

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2019-0054

WASTE DISCHARGE REQUIREMENTS
FOR
B & R LIVESTOCK WASHOUT,
JASON L. THOMPSON TRUST, AND EUGENE NUNES
B & R LIVESTOCK TRUCK WASH
TULARE COUNTY

FINDINGS

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

Background

1. B & R Livestock Washout operates a livestock truck wash facility (Facility), owned by the Jason L. Thompson Trust, at 9602 Avenue 264 in Tulare County, approximately three miles south of Visalia in Section 15, Township 19 South, Range 24 East, MDB&M. The Facility has not previously been regulated by waste discharge requirements (WDRs).
2. For the purposes of this Order, B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes (owner of the land application areas as discussed in Finding 12) will be collectively and jointly referred to as “Discharger” (in singular form). Except as otherwise expressly provided herein, B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes are each jointly responsible for compliance with the WDRs prescribed herein.
3. On 7 November 2001, the Central Valley Water Board received a Report of Waste Discharge (RWD) for the Akins Dairy Truck Wash (previous owner/operator of the Facility) in Tulare County. On 26 September 2010, an amended RWD for expansion of the Facility and its operations was submitted on behalf of the Akins Dairy Truck Wash by 4Creeks Civil Engineering and Land Surveying (4Creeks). The RWD was signed and stamped by David De Groot, RCE No. 70992 with 4Creeks. The expansion called for construction of two additional wash bays and increasing operations to handle washing of up to 20 livestock trailers per day or 100 trailers per week.
4. On 15 December 2016, 4Creeks submitted another amended RWD to increase flows at the Facility and allow washing of up to five small commodity haulers per day in addition to the livestock trailers. Supplemental information in support of the RWD was submitted on 1 December 2017. The supplemental information included a signed Form 200 with a change of name and ownership from Akins Dairy Truck

Wash to B & R Livestock Washout and a Nutrient Management Plan (signed and stamped by Nathan Heeringa, a Certified Professional Agronomist with Innovative Ag Services, LLC) for the discharge of wastewater to the land application area.

5. A Site Location Map and Facility Site Plan are provided in **Attachments A and B**, respectively, and are incorporated by reference herein and considered a part of this Order.
6. WDRs are needed for the Facility to ensure that the discharge will comply with Central Valley Water Board plans and policies.

Facility and Discharge

7. B & R Livestock Washout operates the Facility to wash out livestock trailers that are used to transport various livestock including cattle, sheep, goats, etc. In addition, the Facility also washes out small commodity haulers used to transport grains, cattle feed, gypsum, saw dust, bark, hay, and some fertilizers. Waste streams generated at the Facility are primarily from wash water used to clean out the trailers, no engine cleaning, brake cleaning, or washing of other commercial vehicles takes place at the Facility. In addition, according to the Discharger, no soaps or solvents are added to the wash water.
8. Source water for the Facility is supplied by an on-site well. A sample of the source water was collected on 9 October 2017 and the results are provided in Table 1 below.

Table 1. Source Water Quality

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Supply Well (10/09/2017)</u>
pH	pH Units	8.0
Electrical Conductivity (EC)	umhos/cm	217
Soluble Salts	mg/L	139
Bicarbonate Alkalinity as HCO ₃	mg/L	110
Chloride	mg/L	4.2
Nitrate as N	mg/L	1.08
Sulfate as SO ₄	mg/L	4.8
Boron	mg/L	0.001
Calcium	mg/L	28
Magnesium	mg/L	0.54
Potassium	mg/L	0.73
Sodium	mg/L	12.8
Sodium Absorption Ratio (SAR)	Calculated	0.66

9. At the Facility, trailers are driven onto the wash bays where pressure washers are used to wash out the trailers. The wash water, containing primarily manure, is washed toward drains at the bottom of the wash bays. Concrete drain lines carry the wash water to a concrete wet well, which collects the wash water from all four wash bays. From the wet well, the wash water is pumped to a mechanical separator to separate out as much of the manure solids as possible before draining to an on-site wastewater holding pond. From the holding pond, wastewater is sent to the land application area (LAA) where it is used to supplement irrigation water on approximately 149 acres of farmland. The LAA is discussed in further detail in Finding 12.
10. Wastewater is stored in the on-site wastewater holding pond and then discharged to the LAA only when needed for irrigation of crops. The water balance provided with the 2016 RWD demonstrates that the wastewater holding pond has sufficient capacity to provide for up to 120 days of storage at an estimated flow rate of approximately 3,200 gallons per day (gpd).
11. The holding pond is approximately 100 feet by 45 feet and 15 feet deep and has a storage capacity of approximately 456,000 gallons assuming one foot of freeboard. In addition, there is an overflow pond adjacent to the wastewater holding pond (**Attachment B**). The overflow pond is approximately 260 feet long by 90 feet wide and reportedly five feet deep (estimated capacity of about 500,000 gallons). According to the Discharger, the overflow pond provides additional wastewater and storm water storage during wet weather, which was not accounted for in the water balance. Given the quality of the wastewater discussed below, this Order includes a time schedule requiring to Discharger to line the ponds or install/develop a groundwater monitoring well network to monitor groundwater quality beneath the ponds.
12. Wastewater from the holding pond is sent to the LAA where it is blended with fresh irrigation water and applied by flood irrigation to irrigate crops. The LAA consists of about 149 acres divided into four fields, Assessor's Parcel Numbers (APNs) 119-240-023 and 149-010-037. Field # 1, owned by Jason L. Thompson Trust, with approximately nine acres is planted with walnuts. The remaining three fields (Fields #2, #3, and #4), owned by Eugene Nunes, with approximately 140 acres is planted with corn and winter forage (**Attachment A**).
13. The Discharger currently does not have a method for measuring the wastewater generated at the Facility and discharged to the ponds or the LAA. The 2016 RWD estimated flows based on the number of trucks each day and the average volume of water used to wash out the trailers. However, the accuracy of this estimate is uncertain. Therefore, this Order includes an average monthly daily flow limit of 3,500 gpd to the wastewater holding pond and requires the Discharger to install flow meter(s) at the Facility to meter the wastewater discharged into the wastewater holding pond and LAA or provide an alternative

method to accurately estimate wastewater flows based on actual water usage at the Facility.

14. Solids removed from the trailers consists primarily of manure. Wastewater from washing out the trailers is passed through a mechanical separator before being discharged to the wastewater holding pond. Manure and solids removed from the wastewater is temporarily stored in a manure storage area at the Facility. Soil beneath the manure storage area consists of compacted clay, which is graded to drain all storm water runoff back to the wastewater holding pond. According to the Discharger, manure solids stored in the manure storage area are hauled off-site by local farmers for use as a soil amendment and fertilizer or by a local composting facility as compost material. In addition, a vacuum truck generally comes once a year to vacuum up solids collected on the bottom of the wastewater holding and overflow ponds and haul the solids off-site for disposal.

15. This Facility is not currently permitted; therefore, there is limited data available on wastewater quality. A sample of the Facility's wastewater was collected from the holding pond on 6 October 2017 and provided as part of the supplemental information for the 2016 RWD. Additional samples of the wastewater from the wet well and the holding pond were collected by Central Valley Water Board staff during an inspection of the Facility on 6 March 2019. The sample of the wastewater collected from the holding pond on 6 March 2019 was also analyzed for total recoverable metals. These results are included in Table 2 below, along with average wastewater concentrations for samples collected in 2016 from four local dairy lagoons in Tulare County, provided for comparison. Wastewater concentrations that exceed their respective Maximum Contaminant Levels (MCLs) are shown in bold.

