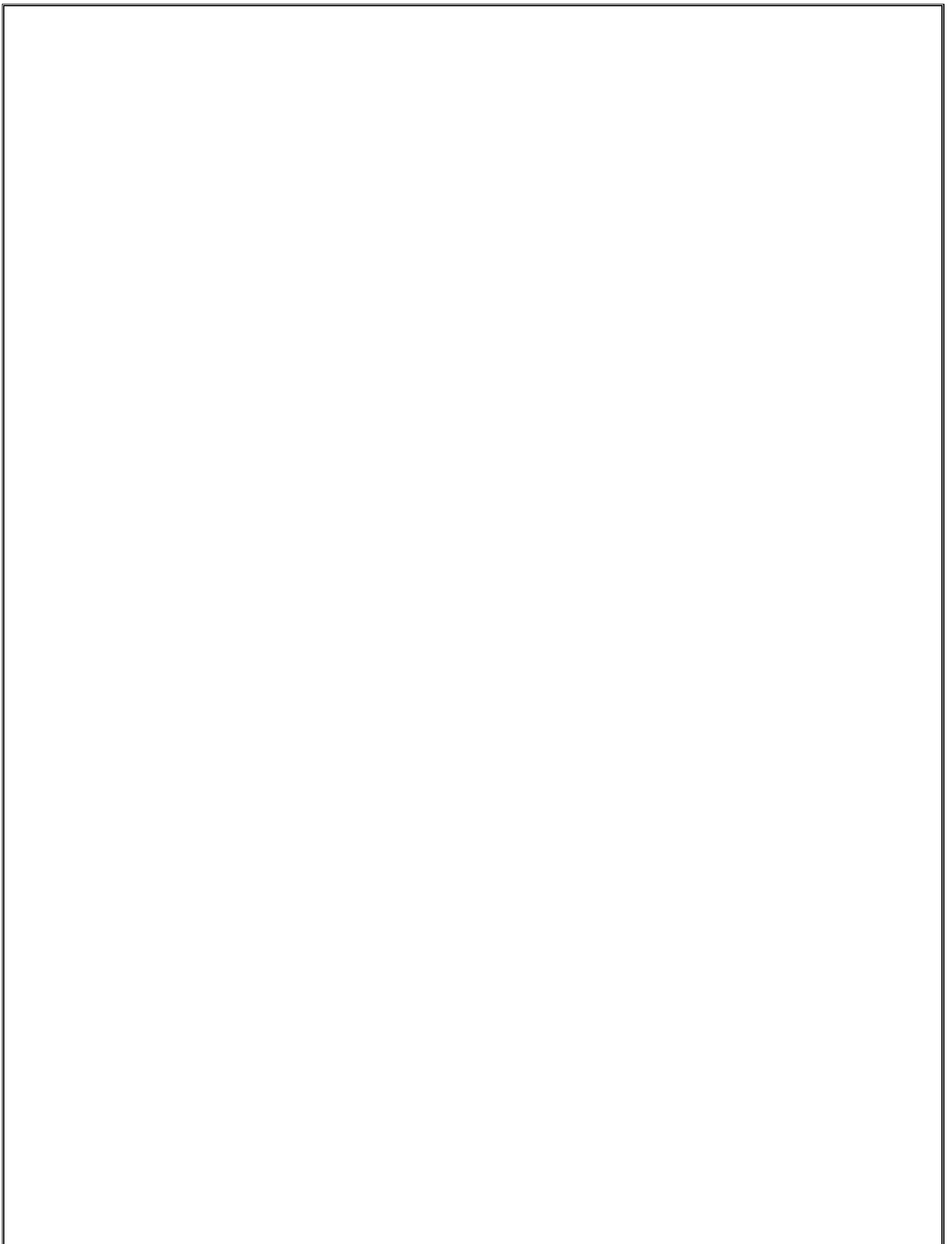
<b>Order Type(s):</b>	Waste Discharge Requirements
<b>Status:</b>	Tentative
<b>Program:</b>	Groundwater Quality Protection Program
<b>Region 5 Office:</b>	Sacramento (Rancho Cordova)
<b>Dischargers(s):</b>	City of Tracy and Leprino Foods Company
<b>Facility:</b>	Land Disposal Units of the City of Tracy Wastewater Treatment Plant
<b>Address:</b>	3900 Holly Drive
<b>County:</b>	San Joaquin
<b>Parcel Nos.:</b>	212-230-03, 213-050-08
<b>Prior Order(s):</b>	R5-2007-0038

**CERTIFICATION**

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on XX Month 202X.

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PATRICK PULUPA, Executive Officer



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WASTE DISCHARGE REQUIREMENTS ORDER R5-2026-XXXX  
CITY OF TRACY AND LEPRINO FOOD COMPANY  
LAND DISPOSAL UNITS OF THE CITY OF TRACY WWTP  
SAN JOAQUIN COUNTY

INFORMATION SHEET ..... 39

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## GLOSSARY

bgs .....	below ground surface
BOD <sub>5</sub> .....	[5-day] Biochemical Oxygen Demand at 20° Celsius
BPTC.....	Best Practicable Treatment or Control
CEQA.....	California Environmental Quality Act, Public Resources Code section 21000 et seq
CV-SALTS.....	Central Valley Salinity Alternatives for Long-Term Sustainability
DO.....	Dissolved Oxygen
DWR.....	Department of Water Resources
EC .....	Electrical Conductivity
FEMA .....	Federal Emergency Management Agency
MCL.....	Maximum Contaminant Level
MGD.....	Million Gallons [per Day]
mg/L .....	Milligrams per Liter
MRP .....	Monitoring and Reporting Program
MUN .....	Municipal and Domestic Supply Beneficial Use
MW.....	Monitoring Well
N.....	Nitrogen
NA .....	Not Applicable
ND.....	not detected or non-detect
NE .....	Not Established
NPDES.....	National Pollutant Discharge Elimination System
OAL.....	Office of Administrative Law
PLC .....	Programmable Logic Controller

P&O Study .....	Prioritization and Optimization Study of the Salt Control Program
RCRA .....	Resource Conservation and Recovery Act
RWD.....	Report of Waste Discharge
SERC .....	State of Emergency Response Commission
SPRRs .....	Standard Provisions and Reporting Requirements
TDS .....	Total Dissolved Solids
Title 22 .....	California Code of Regulations, Title 22
Title 23 .....	California Code of Regulations, Title 23
Title 27 .....	California Code of Regulations, Title 27
TKN.....	Total Kjeldahl Nitrogen
USEPA.....	United States Environmental Protection Agency
Wat. Code .....	Water Code
WDRs.....	Waste Discharge Requirements
WQOs .....	Water Quality Objectives
µg/L .....	Micrograms per Liter
µmhos/cm.....	Micromhos per Centimeter

## FINDINGS

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

### Introduction

1. The City of Tracy owns and operates a 125-acre wastewater treatment plant (WWTP) that primarily treats domestic wastewater and is located at 3900 Holly Drive in Tracy in San Joaquin County, Section 16, T1S, R5E, MDB&M (Attachment A). The WWTP (Facility) also accepts and treats industrial food processing wastewater through a segregated collection system from Leprino Foods Company (Leprino), a local cheese manufacturer.
2. The Facility is composed of a main treatment system and an industrial treatment system. The main treatment system and discharge of treated disinfected effluent to surface water (Old River) are regulated separately under NPDES No. CA0079154 (WDRs Order R5-2022-0073).
3. The industrial treatment system, consisting of two pretreatment units (referred to as lagoons), a treatment pond (Treatment Pond 002), and four storage/holding ponds (Holding Ponds 001, 003, 004, and 005), is owned by the City of Tracy. The City of Tracy authorizes industrial discharges from Leprino to the lagoons and Treatment Pond 002 under the City's Industrial Pretreatment Program. Leprino operates and leases the lagoons and Treatment Pond 002. These WDRs regulate the lagoons, Ponds 001-005, and the biosolids drying beds.
4. The City of Tracy and Leprino Food Company are collectively referred to as Dischargers and are responsible for compliance with these WDRs.
5. The following materials are attached and incorporated as part of this Order:
  - a. Attachment A – Site Location Map
  - b. Attachment B – Site Features Map
  - c. Attachment C – Wastewater Flow Schematic
  - d. Attachment D – Constituent Concentrations in Groundwater Map
  - e. Standard Provisions and Reporting Requirements dated 1 March 1991 (SPRRs)
6. Also attached is **Monitoring and Reporting Program (MRP) R5-2026-XXXX**, is also attached. This MRP Order constitutes a separate, enforceable order, which

requires monitoring and reporting for discharges regulated under these WDRs. The Dischargers shall comply with the MRP and any subsequent revisions thereto.