Table 2. Facility Wastewater Quality

<u>Constituent/ Parameter</u>	<u>Units</u>	<u>Holding Pond 10/6/17</u>	<u>Holding Pond 3/6/19</u>	<u>Wet Well 3/6/19</u>	<u>Dairy Waste- water¹</u>	<u>MCL</u>
pH	pH units	NS	7.7	8.7	7.1	---
Electrical Conductivity (EC)	umhos/ cm	4,620	3,700	3,200	5,770	900 ⁴
Biochemical Oxygen Demand (BOD)	mg/L	NA	960	1,500	NA	---
Total Dissolved Solids (TDS)	mg/L	3,240	1,900	2,600	3,700	500 ⁴
Fixed Dissolved Solids (FDS)	mg/L	NA	1,400	1,400	NA	---
Bicarbonate Alkalinity as HCO ₃	mg/L	2,060	1,900	NA	3,269	---
Nitrate as N	mg/L	6	<3.6	NA	0.3	10 ²
Nitrite as N	mg/L	<0.5	0.9	NA	<0.5	1 ²
Ammonia as N	mg/L	190	250	NA	267	---
Total Kjeldahl Nitrogen (TKN)	mg/L	196	680	NA	438	---

<u>Constituent/ Parameter</u>	<u>Units</u>	<u>Holding Pond 10/6/17</u>	<u>Holding Pond 3/6/19</u>	<u>Wet Well 3/6/19</u>	<u>Dairy Waste- water¹</u>	<u>MCL</u>
Total Nitrogen	mg/L	202	680	NA	440	---
Boron	mg/L	NS	0.38	NA	NA	---
Chloride	mg/L	186	180	NA	348	250 ⁴
Calcium	mg/L	361	250	NA	201	---
Magnesium	mg/L	65	63	NA	124	---
Potassium	mg/L	347	320	NA	560	---
Sodium	mg/L	160	150	NA	300	---
Sulfate	mg/L	197	9.1	NA	49	250 ⁴
Arsenic	ug/L	NA	17	NA	NA	10 ²
Cadmium	ug/L	NA	1.4	NA	NA	5 ²
Chromium	ug/L	NA	43	NA	NA	100 ²
Copper	ug/L	NA	490	NA	NA	1,000 ³
Iron	mg/L	NA	5.4	NA	NA	0.3 ³
Lead	ug/L	NA	5.5	NA	NA	15 ²
Manganese	mg/L	NA	0.98	NA	NA	0.05 ³
Mercury	ug/L	NA	0.22	NA	NA	2 ²
Molybdenum	ug/L	NA	2.1	NA	NA	---
Nickel	ug/L	NA	55	NA	NA	---
Selenium	ug/L	NA	7.6	NA	NA	50 ²
Zinc	ug/L	NA	1,800	NA	NA	5,000 ³

mg/L = milligrams per liter; umhos/cm = micromhos per centimeter; ug/L = micrograms per liter;
 NA = not analyzed.

- 1 Average concentration from four samples collected at four dairy lagoons in Tulare County in 2016.
- 2 Denotes Primary Maximum Contaminant Level (MCL)
- 3 Denotes Secondary MCL
- 4 Denotes Secondary MCL (recommended)

16. Domestic wastewater at the Facility is discharged separately to an existing on-site septic system regulated by Tulare County.

Special Considerations for High Strength Waste

17. For the purpose of this Order, high strength waste is defined as wastewater that contains concentrations of readily degradable organic matter that exceed typical concentrations for domestic sewage. Such wastes contain greater than 500 mg/L biochemical oxygen demand (BOD) and often contain commensurately high levels of total Kjeldahl nitrogen (TKN), which is a measure of organic nitrogen and ammonia nitrogen. Typical high strength wastewater includes septage, some food processing wastes, winery wastes, and rendering plant wastes.

18. Excessive application of high organic strength wastewater to land can create objectionable odors, soil conditions that are harmful to crops, and degradation of underlying groundwater with nitrogen species and metals, as discussed below. Such groundwater degradation can be prevented or minimized through implementation of best management practices, which include planting crops to take up plant nutrients and maximizing oxidation of BOD to prevent nuisance conditions.
19. It is reasonable to expect some attenuation of various waste constituents that percolate below the root zone within the vadose (unsaturated) zone. Specifically, excess nitrogen can be mineralized and denitrified by soil microorganisms, organic constituents (measured as both BOD and volatile dissolved solids) can be oxidized, and the cation exchange capacity of the soil may immobilize some salinity constituents.
20. Regarding BOD, excessive application can deplete oxygen in the vadose zone and lead to anoxic conditions. At the ground surface, this can result in nuisance odors and fly-breeding. When insufficient oxygen is present below the ground surface, anaerobic decay of the organic matter can create reducing conditions that convert metals that are naturally present in the soil as relatively insoluble (oxidized) forms to more soluble reduced forms. This condition can be exacerbated by acidic soils and/or acidic wastewater. If the reducing conditions do not reverse as the percolate travels down through the vadose zone, these dissolved metals (primarily iron, manganese, and arsenic) can degrade groundwater quality. Many aquifers contain enough dissolved oxygen to reverse the process, but excessive BOD loading over extended periods may cause beneficial use impacts associated with these metals.
21. The maximum BOD loading rate that can be applied to land without creating nuisance conditions or leaching of metals can vary significantly depending on soil conditions and operation of the land application system. *Pollution Abatement in the Fruit and Vegetable Industry*, published by the U.S. Environmental Protection Agency, cites BOD loading rates in the range of 36 to 600 lb/acre-day to prevent nuisance, but indicates the loading rates can be even higher under certain conditions. The studies that supported this report did not evaluate actual or potential groundwater degradation associated with those rates. There are few studies that have attempted to determine maximum BOD loading rates for protection of groundwater quality. Those that have been done are not readily adapted to the varying soil, groundwater, and climate conditions that are prevalent throughout the region.
22. The California League of Food Processor's (CLFP) Manual of Good Practice for Land Application of Food Processing/Rinse Water proposes risk categories associated with particular BOD loading rate ranges as follows:
 - a. Risk Category 1: (less than 50 lbs/acre/day; with depth to groundwater greater than 5 feet) Indistinguishable from good farming operations with good distribution important.

- b. Risk Category 2: (less than 100 lbs/acre/day; depth to groundwater greater than 5 feet) Minimal risk of unreasonable groundwater degradation with good distribution more important.
- c. Risk Category 3: (greater than 100 lbs/acre/day; depth to groundwater greater than 2 feet) Requires detailed planning and good operation with good distribution very important to prevent unreasonable degradation, as well as use of an oxygen transfer design equations that consider site specific application cycles and soil properties and special monitoring.

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

- 23. Although it has not been subject to a scientific peer review process, the Manual of Good Practice provides science-based guidance for BOD loading rates that, if fully implemented, may be considered management practices to help prevent groundwater degradation due to reducing conditions.
- 24. In a properly managed land application area, a cycle average BOD loading rate of less than 100 lbs/acre/day should not result in objectionable odors or unreasonably threaten underlying groundwater quality. This Order requires that the cycle average BOD loading rate to the LAA not exceed 100 lbs/acre/day.
- 25. At the maximum permitted flow rate of 3,500 gpd, using the available data for BOD of approximately 1,000 mg/L, the estimated cycle average BOD loading to just Field #1 (9-acres), assuming a 30-day irrigation cycle, would be about 3.2 lbs/acre/day. Using the same flow and BOD information, the estimated cycle average BOD loading rate assuming a 100-day irrigation cycle for Fields #2, #3, and #4 (a total of 140 acres) would be approximately 0.2 lbs/acre/day.
- 26. With total nitrogen concentrations between 200 mg/L and 700 mg/L, nitrogen loading to the LAA, with an average daily flow of 3,500 gpd (approximately 1.3 million gallons annually), would be between 15 and 50 pounds per acre per year (lbs/acre/year). This is less than the annual average nitrogen uptake for corn of 250 lbs/acre/year, and winter wheat of 175 lbs/acre/year (*Western Fertilizer Handbook, 8th edition*).
- 27. With proper management of its land application area and growing crops to take up excess nutrients and salts, it appears there is sufficient land available for reasonable nitrogen and BOD loading, with wastewater applications at the permitted flow rate of 3,500 gpd.

Site-Specific Conditions

28. The Facility and LAA are in the central portion of the San Joaquin Valley. Topography in the area is generally flat with an approximate elevation of 300 feet above mean sea level.
29. Land uses in the vicinity of the Facility is primarily agricultural with some dairies and industrial facilities nearby. Crops grown in the area include grain, corn, alfalfa, walnuts, almonds, and peaches/nectarines according to the Tulare County 2007 Land Use Maps published by the Department of Water Resources.
30. The Facility is in an arid climate characterized by dry summers and mild winters. The rainy season generally extends from November through May. Average annual pan evaporation is about 65 inches in Fresno according to data in Bulletin 113-3, *Vegetative Water Use in California*, published by the Department of Water Resources in April 1975. The average annual precipitation is about 6.3 inches in Visalia with a 100-year return wet year of about 17 inches according to data obtained from the Western Regional Climate Center.
31. The predominant soil types at the Facility and within the land application area are Nord Fine Sandy Loam and Tagus Loam. According to the Web Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service. Nord Fine Sandy Loam and Tagus Loam both are well drained soils with irrigated land capability classifications of 1. Soils with "Class 1" have few limitations or restrictions on the types of crops that can be grown.
32. According to the June 2009 Federal Emergency Management Agency maps (Map 060107C0940E), the Facility and LAA is in Zone X. Areas in Zone X are outside of the 1 percent annual chance floodplain. No depth or base flood elevations are shown in the FEMA maps for this zone.

Groundwater Considerations

33. According to the *Lines of Equal Elevation of Groundwater* map published by the Department of Water Resources in Spring 2012 and Spring 2016, first encountered groundwater in the vicinity of the Facility occurred at about 100 feet below ground surface (bgs) in Spring 2012 and at about 180 feet bgs in Spring 2016. Regional groundwater flow is to the southwest. There are no monitoring wells on-site and no site-specific groundwater gradient information is available.
34. Historical groundwater data from nearby wells within a two-mile radius, as shown in Table 3, indicates that groundwater in the area is of good quality with respect to EC, sodium, chloride, and nitrate.

Table 3. Groundwater Quality from Nearby Wells

Constituent/ Parameter	Units	19S24E15R	19S24E22C	19S24E25D ¹	W060541033	W0605400679 ²
		1956	1962	1956	2014	2017
EC	umhos/cm	242	260	336	160	191
Alkalinity as CaCO ₃	mg/L	117	99	131	100	100
Nitrate as Nitrogen	mg/L	<1	2.1	3.8	<1	1.1
Calcium	mg/L	30	19	49	26	28
Magnesium	mg/L	4.9	0.6	4.7	0.5	<1
Sodium	mg/L	17	28	15	11	9
Potassium	mg/L	1.5	1	1.1	<1	<1
Chloride	mg/L	4	6	12	2.3	3
Sulfate	mg/L	3.8	17	12	3.2	3.4
Iron	mg/L	---	---	---	<0.1	<0.1
Manganese	mg/L	---	---	---	<0.02	<0.02

¹ Well depth of 111 feet bgs

² Well depth of 300 feet bgs

Basin Plan Considerations

35. The operative *Water Quality Control Plan for the Tulare Lake Basin* (Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives (WQOs), contains implementation plans and policies for protecting all waters of the basin, and incorporates, by reference plans and policies of the State Water Resources Control Board (State Water Board). In accordance with Water Code section 13263(a), these WDRs implement the Basin Plan.
36. The Facility is in Detailed Analysis Unit (DAU) No. 242, within the Kaweah Basin hydrologic unit. The Basin Plan identifies the beneficial uses of groundwater in the DAU as municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO), water contact recreation (REC-1), and non-contact water recreation (REC-2).
37. The Facility is in the Consolidated Hydrologic Area No. 558.10 of the South Valley Floor Hydrologic Unit, as depicted on hydrologic maps prepared by the State Water Board, revised in August 1986. The Basin Plan designates surface waters within Hydrologic Unit 558 as Valley Floor Waters. As indicated in the Basin Plan, the beneficial uses of Valley Floor Waters are: agricultural supply (AGR); industrial service supply (IND); industrial process supply (PRO); water contact recreation (REC-1); non-water contact recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD); rare, threatened, or endangered species (RARE); and groundwater recharge (GWR).

38. The Basin Plan establishes narrative WQOs for chemical constituents, taste and odors, and toxicity in groundwater. The narrative toxicity WQO, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses.
39. The Basin Plan includes narrative WQO for chemical constituents that, at a minimum, require water designated as domestic or municipal supply to meet California Code of Regulations, title 22 (Title 22) Maximum Contaminant Levels (MCLs). 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.
40. 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 a numerical limitation in order to implement the narrative objective.
41. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until there is a long-term solution to the salt imbalance. Until then, the Basin Plan establishes several salt management requirements, including:
 - a. Incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum electrical conductivity (EC) in the effluent discharged to land shall not exceed the EC of the source water plus 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.
 - b. Discharges to areas that may recharge to good quality groundwater; shall not exceed an EC of 1,000 umhos/cm, a chloride of 175 mg/L, or a boron content of 1.0 mg/L. The Basin Plan generally applies these limits to industrial discharges to land.

Antidegradation Analysis

42. State Water Resources Control Board's (State Water Board) *Statement of Policy with Respect to Maintaining High Quality Waters of the State*, Resolution 68-16 (Antidegradation Policy) prohibits degradation of groundwater unless it has been shown that such degradation:

- a. Will not unreasonably affect present and anticipated beneficial uses;
 - b. Will not result in water quality less than that prescribed in state and regional policies, (including violation of one or more WQOs);
 - c. Will be minimized by the discharger through the implementation of best practicable treatment or control (BPTC); and
 - d. Will be consistent with the maximum benefit to the people of the State.
43. Constituents of concern that have the potential to degrade and pollute groundwater includes, in part, organics, nutrients, and salts.
- a. For organics, as discussed in Findings 17 through 24, application of organic materials (as measured by BOD) at excessive rates can cause anaerobic conditions that may result in nuisance odor conditions, dissolution of metals, and degradation of groundwater. This Order requires the Discharger to apply wastewater to the LAA at agronomic rates and ensure the cycle average BOD loading rate will be less than 100 lbs/acre/day. With these conditions, the discharge should not unreasonably degrade groundwater quality with constituents related to organic loading. With expected cycle average loading rates of less than 5 lbs/acre/day, the Discharger should be able to comply with these conditions.
 - b. For nitrogen, this Order requires the application of nutrients from wastewater and fertilizers to be at reasonable agronomic rates. A Nutrient Management Plan submitted with the 2016 RWD demonstrated that the nutrient contribution from the wastewater to the 149-acre LAA will be significantly less than crop requirements. With nitrogen uptake by crops, nitrification and denitrification occurring in soils, and depth to groundwater, the discharge, as allowed by this Order, is not expected to contribute to groundwater degradation that would violate water quality objectives for nitrate. Furthermore, this Order requires the Discharger to line its wastewater ponds or install/develop a groundwater monitoring well network to evaluate groundwater conditions beneath the ponds.
 - c. For salinity, the Basin Plan contains effluent limits of source water EC plus 500 umhos/cm and, for discharges to areas that may recharge to good quality groundwater, a maximum EC of 1,000 µmhos/cm. The Facility is in an area that appears to have good quality groundwater with respect to salinity, with an EC of less than 500 umhos/cm. With a source water EC of about 217 umhos/cm, the Facility's discharge with an EC of about 4,600 umhos/cm cannot comply with the Basin Plan limits for EC. Given the limited data available for the Facility it is unknown if the discharge has the potential to cause groundwater to exceed water quality objectives (WQOs) with

respect to individual salinity constituents. However, at the permitted flow rate of 3,500 gpd and an average TDS concentration of about 2,500 mg/L, the estimated salt load from the wastewater to the 149-acre LAA would be minimal at about 180 lbs/acre/year.

To address the Basin Plan salinity requirements, this Order requires extensive monitoring of the discharge for salinity constituents including total and fixed dissolved solids to determine the nature of salinity constituents in the discharge. In addition, this Order requires the Discharger to prepare and implement a Salinity Reduction Study Workplan to identify and address sources of salinity to and from the Facility (Provision G.12) and requires the Discharger to either line the ponds or develop a groundwater monitoring well network (Provision G.13).

Discharge Treatment and Control

44. The Discharger provides, or will provide as required by this Order, the following treatment and control of the discharge that incorporates:
- a. No use of soaps or solvents in the wash water and no washing of engine parts or undercarriages at the Facility;
 - b. Reuse of wastewater and blending with fresh water for irrigation of crops;
 - c. Proper handling and off-site disposal of solids;
 - d. Development and implementation of an Operations and Maintenance Manual;
 - e. A cycle average BOD loading limit not to exceed 100 lbs/acre/day for wastewater applied to the land application area;
 - f. Source water, effluent monitoring (including flow monitoring), land application area monitoring, and pond monitoring;
 - g. Lining of its wastewater ponds or development of a groundwater monitoring well network to evaluate groundwater quality beneath the wastewater ponds, as described by Provision G.13; and
 - h. Submittal of a Salinity Reduction Study Work Plan to evaluate measures to reduce the salinity in the Facility's discharge, as described by Provision G.12.