### **Regulatory History**

7. On 4 May 2007, the Central Valley Water Board adopted WDRs Order R5-2007-0038, which prescribed requirements for the treatment and discharge of wastewater to the treatment pond system at the WWTP. In addition, WDRs Order R5-2007-0038 also regulated the sludge drying beds.
8. The Dischargers have had no violations associated with discharges regulated under WDRs Order R5-2007-0038.
9. On 24 January 2022, the Dischargers submitted a Report of Waste Discharge (RWD) that describes the WWTP and ponds. A supplemental RWD was submitted on 30 January 2024 and additional data were submitted on 11 August 2025.

### **Facility and Discharge**

10. Leprino Foods Company is the world's largest producer of mozzarella cheese. The Leprino facility in Tracy, CA was constructed between 1973 and 1975, and is located approximately 0.75 miles south of the WWTP. Leprino Foods supplies cheese to major pizza chains, including Domino's, Pizza Hut, Papa John's, and Little Caesars. Industrial process wastewater from Leprino's Tracy plant discharges to a segregated industrial collection line. The industrial process wastewater enters the industrial pretreatment system at the WWTP and is directed into pretreatment units (lagoons).
11. The pretreatment system consists of two identical units (Lagoons 1 and 2), and one treatment pond (Treatment Pond 002) (Attachment B). The pretreatment lagoons, constructed in 1977, are two geotextile lined ponds constructed with compacted berms and rise above the base level of the surrounding ground. The berms are of 1.5:1 slope on the interior and meet a concrete floor 94-ft square, and the floor slab is between 8-12 inches thick. The concrete floor serves as the base for grouted threaded supports holding a fine air tube diffuser system 18-inches off the floor. The sloped interior sides of the aerated lagoons are lined with an impermeable Hypalon/EPDM reinforced geotextile fabric specifically designed to seal active lagoon systems. The liner is sealed to the floor of the lagoons with a perimeter-bolted frame completely wrapped by the liner material and grouted in place, and the liner itself is vulcanized into a single continuous sheet. The top of the liner is buried in a trench dug 12-inches deep along the top perimeter of the lagoon system to prevent pullout of the liner top. The liner is approximately 29 years old. The freeboard design allows for 2-feet of freeboard.
12. The lagoon system is built above the surrounding grade. This ensures that any liner punctures below the water line will result in saturation of the berm and visual indications of leaking wastewater should be visible on the surrounding berm slopes.

Leprino lowers the level of the lagoons periodically to inspect the aeration system and the lagoon liners for signs of wear and replaces or repairs the lagoon components as needed.

13. The aerated, lined lagoon system allows reduction of organic components in the food processing wastewater produced from the cheese manufacturing process. The lagoons operate in an aerobic mode that promotes the natural growth of microscopic organisms to consume the soluble portion of the organic materials in the wastewater. Waste within the pretreatment lagoons is aerated using a coarse bubble aeration system, while a nitrogen source in the form of urea is added when necessary to provide a proper nutrient balance. Acetic acid is used for pH adjustments and to support biological processes. The resulting reduction in organic loading is measured as a reduction in BOD<sub>5</sub> concentrations.

14. Influent wastewater flow volumes to the lagoons are summarized below.

MGY = million gallons per year

**Table 1. Influent Flow Volumes**

Year	Total Influent Flow (MGY)	Average Daily Flow (MGD) (note 1)	Range (MGD)
2020	219	0.60	0.30 – 0.76
2021	224	0.61	0.32 – 0.78
2022	265	0.73	0.32 – 0.86
2023	280	0.77	0.23 – 1.08
2024	260	0.72	0.29 – 0.86

Note 1: The City's Industrial Pretreatment Program limits industrial wastewater flow to the lagoons from Treatment Pond 002 to 0.85 MGD as a 7-day average; however, no one day's discharge shall exceed the discharge limit by more than 25 percent of the limit.

15. Influent wastewater quality into the lagoons is summarized below.

**Table 2. Industrial Influent Wastewater Quality**

Sample Date	EC (µmhos/cm)	TDS (mg/L)	BOD (mg/L)	Nitrate (mg/L)	Sodium (mg/L)	Chloride (mg/L)
2/27/25	1,700	1,700	2,100	48	280	330
3/3/25	1,200	1,900	5,400	88	140	78
3/12/25	1,900	1,400	1,600	75	280	280
<b>Averages</b>	<b>1,600</b>	<b>1,667</b>	<b>3,033</b>	<b>70</b>	<b>223</b>	<b>229</b>

16. Following the active aerobic pretreatment in the lagoons, the wastewater is transferred to unlined Treatment Pond 002, where most of the additional treatment, including clarification, is provided. Ferric chloride, phosphoric acid, and polymer are added as part of the treatment process.
17. Treatment Pond 002 is divided into two sections by a floating baffle to allow for settling of food waste solids and clarification of the pretreated wastewater. A rotary screen polishes the pretreated water just prior to discharge to the oxidation and holding ponds, consisting of Storage and Holding Ponds 001, 003, 004, and 005 (referred to as Pond(s) (see Attachment B). The operation of the rotary screen is enhanced by addition of a flocculent emulsion polymer prior to screening. Solids are allowed to stabilize in a facultative mode.
18. From Treatment Pond 002, wastewater is then directed through the wastewater pond holding system, which covers approximately 52 acres. The holding ponds are unlined oxidation ponds used for equalization and storage prior to entering the main WWTP. Discharges from Treatment Pond 002 may be directed to any of the storage ponds based on operational needs.
19. The holding ponds are intended to operate as a combination of facultative lagoons and aerobic maturation (or polishing) ponds for additional BOD<sub>5</sub> and nutrient removal. Activity in the holding ponds is a symbiosis of bacteria and algae in which oxygen is maintained in the upper layer while anaerobic fermentation activity occurs at the bottom.
20. The only domestic wastewater discharged to the holding ponds is treated effluent from the main wastewater treatment system that does not meet Title 22 standards, along with decant water and overflow from aerobic digestion. Both types of discharges are routed to the holding ponds on an as-needed basis
21. Pond dimensions are summarized below.

**Table 3. Pond Dimensions**

<b>Pond</b>	<b>Surface Area (acres)</b>	<b>Capacity (MG)</b>	<b>Depth (feet)</b>
Treatment Pond 002	8	11.2	7
Pond 001	8	5.9	7
Pond 003	15	24.2	7
Pond 004	14	20.1	7
Pond 005	15	21.5	7

22. Wastewater samples are collected from each pond and the results for select constituents are summarized below. Data presented on the table are average concentrations in samples collected between 2020 and 2024. Ponds are shown in

the order the wastewater currently moves through the pond system (also see Attachment B).

23. Water Quality Objectives (WQOs) are based on:  
 EC, TDS, iron, and manganese – Secondary Maximum Contaminant Level (MCL)  
 Nitrate as Nitrogen and – Primary MCL

WQOs presented in data tables through the Order are provided solely for comparison purposes. Their inclusion is intended to offer context for evaluating constituent concentrations in the effluent or other monitoring data. However, the inclusion of WQOs in these tables does not constitute the establishment of groundwater limitations or compliance thresholds under this Order. The WQOs are not enforceable limits for treatment, but rather screening benchmarks intended to support data interpretation and inform risk evaluation. NE represents not established.

**Table 4. Pond Wastewater Quality**

Constituent		Treatment Pond 002	Pond 001	Pond 005	Pond 004	Pond 003	WQOs
EC (µmhos/cm)	Min	2,310	1,963	237	1,673	1,848	900
	Max	4,220	5,220	3,670	3,600	3,880	
	Ave	3,107	2,749	2,623	2,623	2,743	
TDS (mg/L)	Min	1,000	420	950	1,100	920	500
	Max	3,000	2,600	1,800	2,500	2,200	
	Ave	1,475	1,381	1,423	1,441	1,527	
Nitrate as N (mg/L)	Min	ND	ND	ND	ND	ND	10
	Max	8.1	30	38	39	51	
	Ave	2.4	9.5	4.6	4.2	5.8	
TKN (mg/L)	Min	5	5.7	4	3.3	4.8	NE
	Max	450	260	150	85	57	
	Ave	101	70.4	40.3	33.3	25.8	
Iron (mg/L)	Min	0.07	0.05	0.1	0.1	0.31	0.3
	Max	0.31	0.17	0.31	0.19	0.64	
	Ave	0.16	0.11	0.21	0.14	0.49	
Manganese (mg/L)	Min	4.3	2.3	5.5	6.4	12	0.05
	Max	16	25	29	24	23	
	Ave	8.38	8.58	13.4	11.4	17.6	

24. Treated domestic wastewater from the main treatment system that does not meet Title 22 standards may be discharged to the holding ponds as needed and

eventually recirculated back to the main treatment system with the industrial wastewater prior to discharging to surface waters (Attachment C).

25. Currently wastewater from Pond 003 is commingled with influent domestic wastewater prior to entering the primary clarifier in the main treatment plant. Once treated, the commingled treated wastewater is discharged to Old River under an NPDES permit.
26. Biosolids from the domestic wastewater system are thickened by dissolved air flotation, anaerobically digested, and dewatered in asphalt lined drying beds. Decant water and overflow from the aerobic digestion can be directed to holding Pond 001 as needed. The lined drying beds cover approximately 8.2 acres. The drying beds use an underdrain system to return residual liquid to the plant pump station. The dried biosolids are disposed of in a landfill or hauled off-site for land application. Solids associated with the industrial wastewater removed from the ponds are also discharged to the lined drying beds.
27. Water balances were included in the supplemental information provided by the Dischargers for the treatment and holding ponds. Water balances were developed to determine if the holdings ponds have adequate capacity to contain the average rainfall year and the 100-year return period total annual precipitation. The results indicate that the holding ponds present adequate containment capacity for both the average rainfall year and the 100-year period of return total annual precipitation distributed monthly in accordance with mean monthly precipitation patterns under average monthly historical evaporation rates.

### **Site-Specific Conditions**

28. Land use surrounding the Facility is generally agricultural, industrial, and residential.
29. The topography of the surrounding area is relatively flat. The nearest surface waterbodies to the Facility are Sugar Cut Slough, located along the west side of the holding ponds, and Old River, located approximately 2 miles north of the holding ponds.
30. Precipitation and evapotranspiration data were collected from the Ripon and Manteca California Irrigation Management Information System (CIMIS) stations. The 100-year precipitation was estimated at 28.4 inches per year and the total monthly average reference evapotranspiration value is 52.8 inches.
31. The treatment and holding ponds are located in the Federal Emergency Management Agency (FEMA) AE flood zone, which is defined as an area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year.

32. The Facility’s treatment and storage/holding ponds are located in an area where the underlying sediments were influenced both by alluvial silt, clay, and sand deposits originating from the Diablo Range and the finer grained (silt and clay) flood-basin deposits of the Delta region. As a result, drillers’ logs from wells in the vicinity of the wastewater plant show alternating sands and clays with no predominance of fine- or coarse-grained deposits.

**Groundwater Conditions**

33. The groundwater monitoring well network consists of eight onsite shallow groundwater wells, as shown on Attachment D. Well construction details are shown below.

**Table 5. Groundwater Monitoring Well Details as of 4Q2024**

Well ID	Installation Year	Top of Well (feet msl)	Depth to Groundwater (feet from Top of Well)	Groundwater Elevation (feet msl)	Screen Interval (feet bgs)
MW-1	1990	21.36	14.70	6.66	-
MW-2	1990	21.27	17.41	3.86	7.5 – 27.5
MW-3	1990	20.07	16.46	3.61	8.5 – 28.5
MW-4	1990	20.31	15.24	5.07	10.0 – 30.0
MW-5	1994	23.11	17.32	5.79	18.0 – 38.0
MW-6	2008	18.73	14.37	4.36	15 – 35
MW-7	2008	15.68	11.45	4.23	15 – 35
MW-8	2008	16.33	11.73	4.60	13.0 – 23.0

34. Groundwater flow direction at the site is primarily to the northwest and varies between 0.00055 and 0.0017 feet per foot (ft/ft). Flow gradients measured during the fourth quarter 2024 indicate that MW-1 and MW-5 are the upgradient wells for the monitoring network. However, the Dischargers no longer monitor MW-1 because MW-5 provided better characterization of background groundwater quality (as documented in the 2010 Tracy WWTP Groundwater Quality Characterization Report, required per Order R5-2007-0038). The direction of groundwater flow has generally been to the northwest, which is consistent with previous groundwater flow records dating back to the 1990s.

35. Historical groundwater elevations generally show no seasonal variations; however, seasonal variations may be developing in wells MW-4 through MW-8.

36. Groundwater quality data are summarized below. Average concentrations are presented for monitoring years 2020 through 2024. MW-5 is considered an upgradient well.

**Table 6. Groundwater Quality**

Constituent	Units	Well ID							WQOs
		MW-5	MW-2	MW-3	MW-4	MW-6	MW-7	MW-8	
EC	µmhos/cm	1,712	2,600	2,759	2,967	3,049	3,275	3,189	900
TDS	mg/L	1,083	1,517	1,640	1,725	2,115	2,145	2,195	500
Sodium	mg/L	259	427	507	318	439	640	620	69
Chloride	mg/L	216	442	483	325	384	355	320	250
Nitrate as N	mg/L	3.01	ND	0.03	22.6	11.1	18.7	15.7	10
TKN	mg/L	0.16	4	2.4	22.7	0.18	0.23	0.28	NE
Iron	mg/L	0.01	3.02	10	1.3	0.30	0.003	0.83	0.3
Manganese	mg/L	2.65	2,483	2,295	1,443	11.1	12.1	25.4	0.05
Arsenic	mg/L	7.46	48	49.9	33.3	4.2	11.3	13.0	10

**Legal Authorities**

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

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

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

40. 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).)

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

*[T]he Central Valley Water 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.*

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

### **Basin Plan Implementation**

43. 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.”

#### **Beneficial Uses of Water**

44. This Order implements the Central Valley Water Board’s Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), which designates beneficial uses for surface water and groundwater and establishes WQOs necessary to preserve such beneficial uses. (See Wat. Code, § 13241 et seq.).
45. 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.

#### **Water Quality Objectives**

46. The Basin Plan establishes narrative WQOs for chemical constituents, taste and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
47. 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.
48. The Basin Plan’s narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to meet the MCLs specified in 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.

49. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative 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.

#### CV-SALTS Salt and Nitrate Control Programs

50. On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating the Salt Control Program and Nitrate Control Program (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020. On 10 December 2020, the Central Valley Water Board adopted revision to the Basin Plan amendments with Resolution R5-2020-0057 ([https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/resolutions/r5-2020-0057\\_res.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf)). Those revisions became effective on 10 November 2021. As the Central Valley Water Board moves forward to implement these Programs, this Order may be amended or modified to incorporate new or modified requirements necessary for their implementation. More information regarding the Salt and Nitrate Control Programs can be found on the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) web page: ([https://www.waterboards.ca.gov/centralvalley/water\\_issues/salinity/](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/))
51. Under the Salt Control Program, dischargers that are unable to comply with stringent salinity requirements may instead be subject to requirements, as determined appropriate by the Central Valley Water Board, and participate in a basin-wide effort known as the Prioritization and Optimization Study (P&O Study) to develop a long-term salinity strategy for the Central Valley. On 20 April 2021, the Discharger submitted a Notice of Intent to comply with the Salt Control Program. The Discharger elected to participate in the P&O Study and was issued an identification number (CV-SALTS ID: 2573). The Discharger is currently in good standing with the program. To maintain existing salt discharges and minimize salinity impacts, this Order sets a **Salinity Action Level of 2,000 mg/L for TDS as a flow-weighted annual average**. The limit is based on the maximum flow weighted annual average effluent TDS concentration over the last three years and includes an approximate 18 percent contingency factor to allow for operational flexibility and water conservation efforts, and requires continued monitoring of salinity constituent in effluent and groundwater. If the discharge results in an exceedance of the Salinity Action Level, this Order includes **Provision F.1XX requires the Discharger** to evaluate salinity sources and potential source control measures to decrease salinity in the discharge.
52. The Nitrate Control Program is a program for the control and permitting of nitrate discharges to groundwater and applies to all groundwater basins that are designated with the municipal and domestic supply (MUN) beneficial use. The Nitrate Control Program is a prioritized program: basins/sub-basins have been prioritized and basins within Priority 1 and 2 have been identified as having the most serious

ambient water quality concerns for nitrate. Priority 1 and 2 basins have two pathways to compliance – Pathway A: the Individual Permitting Approach or Pathway B: The Management Zone Approach. For the Nitrate Control Program, the Facility is located in the Tracy subbasin of the San Joaquin Valley GW basin, which is designated as non-prioritized. Therefore, the Dischargers are not required to enroll in the Nitrate Control Program at this time.

53. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs. As such, this Order may be amended or modified to incorporate any newly applicable requirements to ensure that the goals of the Salt and Nitrate Control Programs are met.