Antidegradation Conclusions

45. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State. The Facility provides a needed service and aids in the economic prosperity of the region by direct employment and provides a tax base for local and state governments. Provided the discharge

complies with State and Central Valley Water Board plans and policies, there is sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

46. The Provisions of this Order require the Discharger to implement the treatment and control measures listed in Finding 44. These treatment and control measures are reflective of BPTC of the discharge.
47. This Order establishes terms and conditions to ensure that the discharge does not unreasonably affect present and anticipated future beneficial uses of groundwater or result in groundwater quality worse than background or the water quality objectives set forth in the Basin Plan.
48. This Order is consistent with the Antidegradation Policy since: (a) the Discharger has or will implement BPTC to minimize degradation, (b) any limited degradation allowed by this Order will not unreasonably affect present and anticipated future beneficial uses of groundwater, or result in water quality less than water quality objectives, and (c) any limited degradation is of maximum benefit to the people of the State.

Other Regulatory Considerations

49. 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 necessarily subject to Water Code section 106.3 because it does not revise, adopt or establish a policy, regulation or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes that policy by requiring discharges to meet MCLs designed to protect human health and ensure that water is safe for domestic use.
50. Based on the threat and complexity of the discharge, the Facility is determined to be classified as 2C as defined below:
 - a. Category 2 threat to water quality: “Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.”
 - b. Category C complexity: “Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13262 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.

Upon successful demonstration that the Discharger has lined the wastewater holding ponds (in accordance with Provision G.13) the Facility's threat to water quality and complexity rating may be reduced from Category 2C to Category 3B.

51. The discharge of waste authorized under this Order is exempt from the prescriptive requirements set forth in California Code of Regulation, title 27, section 20090 et seq. (See Cal. Code. Regs., tit. 27, section 20090, subd. (b).)
52. The California Department of Water Resources (DWR) 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 74-81* (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.
53. All stormwater is retained at the Facility or blended with the wastewater and applied to the LAA for irrigation of crops. According to the Discharger, the Facility is graded to drain all stormwater runoff toward the wastewater holding ponds.
54. Water Code section 13267, subdivision (b)(1) provides in pertinent part as follows:

In conducting an investigation ... the regional board may require that any person who has discharged, discharges, or ... proposes to discharge ... 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.
55. Technical reports required under this Order and the separately-issued Monitoring and Reporting Program R5-2019-0054 (MRP) are necessary to assure compliance with these WDRs. Additionally, the burden of producing such reports, as estimated by Central Valley Water board staff, is also reasonably related to the need for such reports.
56. The ability to discharge waste to the waters of the State of California is not a right but a privilege. (See Wat. Code, section 13263, subd. (g).) Accordingly, the

adoption of this Order shall not be construed as creating a vested right to continue in any discharges otherwise authorized herein.

California Environmental Quality Act

57. On 1 April 2010, Tulare County, as lead agency under the California Environmental Quality Act (CEQA), approved a Special Use Permit and Negative Declaration for expansion of the existing Facility and its operations. The Negative Declaration determined that the potential environmental impacts resulting from expansion of Facility operations would be less than significant under approved conditions. The two conditions of approval related to water quality were: (1) all manure storage areas, disposal fields, and equipment storage areas shall be properly managed to prevent odors, dust, and vectors, and (2) requires the applicant to obtain approval from Tulare County Environmental Health Services and the Central Valley Water Board for the discharge of wastewater from the livestock truck wash.

CV-SALTS Reopener

58. 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. These programs, once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate. For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers could comply with the new nitrate program either individually or collectively with other dischargers. For salinity, dischargers that are unable to comply with stringent salinity requirements would instead need to meet performance-based requirements and participate in a basin-wide effort to develop a long-term salinity strategy for the Central Valley. This Order may be amended or modified to incorporate any newly-applicable requirements.
59. The stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has been coordinating efforts to implement new salt and nitrate management strategies. The Board expects dischargers that may be affected by new salt and nitrate management policies to coordinate with the CV-SALTS initiative.

Public Notice

60. 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.

61. The Discharger and interested agencies and persons have been notified of the Central Valley Water Board's intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.
62. All comments pertaining to the discharge were heard and considered in a public hearing.

REQUIREMENTS

IT IS HEREBY ORDERED that pursuant to Water Code sections 13263 and 13267, B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes, their agents, successors, and assigns in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of waste to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous', as defined in Title 22, section 66261.1 et seq., is prohibited.
3. Treatment system bypass or overflow of untreated wastes is prohibited, except as allowed by Section E.2 in *Standard Provisions and Reporting Requirements for WDRs dated 1 March 1991* (SPRRs or Standard Provisions), which are incorporated herein.
4. Discharge of waste in a manner or location other than that described herein or in the RWD is prohibited.
5. Discharge of wastewater generated from washing of vehicle engines and/or undercarriages is prohibited.
6. Discharge of toxic substances into the wastewater holding pond is prohibited.
7. Discharge of domestic wastewater to the wastewater holding pond, LAA, or any surface waters is prohibited.
8. Discharge of process wastewater to the domestic wastewater treatment system (septic system) is prohibited.

B. Flow Limitations

1. The monthly average daily discharge to the wastewater holding pond shall not exceed 3,500 gallons per day [**Compliance shall be determined at EFF-001**]. The Discharger shall install flow meters to determine compliance with this flow limitation or provide an acceptable method to estimate wastewater flow into the pond in accordance with Provision G.10.

C. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of 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 the Facility and apply wastewater in the manner described in the Facility's approved Operations and Maintenance Manual, required by Provision G.11.
5. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
6. Wastewater discharged to the unlined holding ponds shall not have a pH of less than 5.0 or greater than 9.0.
7. All conveyance, treatment, storage, and disposal units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
8. 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.
9. As a means of discerning compliance with Discharge Specification C.8, the dissolved oxygen (DO) content in the upper one foot of any wastewater pond shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in any single pond is below 1.0 mg/L for three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.

10. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, 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.
11. 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.
12. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Effluent Limitation B.1 and Discharge Specifications C.10 and C.11.
13. 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.

D. Groundwater Limitations

Release of waste constituents from any component of any treatment, storage, delivery system, or land application area associated with the discharge shall not

cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:

1. Nitrate as Nitrogen of 10 mg/L.
2. For each constituent, the specified MCL(s) under Title 22.

E. Land Application Area Specifications

For the purposes of this Order, “land application areas” or “LAA” refer to the discharge area described in Finding 12.

1. The BOD loading to the LAA calculated as a cycle average as determined by the method described in the attached MRP, shall not exceed 100 lbs/acre/day. The cycle average BOD loading rate shall be calculated as determined by the method described in the attached MRP.
2. Crops shall be grown on the LAA. Crops shall be selected based on nutrient uptake, consumptive use of water, and irrigation requirements to maximize crop uptake of water and nutrients.
3. Application of waste constituents to the LAA shall be at reasonable agronomic rates to preclude creation of a nuisance or degradation of groundwater, considering the crop, soil, climate, and irrigation system. The annual nutrient loading to the LAA, including contributions of organic and chemical fertilizers and the wastewater shall not exceed the annual crop demand.
4. The Discharger shall ensure that water, BOD, and nitrogen are applied and distributed uniformly across each LAA field and shall implement changes to the irrigation system and/or operational practices as needed to ensure compliance with this specification.
5. Discharge to the LAA shall not be initiated when the ground is saturated.
6. Any irrigation runoff or tailwater shall be confined to the LAA and shall not enter any surface water or surface water drainage course.
7. The LAA shall be managed to prevent breeding of mosquitoes or other vectors. In particular:
 - a. There shall be no standing water 48 hours after irrigation ceases;
 - b. Tailwater ditches shall be maintained essentially free of emergent, marginal, or floating vegetation; and

- c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store wastewater.

F. Solids Disposal Specifications

For the purposes of this Order, “manure solids” means the solids, semisolid, and liquid manure removed from the wastewater and stored in the manure storage area; and “sludge” refers to the semisolid and residual solids removed from the bottom of the ponds.

1. Manure solids and sludge shall be removed from sumps and ponds as needed to ensure optimal facility operations.
2. Any drying, handling, or storage of manure solids and sludge at the Facility shall be temporary, controlled and contained in a manner that minimizes leachate formation, and precludes the development of odor, nuisance conditions and infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.
3. Manure solids and sludge shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for further treatment, disposal or reuse at sites (i.e., landfill, composting sites, soil amendment sites operated in accordance with valid waste discharge requirements issued by a regional water quality control board) will satisfy this specification.
4. Any proposed change in solids use or disposal shall be reported to the Executive Officer at least **90 days** in advance of the change.