### **Compliance with Antidegradation Policy**

54. State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Antidegradation Policy), which is incorporated as part of the Basin Plan, prohibits the Central Valley Water Board from authorizing degradation of “high-quality waters” unless it is shown that such degradation will be consistent with the maximum benefit to the people of California; will not unreasonably affect present and anticipated future beneficial uses; and will not result in water quality less than as prescribed in applicable policies. Resolution 68-16 further requires that any discharge to existing high quality waters be required to meet WDRs that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution and/or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the state will be maintained.
55. The Antidegradation Policy applies when an activity discharges to high quality waters and will result in some degradation of such high-quality waters. “High quality waters” are defined as those waters where water quality is more than sufficient to support beneficial uses designated in the Basin Plan. Whether a water is a high-quality water is established on a constituent-by-constituent basis, which means that an aquifer can be considered a high-quality water with respect to one constituent, but not for others (SWRCB Order No. WQ 91-10). If the activity will not result in the degradation of high-quality waters, the Antidegradation Policy does not apply, and the dischargers need only demonstrate that it will use “best efforts” to control the discharge of waste.
56. For the purposes of this Order, constituents/parameters in effluent with the potential to degrade groundwater and/or affect beneficial uses include salts (represented by EC, TDS, sodium, and chloride), and total nitrogen (TKN and nitrate as nitrogen), and metals (iron, manganese, and arsenic).
57. A summary of effluent quality compared to annual averages for upgradient and downgradient groundwater is presented below. As presented in the annual SMRs, monitoring well MW-5 is identified as an upgradient well, and downgradient wells are

MW-2 to MW-4 and MW-6 to MW-8 as groundwater flow direction is generally to the northwest. NA indicates not applicable and NE represents not established.

**Table 7. Antidegradation Summary**

Constituent	Units	Influent to Lagoons Note 1	Effluent (flow weighted average) Note 2	Upgradient Groundwater Note 3	Downgradient Groundwater Note 3	WQO
EC	µmhos/cm	1,600	3,260	1,712	2,973	700
TDS	mg/L	1,667	1,479	1,083	1,890	500
Sodium	mg/L	223	370	259	492	69
Chloride	mg/L	229	400	216	385	250
Nitrate as N	mg/L	70	2.5	3.01	13.6	10
TKN	mg/L	NA	134.3	0.16	4.97	NE
Iron	mg/L	NA	0.18	0.01	2.6	0.3
Manganese	mg/L	NA	3.1	2.65	1,045	0.05
Arsenic	mg/L	NA	NA	7.66	32.5	10

Note 1: Averages from Table 2.

Note 2: Effluent presented in the table is defined as the wastewater present in Treatment Pond 002 prior to discharging to Pond 005. Annual average were calculated using data collected between 2020 and 2024.

Note 3: Averages were calculated using data collected between 2020 and 2024.

58. To determine compliance with the Antidegradation Policy, a conservative approach was taken in the evaluation where groundwater beneath the Facility is identified as high-quality water in regards to all constituents presented in Table 9 above. Therefore, a discussion of each constituent's characterization in the context of the Antidegradation Policy is provided below.

59. **Salinity (EC, TDS, Sodium, and Chloride).** Wastewater from cheese manufacturing is typically high in salt content and can be a significant source of salinity in groundwater.

Wastewater discharged into the lagoons directly from the Leprino industrial wastewater line contains an average EC concentration of 1,600 µmhos/cm. As described in Findings 14 and 18, chemical additives are introduced into the lagoons and Treatment Pond 002 to reduce organic material, remove suspended solids, manage pH, and enhance flocculation. When urea and acetic acid are added to wastewater, they participate in biological and chemical reactions that temporarily increase the number of dissolved ions in the water. EC responds to changes in ionic strength, while TDS reflects the actual mass of dissolved material. Because the added chemicals either (a) do not contribute significant mass of inorganic salts, or (b) are rapidly consumed by biological processes, EC can rise without a

corresponding increase in TDS. Impacts on groundwater from salts (TDS, chloride, and sodium) are attributable to the original wastewater influent quality, which contains elevated concentrations of dissolved salts prior to any treatment. The nutrient and pH-adjustment chemicals added during treatment do not contribute measurable long-term salt loads and therefore do not increase the overall salt load to groundwater.

When comparing upgradient groundwater quality to downgradient (MW-5 is identified as an upgradient well), concentrations of EC, TDS, sodium, and chloride are generally higher in the downgradient wells. This indicates that the discharge of wastewater from the lagoons, unlined Treatment Pond 002, and the four unlined holding ponds are likely impacting groundwater quality in regards to salts. It should also be noted that the concentrations of EC, TDS, sodium, and chloride in the upgradient monitoring well MW-5 exceed potential WQOs, indicating there likely other sources contributing to groundwater degradation in the area.

The Discharger has elected to participate in the P&O Study under CV-SALTS; therefore, the Order sets a performance based **Salinity Action Level of 2,000 mg/L for TDS** as a flow-weighted annual average based on historical effluent data, groundwater quality, and treatment system performance. The purpose of this limit is to ensure the Discharger is implementing appropriate performance-based measures at the Facility and is intended to prevent increases of salinity concentrations in groundwater. The **Salinity Action Level for TDS** includes an approximate 18 percent safety factor to allow for operational flexibility and water conservation efforts, and requires continued monitoring of salinity constituent in effluent and groundwater.

60. **Total Nitrogen (Nitrate as nitrogen and TKN).** For constituents such as nitrogen, the potential for groundwater degradation depends on the quality of the wastewater and the capacity of the underlying vadose zone to facilitate key nitrogen transformation processes. Specifically, the vadose zone must support nitrification, which converts ammonia to nitrate, and denitrification, which reduces nitrate to nitrogen gas. These processes help mitigate nitrogen loading before it reaches the water table.

The average flow-weighted nitrate as nitrogen concentration in the wastewater prior to discharging to Treatment Pond 002 is less than the WQO of 10 mg/L; however, concentrations of total Kjeldahl nitrogen (TKN), the organic and reduced nitrogen fraction, are considered high (up to 450 mg/L). The high organic nitrogen concentrations are likely resulting in nitrification in the subsurface, causing nitrate as nitrogen concentrations in groundwater to exceed the WQO. Groundwater monitoring data show elevated nitrate as nitrogen concentrations in downgradient wells relative to upgradient well MW-5. This may be the result of groundwater becoming reoxygenated as it moves downgradient away from the pond system, which promotes nitrification and increases nitrate levels. In addition, intrawell trend analysis indicates that nitrate as nitrogen concentrations in MW-4 are increasing

over time; MW-4 is located adjacent to unlined Treatment Pond 002, the initial receiving pond for wastewater discharged from the lagoons.

To address groundwater degradation associated with the unlined treatment and storage ponds, the Discharger is required to submit a *Groundwater Protection and Pond Management Plan* (Provision J.2.a). The Plan will identify feasible operational and management measures to minimize further degradation of groundwater beneath the Facility. The Plan will focus on near-term operational and management improvements while also evaluating long-term containment options. The Plan will also include an evaluation of potential long-term containment options, such as synthetic liners or alternative treatment or storage systems. The Facility is located in a non-prioritized basin and is therefore not required to enroll in the Nitrate Control Program at this time.

61. **Metals.** Concentrations of iron, manganese, and arsenic in upgradient groundwater are less than concentrations in downgradient groundwater, indicating impacts to groundwater quality are from the discharge.

Manganese concentrations in the effluent (wastewater in Treatment Pond 002) exceed the WQO. Intrawell concentration trends in groundwater show increasing trends for manganese in downgradient well MW-8 and iron in downgradient wells MW-3 and MW-8.

To address groundwater degradation associated with the unlined treatment and storage ponds, the Discharger is required to submit a *Groundwater Protection and Pond Management Plan* (Provision J.2.a). The Plan will identify feasible operational and management measures to minimize further degradation of groundwater beneath the Facility. The Plan will focus on near-term operational and management improvements while also evaluating long-term containment options. The Plan will also include an evaluation of potential long-term containment options, such as synthetic liners or alternative treatment or storage systems (see Provision J.2.a).

62. **Total Coliform.** Concentrations of total coliform greater than the WQO of 2 MPN/100 mL have been detected in up- and downgradient groundwater monitoring wells. Maximum annual concentrations are shown below.  
 -- Indicates concentrations were less than 2 MPN/100 mL.

**Table 8. Total Coliform Concentration (MPN/100 mL)**

Year	Well ID						
	MW-5	MW-2	MW-3	MW-4	MW-6	MW-7	MW-8
2020	366	3	9	--	--	--	--
2021	38	2,419	56	83	--	--	--
2022	--	--	--	--	--	--	--
2023	6.3	--	--	--	--	--	--

Year	Well ID						
	MW-5	MW-2	MW-3	MW-4	MW-6	MW-7	MW-8
2024	--	--	--	--	--	7	--

Although total coliform concentrations in groundwater beneath the Facility exceed the WQO, similar concentrations are present in upgradient groundwater, indicating that the source is not solely attributable to the domestic wastewater treatment system.