G. Provisions

1. The Discharger shall comply with the applicable *Standard Provisions* (attached and incorporated herein).
2. The Discharger shall comply with the operative MRP (i.e., Monitoring and Reporting Program R5-2019-0054 and all revisions thereto).
3. A copy of this Order, including its 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.
4. 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 documents 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.

5. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger only when the operation is necessary to achieve compliance with the conditions of this Order.
6. As described in the SPRRs, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
7. 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.
8. In the event of any change in control or ownership of the Facility, the Discharger shall 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.
9. To assume operation as a 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 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.

10. **By 9 December 2019**, the Discharger shall install flow meters at the discharge points to the wastewater holding pond and the LAA or provide documentation detailing the proposed method to be used to accurately estimate wastewater discharged to the holding pond and LAA. Upon submittal, the Discharger shall begin flow monitoring of its wastewater in accordance with Monitoring and Reporting Program R5-2019-0054. Following collection of at least six months of flow data, the Discharger shall submit a technical report prepared by a California registered engineer, with a revised water balance using actual flow data for the Facility, demonstrating that there is sufficient capacity within the wastewater ponds, including both the holding pond and the overflow pond, and the LAA to contain all wastewater and storm water for a normal year and a 100-year wet year. This report and revised water balance shall be submitted **by 7 December 2020**
11. **By 9 March 2020**, the Discharger shall submit an Operations and Maintenance Manual. At a minimum the **Operations and Maintenance Manual** must include:
 - a. A description of activities that occur at the Facility;
 - b. Procedures for operating and maintaining the Facility's ponds;
 - c. Procedures for monitoring Facility operations including how, when, and where wastewater is discharge to the LAA;
 - d. Solids handling and disposal procedures; and
 - e. Records management.
12. **By 8 June 2020**, the Discharger shall submit a **Salinity Reduction Study Workplan**. The Discharger shall prepare and implement a Salinity Reduction Study Workplan (Workplan) to identify and address sources of salinity at the Facility. The Workplan shall, at a minimum, include the following:
 - a. Data on current influent and effluent salinity concentrations;
 - b. Identification of known salinity sources;
 - c. Description of current plans to reduce/eliminate known salinity sources;
 - d. Preliminary identification of other potential sources;

- e. A proposed schedule for evaluating sources; and
- f. A proposed schedule for identifying and evaluating potential reduction, elimination, and prevention methods.

Implementation progress of the Workplan shall be reported each year in the Annual Monitoring Report required pursuant to the MRP.

- 13. The Discharger shall eliminate the discharge to unlined ponds or install/develop and maintain a groundwater monitoring well network to monitor changes in groundwater quality associated with its discharge at the Facility.

The Discharger shall comply with the following time schedule in implementing the work required by this Provision:

<u>Task</u>	<u>Description</u>	<u>Due Date</u>
a.	<p>Submit a Workplan and a time schedule, for Executive Officer approval, to line the on-site wastewater ponds (i.e., the wastewater holding pond and the overflow pond). The Workplan shall be prepared by a California registered engineer and shall include: (a) a design report detailing the pond specification and design criteria, and (b) a construction quality assurance (CQA) plan describing procedures for testing and observations to be conducted to ensure proper installation in conformance with the design criteria.</p> <p>Or</p> <p>If the Discharger elects not to line the ponds, it shall submit a Workplan and time schedule, for Executive Officer approval, to install/develop a groundwater monitoring well network at the Facility. At a minimum, the monitoring well network shall include one monitoring well up-gradient of the unlined ponds to establish background groundwater quality and two down-gradient monitoring wells. The Workplan can propose to use existing wells as part of the monitoring well network provided the Discharger can demonstrate the existing wells are constructed and located in a manner that can adequately evaluate the Facility's impact on underlying groundwater. The Workplan shall satisfy the information needs specified in the monitoring well installation section of Attachment C, Standard Monitoring Well Provisions for Waste Discharge Requirements. The monitoring wells shall comply with appropriate well standards as described in <i>California Well Standards Bulletin 74-90</i> (June 1991) and <i>Water Well Standards: State of California Bulletin 74-81</i> (December 1981), and any more stringent standards adopted by local agencies pursuant to Water Code section 13801.</p>	By 8 June 2020

<u>Task</u>	<u>Description</u>	<u>Due Date</u>
b.	If the Discharger elects to install groundwater monitoring wells, the Discharger shall complete the installation of the groundwater monitoring well network in accordance with the approved Workplan submitted as required by Task G.13.a and commence groundwater monitoring as specified in Monitoring and Reporting Program R5-2019-0054.	In accordance with the approved time schedule but no later than 7 June 2022
c.	If the Discharger elects to line the wastewater ponds, the Discharger shall complete the installation of the liner(s) as proposed in the approved Workplan submitted as required by Task G.13.a.	In accordance with the approved time schedule, but no later than 7 June 2023
d.	<p>Submit a Post-Construction Report for the pond liner(s) detailing installation of the approved liner(s) including: (a) as-built drawings, (b) documentation of the results on the quality assurance testing and observations, (c) certification that the liner(s) were constructed as designed, (d) results of the leak detection survey, and (e) an Operations and Maintenance plan for clean out and repair of the liner(s).</p> <p>Or</p> <p>Submit a technical report detailing the installation of the monitoring well network and results of the initial sampling event. The technical report shall meet the requirements of the Monitoring Well Installation Report Section (Section 2) of Attachment C.</p>	90 days following completion of Task 13.b or 13.c.

14. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
15. 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 work plans 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.

16. If the Central Valley Water Board determines that the discharge has a reasonable potential to cause or contribute to an exceedance of a water quality objective, or to create a condition of nuisance or pollution, this Order may be reopened for consideration of additional requirements.
17. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

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

Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions are available on the Internet (at the address below), and will be provided upon request.

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

I, PATRICK PULUPA, Executive Officer, hereby certify that the foregoing is a full true and correct copy of the Order adopted by the California Regional Water Quality Control Board on 7 June 2019.



PATRICK PULUPA, Executive Officer

Order Attachments:

- Attachment A- Site Location Map
- Attachment B- Facility Site Plan
- Attachment C- Standard Monitoring Well Provisions for WDRs
- Monitoring and Reporting Program R5-2019-0054
- Information Sheet
- Standard Provisions and Reporting Requirements (SPRRs) dated 1 March 1991



Drawing Reference:
Google Earth Map Data © 2018 Google

FACILITY SITE PLAN

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0054

FOR
B & R LIVESTOCK WASHOUT,
JASON L. THOMPSON TRUST, AND EUGENE NUNES
B&R LIVESTOCK TRUCK WASH
TULARE COUNTY



Scale 1" ≈ 160 feet

ATTACHMENT B

ORDER R5-2019-0054
ATTACHMENT C
STANDARD MONITORING WELL PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing, at a minimum, the information listed in Section 1, below. Wells may be installed after Central Valley Water Board staff approves the workplan. Upon installation, the Discharger shall submit a well installation report that includes the information contained in Section 2, below. All work plans and reports must be prepared under the direction of, and certified by, a California registered geologist or civil engineer.

**SECTION 1 - Monitoring Well Installation Workplan and
Groundwater Sampling and Analysis Plan**

The monitoring well installation work plan shall contain, at a minimum, the following information:

A. General Information:

- Purpose of the well installation project
- Brief description of local geologic and hydrogeologic conditions
- Proposed monitoring well locations and rationale for well locations
- Topographic map showing facility location, roads, and surface water bodies
- Large-scaled site map showing all existing on-site wells, proposed wells, surface water bodies and drainage courses, buildings, waste handling facilities, utilities, and major physical and man-made features

B. Drilling Details:

- Description of the on-site supervision of drilling and well installation activities
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Cuttings disposal methods
- Soil sampling intervals (if appropriate); logging methods; number and location of soil samples and rationale; and sample collection, preservation, and analytical methods

C. Monitoring Well Design (in graphic form with rationale provided in narrative form):

- Diagram of proposed well construction details
 - Borehole diameter
 - Casing and screen material, diameter, and centralizer spacing (if needed)
 - Type of well caps (bottom cap either screw on or secured with stainless steel screws)
 - Anticipated depth of well, length of well casing, and length and position of perforated interval
 - Thickness, position and composition of surface seal, sanitary seal, and sand pack
 - Anticipated screen slot size and filter pack

- D. Well Development (not to be performed until at least 48 hours after sanitary seal placement):
- Method of development to be used (i.e., surge, bail, pump, etc.)
 - Parameters to be monitored during development and record keeping technique
 - Method of determining when development is complete
 - Disposal of development water
- E. Well Survey (precision of vertical survey data shall be at least 0.01 foot):
- Identify the Licensed Land Surveyor or Civil Engineer that will perform the survey
 - Datum for survey measurements
 - List well features to be surveyed (i.e., top of casing, horizontal and vertical coordinates, etc.)
- F. Schedule for Completion of Work
- G. Appendix: Groundwater Sampling and Analysis Plan (SAP)
The Groundwater SAP, a guidance document that is referred to by individuals responsible for conducting groundwater monitoring and sampling activities, shall contain, at a minimum, a detailed written description of standard operating procedures for:
- Equipment to be used during sampling
 - Equipment decontamination procedures
 - Water level measurement procedures
 - Well purging (include a discussion of procedures to follow if three casing volumes cannot be purged)
 - Monitoring and record keeping during water level measurement and well purging (include copies of record keeping logs to be used)
 - Purge water disposal
 - Analytical methods and required reporting limits
 - Sample containers and preservatives
 - Sampling
 - General sampling techniques
 - Record keeping during sampling (include copies of record keeping logs to be used)
 - QA/QC samples
 - Chain of Custody
 - Sample handling and transport

SECTION 2 - Monitoring Well Installation Report

The monitoring well installation report must provide the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved work plan.