63. The Discharger implements, as required by this Order, the following measures, which the Central Valley Water Board has determined constitute BPTC. These measures will minimize the extent of water quality degradation resulting from the Facility's discharges:
  - a. Lined lagoons.
  - b. Lined sludge drying beds with leachate return system.
  - c. Effluent and groundwater monitoring.
  - d. Pretreatment program.
  - e. Continued participation in the Salt Control Program.
  
64. Generally, limited degradation of groundwater by some of the typical constituents of concern (e.g., EC and nitrate) released with the discharge from a municipal wastewater facility after effective source control and treatment, is consistent with maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impacts on water quality will be substantially less. The degradation will not unreasonably affect present and anticipated beneficial uses of groundwater or result in water quality less than water quality objectives.
  
65. The Facility contributes to the economic prosperity of the region by providing necessary services and employment for the local community; by providing incomes for numerous aligned businesses; and by providing a tax base for local and county governments.
  
66. Based on the foregoing, the adoption of this Order is consistent with the State Water Board's Antidegradation Policy.

### **California Environmental Quality Act**

67. 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) (Pub. Res. Code, § 21000 et seq.) pursuant to California Code of Regulations, title 14, section 15301. The discharges authorized under this Order are substantially within parameters established under prior WDRs, particularly with respect to character and volume of discharges.
68. To the extent that the construction of any new basins, ponds and/or surface impoundments are authorized under this Order, such features involve minor alterations to land at an existing facility, which are exempt from CEQA procedural requirements pursuant to California Code of Regulations, title 14, sections 15301 and 15304

### **Other Regulatory Considerations**

69. These WDRs regulate a facility that may impact a disadvantaged community and/or tribal community and includes an alternative compliance path that allows the Discharger time to come into compliance with water quality objectives (i.e., salinity and nitrate). The Discharger has selected the Alternative Permitting Approaches for the Salt and Nitrate Control Programs, which provide performance-based approaches for achieving compliance with salinity and nitrate limits through implementation of specific requirements (i.e., support facilitation and completion of the Salinity P&O Study and Nitrate Management Zone Implementation Plans). The Central Valley Water Board has satisfied the outreach requirements set forth in Water Code section 189.7 by conducting outreach in disadvantaged and tribal communities that may be affected by the discharges authorized by this Order. Pursuant to Water Code section 13149.2, the Central Valley Water Board reviewed readily available information and information raised to the Board by interested persons concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of these WDRs. The Board also considered environmental justice concerns within the Board's authority and raised by interested persons with regard to those impacts.
70. The Central Valley Water Board anticipates that the issuance of these WDRs will result in water quality impacts within the scope of the Board's authority. Specifically, these WDRs authorize the continued discharge of wastewater with salinity concentrations above applicable water quality objectives. The Central Valley Water Board has identified the following measures available and within the scope of its authority to address the impacts of the Facility to the nearby disadvantaged communities in San Joaquin County: 1) active participation in the P&O Study and compliance with the Salt Control Program, 2) compliance with a salinity limitation, and 3) preparation and implementation of Salinity Evaluation and Minimization Plan

to establish goals for potentially reducing salinity concentrations in the Facility's discharge.

71. Pursuant to Water Code section 106.3, subdivision (a), it is "the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Although this Order is not subject to Water Code section 106.3, as it does not revise, adopt or establish a policy, regulation or grant criterion, (see § 106.3, subd. (b)), it nevertheless promotes the policy by requiring discharges to meet MCLs for drinking water (excluding salinity), which are designed to protect human health and ensure that water is safe for domestic use. For salinity, the Order requires compliance with the Salt Control Program. Although the Basin Plans' Exceptions Policy for Salinity allows participants in the Salt Control Program to obtain limited-term exceptions from MCLs for salinity, this Program is consistent with the Human Right to Water Policy because its overarching management goals and priorities include long-term development of sustainable management practices and, where feasible, restoration of impacted groundwater basins and sub-basins.

#### Human Right to Water

72. 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 not cause groundwater to exceed maximum contaminant levels (MCLs) for drinking water (excluding salinity), which are designed to protect human health and ensure that water is safe for domestic use. For salinity, this Order requires compliance with the Salt Control Program. Although the Basin Plans' Exceptions Policy for Salinity allows participants in the Salt Control Program to obtain limited-term exceptions from MCLs for salinity, this Program is consistent with the Human Right to Water Policy because its overarching management goals and priorities include long-term development of sustainable management practices and, where feasible, restoration of impacted groundwater basins and sub-basins.

#### Threat-Complexity Rating

73. For the purposes of California Code of Regulations, title 23, section 2200, the Facility has a threat and complexity rating of 1-A as defined below:
- a. Category "1" – Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of

an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.

- b. Category "A" –Any discharge of toxic wastes; any small volume discharge containing toxic waste; any facility having numerous discharge points and groundwater monitoring; or any Class 1 waste management unit.

#### Storm Water

74. All storm water at the Facility is collected and directed to the Facility's main treatment headworks for treatment and disposal under NPDES permit CA0079154 (WDRs Order R5-2022-0073). Therefore, coverage under the General Storm Water Permit is not required at this time.

#### Sanitary Sewer Overflows

75. Sanitary Sewer Overflows (SSOs), which typically consist of a mixture of domestic and commercial wastewater, often contains pathogenic organisms, toxic pollutants, nutrients, oxygen demanding compounds, oil and grease, suspended solids, and other pollutants. When an SSO results in a discharge to surface water, it can cause temporary exceedances of WQOs, pose a threat to public health, adversely affect aquatic life, and impair recreational use and aesthetic enjoyment of surface waters in the area. The most common causes for SSOs are grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and/or contractor-caused blockages.

76. On 6 May 2022, the State Water Board adopted the SSO General Order, under which all public agencies that own or operate a sanitary sewer system with a total system length of more than one mile must enroll. The Discharger is enrolled under the SSO General Order.

#### Groundwater Wells

77. The Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 94-81 (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.

78. Statistical data analysis methods outlined in the USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (Unified Guidance) are appropriate for determining compliance with the Groundwater

Limitations of this Order. Depending on the circumstances, other methods may also be appropriate

### **Scope of Order**

79. This Order is strictly limited in scope to those waste discharges, activities, and processes described and expressly authorized herein.
80. Pursuant to Water Code section 13264, subdivision (a), the Dischargers is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new RWD per Water Code section 13260.
81. 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.
82. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as “Dischargers,” subject only to the discretion to designate or substitute new parties in accordance with this Order.

### **Procedural Matters**

83. All of the above, and the supplemental information and details in the attached Information Sheet (incorporated herein), were considered in establishing the following conditions of discharge.
84. The Dischargers, 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. (Wat. Code, § 13167.5)
85. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
86. The Central Valley Water Board will review and revise the WDRs in this Order as necessary.

## **REQUIREMENTS**

**IT IS HEREBY ORDERED** that WDR Order R5-2007-0038 is rescinded (except for enforcement purposes) and, pursuant to Water Code sections 13263 and 13267, the City of Tracy and the Leprino Foods Company, its agents, successors, and employees shall comply with the following:.

### **A. Standard Provisions**

1. Except as expressly provided herein, the Dischargers shall comply with the *Standard Provisions and Reporting Requirements* dated 1 March 1991 (SPRRs).

### **B. Discharge Prohibitions**

1. Except as expressly authorized under a separate permit, the discharge of wastes to surface waters or surface water drainage courses, including irrigation ditches outside of control of the Discharger, is prohibited.
2. Discharge of waste classified as “hazardous”, as defined in Title 22, section 66261.1 et seq., is prohibited.
3. Except as authorized pursuant to Section E.2 of the SPRRs, treatment system bypass of untreated or partially treated waste is prohibited.
4. Discharge or application of waste at a location or in a manner different from that described in the Findings is prohibited.
5. Discharge of toxic substances into any wastewater treatment system such that biological treatment mechanisms are disrupted is prohibited.
6. Waste constituents shall not be discharged or otherwise released from the Facility (including during treatment and storage activities) in a manner that results in:
  - a. Violations of the Groundwater Limitations of this Order; or
  - b. Conditions of “nuisance” or “pollution,” as defined per Water Code section 13050.
7. Discharge or application of waste classified as “hazardous” (see Title 22, § 66261.1 et seq.) is prohibited.
8. Except as expressly authorized under a separate permit, the discharge of wastes to surface waters or surface water drainage courses is prohibited.