A. General Information:

- Purpose of the well installation project
- Number of monitoring wells installed and identifying label(s) for each
- Brief description of geologic and hydrogeologic conditions encountered during well installation
- Topographic map showing facility location, roads, surface water bodies
- Large-scaled site map showing all previously existing wells, newly installed wells, surface water bodies and drainage courses, buildings, waste handling facilities, utilities, and other major physical and man-made features.

B. Drilling Details (in narrative and/or graphic form):

- On-site supervision of drilling and well installation activities
- Drilling contractor and driller's name
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Well boring log (provide for each well)
 - Well boring number and date drilled
 - Borehole diameter and total depth
 - Total depth of open hole (i.e., total depth drilled if no caving or back-grouting occurs)
 - Depth to first encountered groundwater and stabilized groundwater depth
 - Detailed description of soils encountered, using the Unified Soil Classification System

C. Well Construction Details (provide for each well):

Well construction diagram including:

- Monitoring well number and date constructed
- Casing and screen material, diameter, and centralizer spacing (if needed)
- Length of well casing
- Length and position of slotted casing and size of perforations
- Thickness, position and composition of surface seal, sanitary seal, and sand pack
- Type of well caps (bottom cap either screw on or secured with stainless steel screws)

- E. Well Development (provide for each well):
- Date(s) and method of development
 - How well development completion was determined
 - Volume of water purged from well and method of development water disposal
- F. Well Survey (provide for each well):
- Reference elevation at the top rim of the well casing with the cap removed (feet above mean sea level to within 0.01 foot)
 - Ground surface elevation (feet above mean sea level to within 0.01 foot)
 - Horizontal geodetic location, where the point of beginning shall be described by the California State Plane Coordinate System, 1983 datum, or acceptable alternative (provide rationale)
 - Present the well survey report data in a table
- G. Water Sampling:
- | | |
|---|-----------------------------------|
| Date(s) of sampling | Sample identification |
| How well was purged | Analytical methods used |
| How many well volumes purged | Laboratory analytical data sheets |
| Levels of temperature, EC, and pH at stabilization | Water level elevation(s) |
| Sample collection, handling, and preservation methods | Groundwater contour map |
- H. Soil Sampling (if applicable):
- Date(s) of sampling
 - Sample collection, handling, and preservation methods
 - Sample identification
 - Analytical methods used
 - Laboratory analytical data sheets
 - Present soil sampling data in a table
- I. Well Completion Report(s) (as defined in California Water Code §13751). Blank forms are available from California Department of Water Resources' website www.water.ca.gov. Submit this section under separate cover.
- J. Appendix - include, at a minimum, copies of the following:
- County-issued well construction permits
 - Registered engineer or licensed surveyor's report and field notes
 - Field notes from well development

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2019-0054

FOR
B & R LIVESTOCK WASHOUT,
JASON L. THOMPSON TRUST, AND EUGENE NUNES
B & R LIVESTOCK TRUCK WASH
TULARE COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to Water Code section 13267, and establishes monitoring and reporting requirements for B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes (or Discharger) regarding the operation of the B & R livestock truck wash facility (Facility) described in Waste Discharge Requirements (WDRs) R5-2019-0054. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts or the Executive Officer issues a revised MRP.

Section 13267, subsection (b)(1) of the California Water Code states:

[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 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.

B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes, either own/operate the Facility or the land application area (LAA) subject to the Waste Discharge Requirements (WDRs) cited herein, and the monitoring reports are necessary to determine compliance with the WDRs.

Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

Pursuant to Water Code section 13268, subdivisions (a)(1) and (b)(2), failure to furnish the reports required under this MRP (and the operative WDRs), or falsifying information submitted in such reports, constitutes a misdemeanor and may result in the imposition of up to \$1,000 in administrative liability for each day of non-compliance.

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

A. GENERAL MONITORING REQUIREMENTS

1. Flow Monitoring

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

2. Monitoring and Sampling Locations

Samples shall be obtained at the monitoring points specified in this MRP. The Central Valley Water Board Executive Officer shall approve any proposed changes to sampling locations prior to implementation of the change. The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Location Name	Description
EFF-001	A location where a representative sample of the wastewater in the wastewater holding pond can be obtained. Samples shall be collected opposite the pond inlet.
PND-001	Wastewater Holding Pond.
PND-002	Overflow Pond.
SPL-001	A location where a representative sample of the supply water for the Facility can be obtained.
MW-1 through MW-X	Groundwater Monitoring Wells.
LAA-001	Land Application Area Field #1.
LAA-002	Land Application Area Field #2.
LAA-003	Land Application Area Field #3.
LAA-004	Land Application Area Field #4.

3. Sampling and Sample Analysis

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

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

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

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

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

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

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

If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency. This monitoring program shall remain in effect unless and until a revised MRP is issued.

B. SPECIFIC MONITORING REQUIREMENTS

1. Effluent Monitoring (EFF-001)

Effluent samples shall be collected opposite the inlet to the wastewater holding pond. Samples shall be representative of the nature of the discharge. Time of collection of the samples shall be recorded. Effluent monitoring shall include at least the following:

Table 1. Effluent Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Daily	Flow	gpd	Metered ¹
Weekly	pH	pH Units	Grab
Weekly	Electrical Conductivity (EC)	umhos/cm	Grab
Monthly	Biochemical Oxygen Demand (BOD)	mg/L	Grab
Monthly	Total Dissolved Solids (TDS)	mg/L	Grab
Monthly	Fixed Dissolved Solids (FDS)	mg/L	Grab
Monthly	Nitrate as Nitrogen	mg/L	Grab
Monthly	Nitrite as Nitrogen	mg/L	Grab
Monthly	Total Kjeldahl Nitrogen (TKN)	mg/L	Grab
Monthly	Total Nitrogen	mg/L	Calculated
Annually ²	General Minerals ³	Various	Grab
Annually ²	TPH as Gasoline	mg/L	Grab
Annually ²	TPH as Diesel	mg/L	Grab

Frequency	Constituent/Parameter	Units	Sample Type
Annually ²	Volatile Organic Compounds ⁴	mg/L	Grab
Annually ²	Metals ⁵	various	Grab

gpd = gallons per day, **mg/L** = milligrams per liter, **umhos/cm** = micromohs per centimeter;

TPH = Total Petroleum Hydrocarbons

- 1 Flow may be metered or estimated based on water supply reading or other approved method as established by Provision G.10 of WDRs R5-2019-0054.
- 2 Samples shall be collected annually in October, unless otherwise specified.
- 3 General mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness (as CaCO₃), iron, magnesium, manganese, nitrate as nitrogen, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance).
- 4 Individual volatile organic chemical concentrations shall be reported by EPA Method 8260B or equivalent.
- 5 Metals include: arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. Samples collected for metals shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis

2. Pond Monitoring (PND-001 and PND-002)

A permanent marker (e.g., staff gages) shall be placed in all ponds used to contain wastewater. The marker shall have calibrations indicating water level at the design capacity and available operational freeboard. Pond monitoring shall include at least the following:

Table 2. Pond Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Weekly	Freeboard	Feet ¹	Measurement
Weekly	Dissolved Oxygen (DO) ^{2,3}	mg/L	Grab
Monthly	Berm Condition	---	Observation
Monthly	Liner Condition ⁴	---	Observation

1. Measurement shall be in feet below the top of the berm to the water surface.
2. DO shall be monitored between 8:00 am and 10:00 am and shall be taken opposite the pond inlet approximately one foot below the pond surface. If there is less than one foot of water in the pond no sample shall be collected and the reason noted in the applicable monitoring report.
3. If the DO in the upper one foot of any pond used to contain wastewater is below 1.0 mg/L for more than three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and include a specific plan to resolve the issue.
4. If installed.