### **C. Conditional Discharge Prohibitions**

1. During Phase I of the Salt Control Program, the Discharger is prohibited from discharging salts at concentrations exceeding the salinity numeric value of 700  $\mu\text{mhos/cm}$  (calculated as a monthly average) and 900  $\mu\text{mhos/cm}$  (as an annual average) unless the Discharger is implementing the Phase I requirements of the Salt Control Program Alternative Permitting approach (i.e., full participation in the P&O Study).

#### D. Flow Limitations

1. Influent flow rate to the lagoons shall not exceed 0.85 MGD as a monthly average.

#### E. Salinity Action Level

1. To comply with the Salt Control Program, the Dischargers selected the Alternative Salinity Permitting Approach (i.e., participation in the P&O Study). Therefore, these WDRs establish a **Salinity Action Level of 2,000 mg/L for TDS as a flow-weighted annual average**. As part of the Annual Monitoring report required per MRP R5-2026-XXXX, the Dischargers shall evaluate the flow-weighted annual average effluent EC concentration (sampled from the last pond prior to entering the main treatment plant). If the Facility's discharge exceeds the Salinity Action Level, the Dischargers shall submit a Salinity Action Level Report by **March 1st** of the year following the exceedance of the Salinity Action Level. The Salinity Action Level Report shall, at a minimum, include the following:
  - a. An evaluation of the Discharger's salinity effluent levels. This evaluation shall discuss any changes to incoming wastewater from the Leprino Facility, any increased water conservation efforts implemented within the Facility, and any other changes to the Dischargers' operations that could have contributed to the increased salinity concentrations.
  - b. If additional time is needed to investigate the source(s) of the salinity in the Facility's discharge, a detailed work plan describing what actions the Dischargers will conduct (with completion dates) to investigate the source(s) of salinity and report its findings to the Central Valley Water Board. The findings from the investigations shall be submitted to the Central Valley Water Board no later than **October 1st** of the year following the exceedance of the Salinity Action Level.
  - c. An evaluation of the potential impacts the increased salinity concentrations could have on underlying groundwater and downgradient users. If additional time is needed for this evaluation, the Salinity Action Level Report shall propose a submittal date (no later than **October 1st** of the year following exceedance of the Salinity Action Level).

#### E. Discharge Specifications

1. The discharge shall remain within the permitted waste treatment/containment structures at all times.

2. The Dischargers shall operate all systems and equipment to optimize the quality of the discharge.
3. 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.
4. As a means of monitoring odors, the dissolved oxygen (DO) content in the upper one foot of Treatment Pond 002 and Ponds 001, 003, 004, and 005 shall not be less than 1.0 mg/L for three consecutive sample events. If DO concentrations are less than 1.0 mg/L for three consecutive sampling events and offensive odors are perceivable beyond the property limits for an entire community or neighborhood, or considerable number of persons, the Dischargers shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the odors within 30 days.
5. The Dischargers shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Dischargers 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.
6. Wastewater treatment, storage, and infiltration 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.
8. All ponds 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 Dischargers shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
9. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate pond or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
10. The Dischargers shall monitor sediment accumulation in the ponds at least every five years beginning in **2027**, and shall periodically remove sediment or till the ponds as necessary to maintain adequate storage capacity.
11. Storage of solids on areas not equipped with means to prevent storm water infiltration, or a paved leachate collection system is prohibited.
12. 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 that affects an entire community or neighborhood, or any considerable number of persons

#### **G. Biosolids Storage Specifications**

1. Facilities for the storage of biosolids shall be located, designed, and maintained to restrict public access to biosolids.
2. Biosolids storage facilities shall be designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
3. The storage of biosolids, residual sludge, and solid waste on the Facility property shall be temporary and 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.

#### **H. Groundwater Limitations**

Discharge of waste from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or natural background groundwater quality, whichever is greater:

1. Constituents in concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding

salinity provided the Discharger complies with Salt Control Program requirements (see Conditional Prohibitions C.1).

2. Taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.
3. A most probable number (MPN) of 2.2/100 ml or more of total coliform organisms (TCO) over any seven-day period.

#### **I. Solids Disposal Specifications**

1. For the purposes of this Order “sludge” means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes; “solid waste” refers to grit and screenings generated during preliminary treatment; “residual sludge” means sludge that will not be subject to further treatment at the Facility; and “biosolids” refers to sludge that has been treated and tested and shown to be capable of being beneficially used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations.
2. Solid waste and residual sludge shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation, prevent nuisance conditions, and maintain adequate treatment and storage capacity.
3. Any handling and storage of residual sludge, solid waste, and biosolids at the Facility 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.
4. Residual sludge, biosolids and solid waste shall be disposed of in a manner consistent with Title 27 requirements. Removal for further treatment, disposal, or reuse at disposal sites (i.e., landfills, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a California Regional Water Quality Control Board will satisfy this specification.
5. 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

#### **J. Provisions**

1. The Discharger shall comply with the separately issued **MRP R5-2026-00XX** and any subsequent revisions thereto. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP

2. The following reports shall be submitted pursuant to Water Code section 13267:
  - a. **By 30 August 2029**, the Discharger shall submit a *Groundwater Protection and Pond Management Plan* prepared by a qualified professional. The purpose of the Plan is to identify feasible operational, management, and structural measures that will minimize further groundwater degradation associated with unlined Treatment Pond 002 and Ponds 001, 003, 004, and 005, and to evaluate long-term containment options capable of achieving compliance with Basin Plan water quality objectives. At a minimum, the Plan shall include:
    - i. A summary of current wastewater and pond operations, including hydraulic and organic loading rates, solids handling practices, and factors contributing to nitrogen, salinity, and organic loading to groundwater.
    - ii. A description of operational and management measures the Discharger will implement to reduce percolation of pollutants to groundwater. Measures may include improved solids handling, load balancing among ponds, enhanced aeration or mixing, hydraulic loading reductions, or other practices that reduce nitrate, salinity, dissolved metals, and organic impacts to groundwater.
    - iii. An evaluation of feasible long-term containment options while considering maintaining capacity, such as synthetic liners or alternative treatment or storage systems. The evaluation shall address each option's effectiveness in mitigating percolation, ability to achieve compliance with Basin Plan water quality objectives, technical feasibility, implementation timeframe, and relative cost.
    - iv. Identification of the preferred long-term containment alternative and a proposed implementation schedule. If the Discharger proposes to continue operating unlined ponds, the Plan shall include a technical demonstration that such operation will not cause or contribute to exceedances of water quality objectives or further groundwater degradation.
  - b. **By 30 August 2028**, the Dischargers shall submit a *Lagoon Integrity Evaluation* prepared by a qualified professional. The report shall include:
    - i. Evaluation of the age, condition, and integrity of the Hypalon/EPDM liner system.

- ii. Evaluation of feasible leak detection technologies (e.g., perimeter trenches, sumps, liner sensors), including a cost-benefit comparison of leak detection installation versus continued visual inspection.
    - iii. An evaluation of the lagoons to determine whether the current design and operational practices are protective of groundwater quality.
    - iv. Recommendations for upgrades, if warranted, and a proposed timeline for completion of upgrades.
  - c. **At least 180 days** prior to any sludge removal from the ponds and disposal, the Discharger shall submit a *Sludge Cleanout Plan*. The plan shall specifically describe the removal, drying, and disposal of the sludge, 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. The Dischargers shall comply with the applicable provisions of the Salt and Nitrate Control Programs adopted in Resolution R5-2018-0034 (as revised per Resolution R5-2020-0057) to address ongoing salt and nitrate accumulation in the Central Valley developed as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative.
3. 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 Dischargers shall bear the professional's signature and stamp.
4. The Dischargers shall submit the technical reports and work plans required by this Order and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Dischargers shall proceed with all work required by the foregoing provisions by the due dates specified.
5. The Dischargers shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Dischargers 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 Dischargers shall state the reasons for such noncompliance and provide an estimate of the date when the Dischargers will be in compliance. The Dischargers 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.
6. A discharger whose waste flows have been increasing, or are projected to increase, shall estimate when flows will reach the hydraulic and treatment capacity of its treatment, collection, and disposal facilities. The projections shall be made, based on the previous three year's average dry weather flows, peak flows, and total annual flows as appropriate and be included as part of the annual report. When a projection shows that the capacity of any part of the system may be exceeded within four years, the Dischargers shall notify the Central Valley Water Board
  7. The Dischargers shall comply with Monitoring and Reporting Program **R5-2026-00XX**, which is part of this Order, and any revisions thereto as ordered by the Executive Officer. The submittal dates of Dischargers self-monitoring reports shall be no later than the submittal date specified in the MRP.
  8. The Dischargers 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 Dischargers to achieve compliance with the conditions of this Order. Proper operation and maintenance include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Dischargers when the operation is necessary to achieve compliance with the conditions of this Order.
  9. As described in the SPRRs, the Dischargers shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
  10. In the event that the Dischargers 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 Dischargers shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
  11. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the