The Discharger shall inspect the condition of the ponds monthly and record visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether grease, dead algae, vegetation, scum, or debris are accumulating on the pond surface and their location; whether burrowing animals or insects are present; and

the color of the water in the pond (e.g., dark green, dull green, yellow, tan, brown, etc.). A summary of these entries made in a log shall be included in the subsequent monitoring report.

3. Source Water Monitoring (SPL-001)

The Discharger shall monitor the supply well for the Facility at SPL-001 and analyze for the constituents specified below. Source water monitoring shall include the following:

Table 3. Source Water Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Quarterly ¹	EC ²	umhos/cm	Grab
Annually	General Minerals ³	various	Grab

umhos/cm = micromhos per centimeter

- ¹ Samples to be collected in January, April, July, and October.
- ² If the source water is from more than one source, the electrical conductivity shall be reported as a weighted average and include copies of supporting calculations.
- ³ General mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness (as CaCO₃), iron, magnesium, manganese, nitrate as nitrogen, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance).

4. Groundwater Monitoring

The Discharger shall conduct the groundwater monitoring specified in this section if a groundwater monitoring well network is installed/developed at the Facility per Provision G.13 of the WDRs.

After measuring water levels and prior to collecting samples, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Purging shall continue until pH, EC, and turbidity have stabilized. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 well casing volumes.

Upon installation of its monitoring well network (if required), the Discharger shall monitor the wells in its monitoring well network and any subsequent additional wells as follows:

Table 4. Groundwater Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Quarterly ³	Depth-to-Water	Feet ¹	Measured
Quarterly ³	Groundwater Elevation	Feet ^{1,2}	Calculated
Quarterly ³	pH	pH units	Grab
Quarterly ³	Electrical Conductivity (EC)	umhos/cm	Grab
Quarterly ³	Nitrate as Nitrogen	mg/L	Grab
Quarterly ³	Total Kjeldahl Nitrogen (TKN)	mg/L	Grab
Annually ⁴	General Minerals ⁵	various	Grab

umhos/cm = micromhos per centimeter; **mg/L** = milligrams per liter

- ¹ To the nearest hundredth foot.
- ² Groundwater elevation shall be calculated based on depth-to-water measurements from a surveyed measuring point.
- ³ Samples to be collected in January, April, July, and October.
- ⁴ Samples to be collected in October.
- ⁵ General mineral analysis shall include, alkalinity (as CaCO₃), bicarbonate (as CaCO₃), boron, calcium, carbonate (as CaCO₃), chloride, hardness (as CaCO₃), iron, magnesium, manganese, nitrate as nitrogen, phosphate, potassium, sodium, sulfate, total dissolved solids, and include verification that the analysis is complete (i.e., cation/anion balance).

The Discharger shall maintain its groundwater monitoring well network. If a monitoring well(s) is dry for more than four consecutive sampling events or is damaged, the Discharger shall submit a workplan and proposed time schedule to replace the monitoring well(s). The monitoring well(s) shall be replaced following Executive Officer approval of the workplan. Once installed, all new monitoring wells shall be added to the existing groundwater monitoring well network.

5. Land Application Area Monitoring (LAA-001 through LAA-004)

The Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation area within the LAA each day when water is applied. The data shall be presented in both graphical (map) and tabular format and shall include at least the following:

Table 5. Land Application Area Monitoring

Frequency	Constituent/Parameter	Units	Sample Type
Daily ¹	Application Area/Field	Acres	Calculated
Daily ¹	Wastewater Flow	Gallons	Metered
Daily ¹	Wastewater Loading	Inches/day	Calculated
Annually	Total Wastewater Loading	Inches/(acre-year)	Calculated
BOD ₅ Loading ³			
Cycle	Cycle Average ⁴	lbs/acre/day	Calculated
Nitrogen Loading ³			

Annually	From Wastewater	lbs/acre/year	Calculated
Annually	From Chemical Fertilizers and Sludge/Manure Solids	lbs/acre/year	Calculated
Salt Loading³			
Annually	From Wastewater	lbs/acre/year	Calculated

¹ When wastewater is applied to the LAA.

² National Weather Service or CIMIS data from the nearest weather station is acceptable.

³ The BOD₅, salt, and nitrogen loading rates shall be calculated as specified in Section C of this MRP.

⁴ A cycle average is calculated by taking the pounds of BOD₅ applied to the LAA in a given period, divided by the sum of the total days wastewater was applied plus the number of days of rest (no application of wastewater). See Section C of this MRP for the formula to calculate the cycle average loading rate.

In addition, the Discharger shall inspect the LAA at least once a month. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in the log book and included as part of the quarterly monitoring report.

C. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

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

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

Program: Non-15,
 WDID: 5C54NC00363,
 Facility: B & R Livestock Washout
 Order: R5-2019-0054
 County: Tulare
 Place ID: 856455

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of the WDRs and this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger have previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. Pursuant to Section B.3 of the Standard Provisions and General Reporting

Requirements, the transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

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

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

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

1. Quarterly Monitoring Reports

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

1. Results of **Effluent and Pond Monitoring** as specified in Sections B.1 and B.2, including calculation of maximum daily and monthly average daily flow for each month of the quarter.
2. Results of the **Source Water Monitoring** as specified in Section B.3. If multiple sources are used, the Discharger shall calculate the flow-weighted average concentration for each constituent monitored. Results must include supporting calculations.

3. Results of the **Groundwater Monitoring** as specified in Section B.4 (if required):
 - a. Results of the groundwater monitoring. If there is insufficient water in the well(s) for sampling the monitoring well(s) shall be reported as dry for that quarter.
 - b. For each monitoring well, a table showing groundwater depth, elevation, and constituent concentrations for the five previous years, up to the present quarter.
 - c. A groundwater contour map based on groundwater elevations for that quarter. The map shall show the gradient and direction of groundwater flow. The map shall also include locations of all monitoring wells and wastewater storage and application areas.
4. Results of the **LAA Monitoring** specified in Section B.5, including:
 - a. A summary of the inspection activities conducted for the LAA.
 - b. Calculated cycle average BOD₅ loading for each discrete irrigation area within the LAA using the following formula:

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

Where:	<i>M</i>	=	Mass of BOD ₅ applied to an LAA in lbs/ac/day
	<i>C</i>	=	Concentration of BOD ₅ in mg/L based on the average concentration for the Quarter
	<i>V</i>	=	Total volume of wastewater applied to discrete LAA fields during the irrigation cycle, in millions of gallons
	<i>A</i>	=	Area of the LAA irrigated in acres
	<i>T</i>	=	Include when calculating the cycle average loading rate. Irrigation cycle length in days (from the first day wastewater is applied to the last day of the drying time)
	8.345	=	Unit conversion factor.

2. Fourth Quarter Monitoring Reports

In addition to the above, the Discharger shall submit a Fourth Quarter Monitoring report on **February 1st of each year**, and shall include the following additional information:

1. The total and average daily flow discharged to the wastewater holding pond for each month and a comparison with the total annual flow sent to the land application area (LAA).
2. The names and general responsibilities of all persons in charge of wastewater management.
3. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.
4. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4).
5. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.
6. A discussion and summary of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.
7. For the LAA, a chronological log of dates for fertilizer, sludge and/or solids applications.
8. Calculate the annual mass loading of total nitrogen and salts from the wastewater for each discrete irrigation area within the LAA using the following formula;

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

Where: M = Mass of total nitrogen (TN) or fixed dissolved solids (FDS) applied to a LAA in lbs/ac/year
 C = Concentration of TN or FDS in mg/L based on the average concentration for the calendar year
 V = Total volume of wastewater applied to discrete LAA fields during the calendar year, in millions of gallons
 A = Area of the LAA irrigated in acres

- 8.345 = Unit conversion factor.
9. A summary of the disposal of manure solids and sludge removed from the manure storage area and the wastewater ponds during the calendar year.
 10. An annual update to the Salinity Reduction Study Work Plan (as required by Provision G.12 of WDRs Order R5-2019-0054).
 11. A statement of when the Facility's Operations and Maintenance Manual was last reviewed for adequacy and a description of any changes made during the calendar year.