- Dischargers shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
12. In the event of any change in control or ownership of the facility, the Dischargers must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
  13. To assume operation as Dischargers 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 SPRRs Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
  14. In order to rescind WDRs that are no longer necessary because the discharge to land permitted under this Order has ceased, the Dischargers must contact the Central Valley Water Board's Compliance and Enforcement Unit to coordinate appropriate wastewater treatment system closure requirements.
  15. A copy of this Order including the MRP, Information Sheet, Attachments, and SPRRs shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

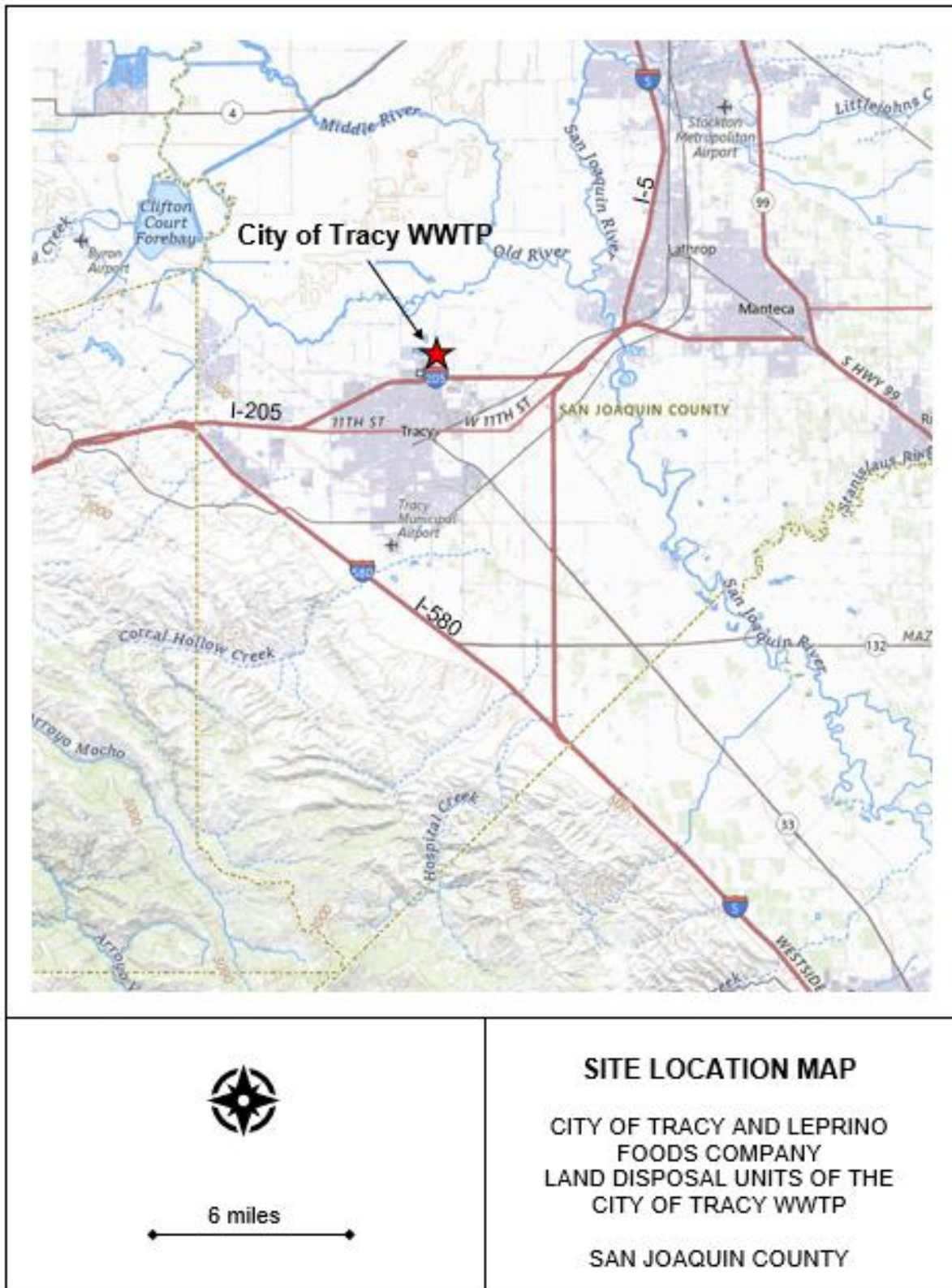
### **ENFORCEMENT**

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

### **ADMINISTRATIVE REVIEW**

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board for administrative review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. To be timely, the State Water Board must receive the petition by 5:00 pm 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 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the internet at the State Water Boards' Public Notices [Petitions for Water Quality webpage](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)). Copies will be provided upon request.

**ATTACHMENT A – SITE LOCATION MAP**



**ATTACHMENT B – SITE FEATURES MAP**



0.25 miles

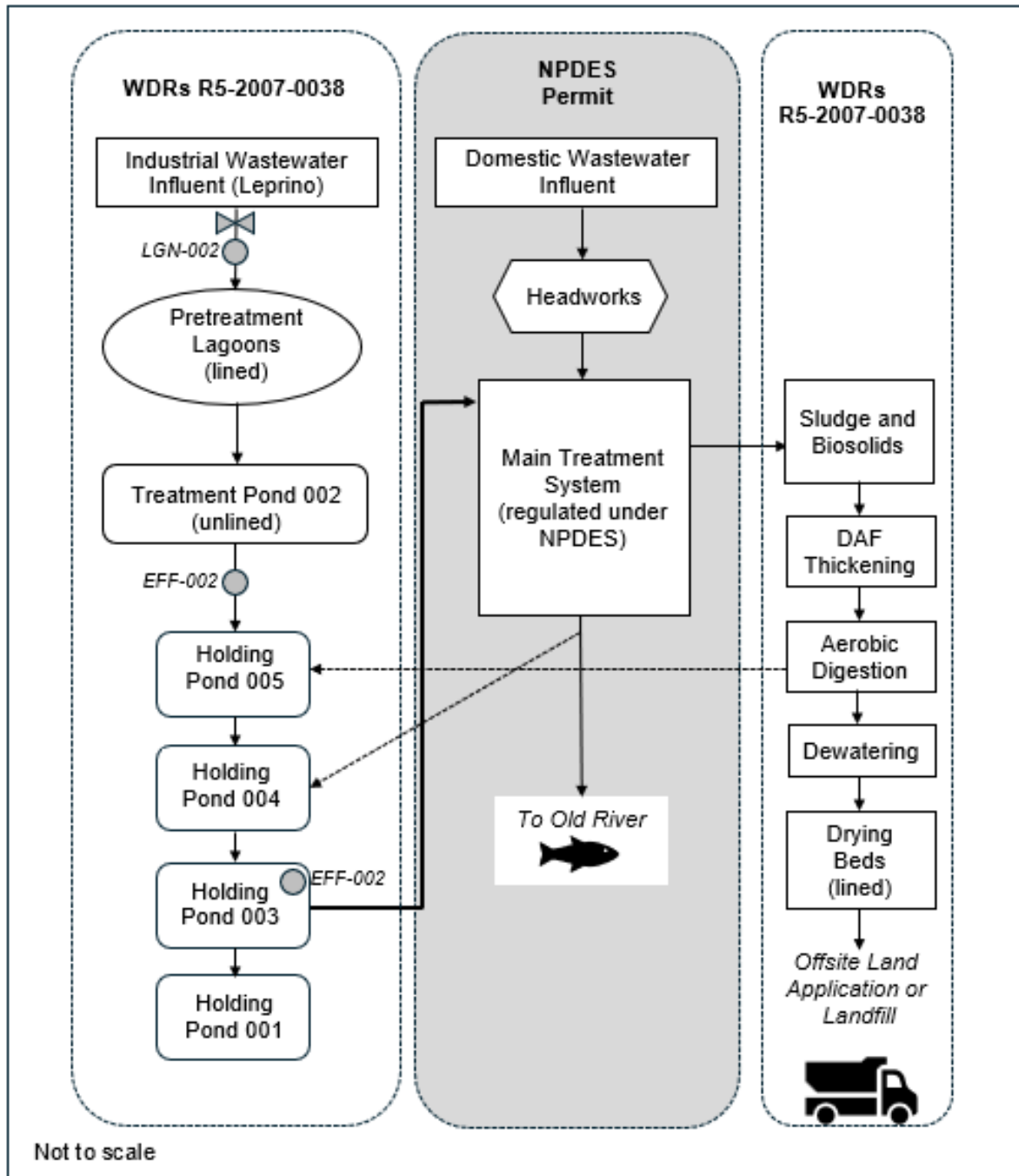
\*Pond 001 is not currently in use.

**SITE FEATURES MAP**

CITY OF TRACY AND LEPRINO FOOD COMPANY  
LAND DISPOSAL UNITS OF  
THE CITY OF TRACY WWTP

SAN JOAQUIN COUNTY

**ATTACHMENT C – WASTEWATER FLOW SCHEMATIC**



Not to scale

**LEGEND**

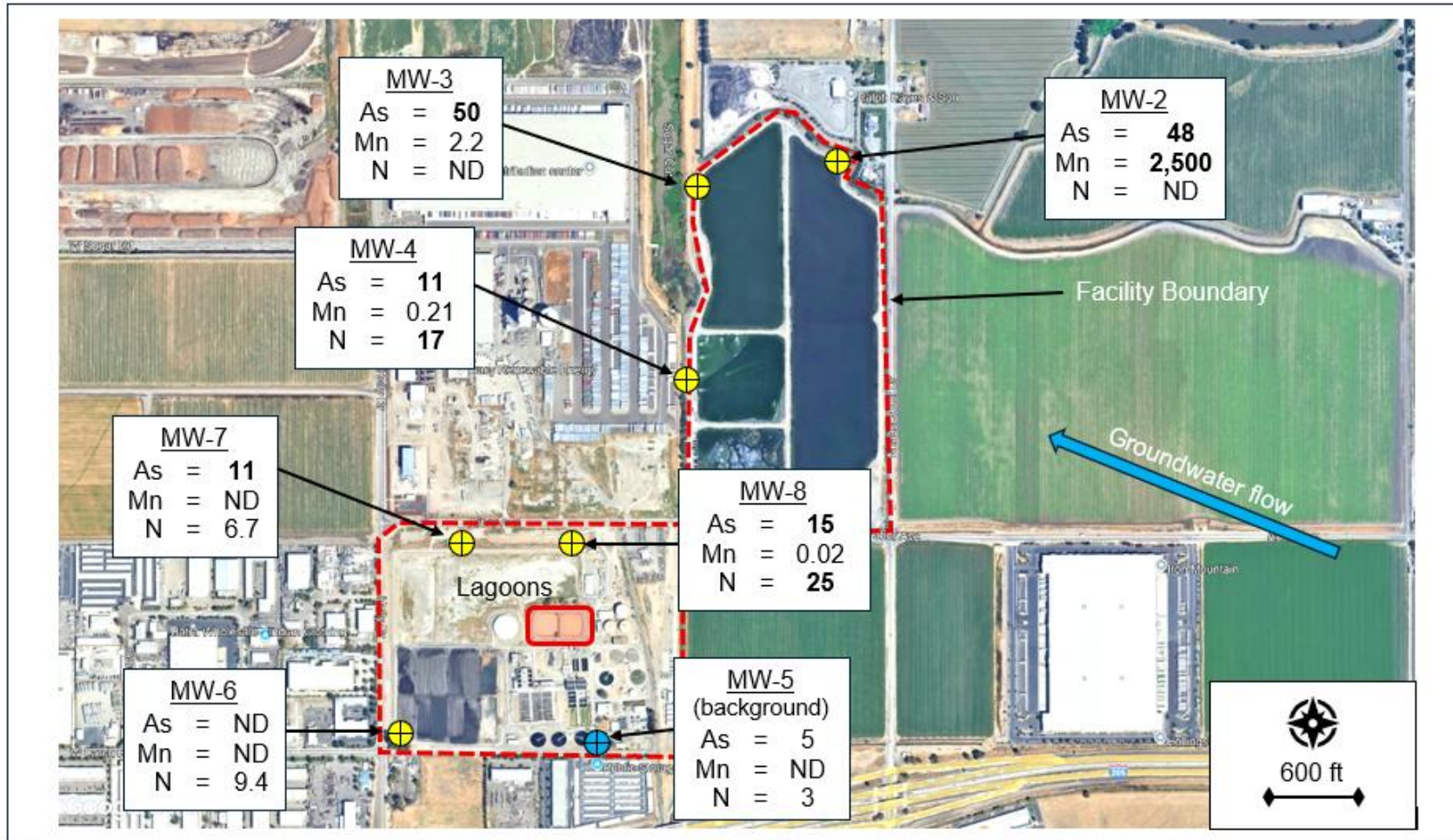
- Sample location
- Flow meter
- Discharge occurs as needed

Note: Discharges to Ponds 001, 003, 004, and 005 may change based on operational needs. Pond 001 is not currently in use.

**WASTEWATER FLOW SCHEMATIC**

CITY OF TRACY AND LEPRINO  
 FOODS COMPANY  
 WASTEWATER TREATMENT PLANT  
 SAN JOAQUIN COUNTY

**ATTACHMENT D – CONSTITUENT CONCENTRATIONS IN GROUNDWATER MAP**



**Legend**

As = arsenic  
 MW = groundwater monitoring well  
 Mn = manganese  
 N = nitrate as nitrogen  
 ND = not detected  
 Units are mg/L

**Note:** Concentrations shown are results from the most recent sampling event for each well. Concentrations in **bold** exceed the WQO.

**CONSTITUENT CONCENTRATIONS IN GROUNDWATER MAP  
 CITY OF TRACY AND LEPRINO FOOD COMPANY  
 LAND DISPOSAL UNITS OF THE CITY OF TRACY WWTP  
 SAN JOAQUIN COUNTY**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER R5-2026-00XX  
FOR  
CITY OF TRACY AND LEPRINO FOOD COMPANY  
LAND DISPOSAL UNITS OF THE CITY OF TRACY WWTP  
SAN JOAQUIN COUNTY

**INFORMATION SHEET**

**Facility and Discharge Description**

The Facility is composed of a main treatment system and an industrial treatment system. The main treatment system and discharge of treated disinfected effluent to surface water (Old River) are regulated separately under NPDES No. CA0079154 (WDRs Order R5-2022-0073).

The industrial treatment system, consisting of two pretreatment units (referred to as lagoons), a treatment pond (Treatment Pond 002), and four storage/holding ponds (Holding Ponds 001, 003, 004, and 005), is owned by the City of Tracy. Leprino operates and leases the lagoons and treatment Pond 002, which are regulated under an industrial pretreatment permit issued by the City of Tracy. These WDRs regulate the lagoons, Ponds 001-005, and the biosolids drying beds.

The City of Tracy and Leprino Food Company are collectively referred to as Dischargers and are responsible for compliance with these WDRs.

Wastewater from Leprino Food Company enters the Facility and is discharged into two lined above grade lagoons. Wastewater is treated and discharged from the lagoons to unlined Treatment Pond 002 for additional treatment. Treatment Pond 002 also receives biosolids which are allowed to stabilize in a facultative mode. From Treatment Pond 002, wastewater is directed through four Holding Ponds (001, 003, 004, and 005) prior to commingling with influent domestic wastewater and sent to the main treatment system for final treatment and surface water discharge.

Wastewater contains high concentrations of salts, nitrate, and dissolved metals, which are impacting groundwater beneath the Facility. These WDRs require the Dischargers to complete and submit two evaluations: a *Groundwater Protection and Pond Management Plan* and a *Lagoon Integrity Evaluation*. The purpose of these plans is to evaluate the causes of the current groundwater impacts and to identify practical measures the Discharger can implement to minimize additional impacts and ensure the long-term protection of groundwater quality.

### **Groundwater Limit Compliance Language**

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

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

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

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

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

### **Monitoring Requirements**

Section 13267 of the California Water Code authorizes the Central Valley Water Board to require monitoring and technical reports as necessary to investigate the impact of waste discharges on waters of the State. Water Code Section 13268 authorizes assessment of civil administrative liability where appropriate. The Order includes effluent, infiltration basin, residual solids, LAAs, 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 within one year of the effective date of the amendments (17 January 2020). Upon receipt of the Notice to Comply, the Dischargers 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. The Dischargers (Salt ID: 1829) has chosen to pursue Option 2 (Alternative Salinity Permitting Approach).

For the Nitrate Control Program, Facility falls under Groundwater Basin 5-22.15 (San Joaquin Valley Tracy, Basin No 5-22) which is in a non-prioritized basin as is therefore not required to enroll in the Nitrate Control Program at this time.

### **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.