The Discharger shall implement the above monitoring program in the first month following adoption of this MRP.

I, PATRICK PULUPA, Executive Officer, hereby certify that the foregoing is a full true and correct copy of the Monitoring and Reporting Program adopted by the California Regional Water Quality Control Board on 7 June 2019.



PATRICK PULUPA, Executive Officer

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CBOD	Carbonaceous BOD
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-Hour Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots.
Daily	Samples shall be collected at least every day.
Twice Weekly	Samples shall be collected at least twice per week on non-consecutive days.
Weekly.....	Samples shall be collected at least once per week.
2/Month	Samples shall be collected at least twice per month during non-consecutive weeks.
Monthly	Samples shall be collected at least once per month.
Bimonthly.....	Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months.
Quarterly.....	Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October.
Semiannually	Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in April and October.
Annually.....	Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October.
mg/L	Milligrams per liter
mL/L	milliliters [of solids] per liter
ug/L	Micrograms per liter
umhos/cm.....	Micromhos per centimeter
mgd	Million gallons per day
MPN/100 mL.....	Most probable number [of organisms] per 100 milliliters

WASTE DISCHARGE REQUIREMENTS ORDER R5-2019-0054
B & R LIVESTOCK WASHOUT,
JASON L. THOMPSON TRUST, AND EUGENE NUNES
B & R LIVESTOCK TRUCK WASH
TULARE COUNTY

INFORMATION SHEET

Background

B & R Livestock Washout operates a livestock truck wash facility (Facility), owned by the Jason L. Thompson Trust, at 9602 Avenue 264 in Tulare County, approximately three miles south of Visalia. The Facility has not previously been regulated by waste discharge requirements (WDRs) from the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board).

On 7 November 2001, the Central Valley Water Board received a Report of Waste Discharge (RWD) for the Akins Dairy Truck Wash (previous operator/owner of the Facility) in Tulare County.

On 26 September 2010 an amended RWD for expansion of the Facility and its operations was submitted on behalf of Akins Dairy Truck Wash by 4Creeks Civil Engineering and Land Surveying (4Creeks). The RWD was signed and stamped by David De Groot, RCE No. 70992 with 4Creeks. The expansion called for construction of two additional wash bays and increasing operations to handle washing of up to 20 livestock trailers per day or 100 trailers per week.

On 15 December 2016, 4Creeks submitted an amended RWD to increase flows at the Facility and allow washing of an additional five small commodity haulers per day. Supplemental information in support of the RWD was submitted on 1 December 2017. The supplemental information included a signed Form 200 with a change of name and ownership from Akins Dairy Truck Wash to B & R Livestock Washout, and a Nutrient Management Plan (signed and stamped by Nathan Heeringa a Certified Professional Agronomist with Innovative Ag Services, LLC) for the discharge of wastewater to a land application area.

On 6 March 2019, Central Valley Water Board staff inspected the Facility and collected additional grab samples of the wastewater from the wet well and the wastewater holding pond.

Facility and Discharge

The main operation of the Facility consists of washing out livestock trailers used to transport various livestock, including cattle, sheep, goats, etc. In addition, the Facility also washes small commodity haulers that are used to transport grains, cattle feed, gypsum, saw dust, bark, hay, and some fertilizers.

At the Facility, trailers are driven onto the wash bays where pressure washers are used to wash out the trailers. Waste streams generated at the Facility are primarily from wash water used to clean out the trailers. No engine cleaning, brake cleaning, or washing of other commercial vehicles takes place at the Facility. In addition, no soaps or solvents are added to the wash water. The wash water drains to sumps at the bottom of the wash bays. Concrete drain lines carry the wash water to a concrete wet well, which collects the wash water from all four wash bays. From the wet well the wash water is pumped to a mechanical separator to separate out as much of the manure solids as possible before draining to an on-site wastewater holding pond. According to B & R Livestock Washout, there is an overflow pond adjacent to the main wastewater holding pond, which provides additional wastewater and storm water storage during wet weather. From the holding pond, wastewater can be pumped out to the land application area (LAA) where it is used to supplement irrigation water on approximately 149 acres of farmland owned by the Jason L. Thompson Trust and Eugene Nunes.

For the purposes of this Order, B & R Livestock Washout, Jason L. Thompson Trust, and Eugene Nunes (owner of a portion of the LAA) will be collectively and jointly referred to as "Discharger".

Soil and Groundwater Conditions

Soils in the vicinity of the Facility and LAA are Nord Fine Sandy Loam and Tagus Loam, according to the Web Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service.

The Discharger does not have a groundwater monitoring well network in the vicinity of the Facility.

According to the *Lines of Equal Elevation of Groundwater* map published by the Department of Water Resources in Spring 2012 and Spring 2016, first encountered groundwater in the vicinity of the Facility occurred at about 100 feet below ground surface (bgs) in Spring 2012 and at about 180 feet bgs in Spring 2016. Regional groundwater flow is to the southwest. Historical groundwater data from nearby wells within a two-mile radius, indicates that shallow groundwater in the area is of good quality with respect to EC, chloride, and nitrate.

Basin Plan

The *Water Quality Control Plan for the Tulare Lake Basin*, Third Edition (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, 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(a), waste discharge requirements must implement the Basin Plan. The Basin Plan contains effluent limits of source water EC plus 500 umhos/cm and, for

discharges to areas that may recharge to good quality groundwater, a maximum EC of 1,000 $\mu\text{mhos/cm}$. The Facility is in an area that appears to have good quality groundwater with respect to EC, with EC less than 500 $\mu\text{mhos/cm}$.

With a source water EC of about 217 $\mu\text{mhos/cm}$, the Facility's discharge with an EC of about 4,600 $\mu\text{mhos/cm}$ cannot comply with the Basin Plan limits for EC of source water EC plus 500 $\mu\text{mhos/cm}$ (717 $\mu\text{mhos/cm}$) and 1,000 $\mu\text{mhos/cm}$, maximum. In addition, given the limited data available for the Facility it is unknown if the discharge has the potential to cause groundwater to exceed water quality objectives (WQOs) with respect to individual salinity constituents. This Order does not include salinity limits in anticipation of the CV-SALTS initiative. However, to address the Basin Plan salinity requirements, this Order requires extensive monitoring of the discharge for salinity constituents, including total and fixed dissolved solids to determine the nature of salinity constituents in the discharge and includes a provision requiring the Discharger to prepare and implement a Salinity Reduction Study Work Plan.

Monitoring Requirements

Section 13267 of the Water Code authorizes the Central Valley Water Board to require the Discharger to submit monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State. The proposed Order includes effluent monitoring, pond monitoring, source water, land application monitoring, and potentially groundwater monitoring. This monitoring is necessary to characterize the discharge and evaluate compliance with effluent limitations and specifications prescribed by this Order.

CV-SALTS Regulatory Considerations

The Central Valley Water Board adopted Basin Plan amendments 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. These programs once effective, could change how the Central Valley Water Board permits discharges of salt and nitrate. The Salinity Control Program currently being developed would subject dischargers that do not meet stringent salinity numeric values (700 $\mu\text{S/cm}$ EC as a monthly average to protect the AGR beneficial use and 900 $\mu\text{S/cm}$ EC as an annual average to protect the MUN beneficial use) to performance-based salinity requirements, and would require these dischargers to participate in a basin-wide Prioritization and Optimization Study to develop a long-term strategy for addressing salinity accumulation in the Central Valley.

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 Board anticipates that the CV-SALTS initiative will result in regulatory changes that will be implemented through conditional prohibitions and modifications to many WDRs region-wide, including the WDRs that regulate

discharges from the Plant. More information regarding this regulatory planning process can be found at the following link:
https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/

Reopener

The conditions of discharge in the proposed 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. It may be appropriate to reopen the Order if new technical information is received or if applicable laws and regulations change.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

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

Waste Discharge to Land

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

B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at **(916) 464-3291** [*Note: Current phone numbers for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.*] as soon as it or its agents

Waste Discharge to Land

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

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

This plan shall:

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

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

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

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 internet at http://www.swrcb.ca.gov/rwqcb5/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

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

Record of monitoring information shall include:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7. Annual Pretreatment Report Requirements:

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

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

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

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

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

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

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

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

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

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

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

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

and

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

Revised January 2004 to update addresses and phone numbers