

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER **R5-2013-XXXX**

WASTE DISCHARGE REQUIREMENTS

FOR  
OLSON MEAT COMPANY, INC.  
MEAT PACKING FACILITY  
GLENN COUNTY

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

1. Olson Meat Company, a California corporation, operates a slaughterhouse and swine processing facility on 40 acres of agricultural land outside of, Orland, Glenn County (hereby referred to as Discharger).
2. The swine processing facility (hereafter Facility) is located at 7305 Cutler Avenue, Orland, CA 95963. This Facility is located on the south side of Cutler Avenue (County Road 4), north of Capay Avenue (County Road 7), on the west side of 5th Avenue (County Road S), east of 6th Avenue (County Road 202), within the area of Capay, in the unincorporated area of Glenn County, California., Latitude 39° 47' 17" and Longitude -122° 6' 24", Foster Island 7.5-minute Quadrangle, T22N, R2W, Section 5, as shown on [Attachment A](#), which is attached hereto and made part of this Order by reference.
3. Olson Meat Company commenced operation at the Facility in 2002 for pork production. On commencing operation, the Discharger implemented several mitigation measures included the use of wastewater for irrigation, and the construction of eleven (11) settling/treatment ponds.
4. The Discharger submitted a Report of Waste Discharge (RWD) dated 25 March 2010. The Central Valley Water Board reviewed that report and requested additional information. A revised report was received 2 August 2010. At the request of the Central Valley Water Board, the Discharger installed groundwater monitoring wells in August of 2011.
5. This Facility has not previously been regulated by the Central Valley Water Board. The purpose of this Order is to prescribe requirements for the Discharger that are protective of the waters of the state as it pertains to the facilities existing wastewater discharge.

**Existing Facility and Discharge**

6. The Facility is a slaughterhouse and swine processing facility. [Attachment B](#), which is attached hereto and made a part of this Order by reference, depicts a plan view of the Facility and the land application areas. About 10,630 gallons of process wastewater is generated by the facility daily.

7. For purposes of this Order, the term "Treatment System" shall refer to the wastewater treatment system, which consists of collection drains, screens, concrete collection pits, wastewater storage ponds, and associated irrigation piping and land application area. [Attachment C](#) of this Order, which is attached hereto and made part of this Order by reference, depicts a process flow diagram of the Treatment System.
8. Swine are kept in holding pens for only a few hours to provide a daily supply of animals for processing. The pens are sources of wastewater from pen washing, drinking water spillage, and washing of live swine. Manure in the pens is washed down and collected in the concrete pits. After the swine are killed the carcasses are rapidly bled out and the blood is collected in floor drains that flow into two concrete storage pits. The carcasses are then conveyed to the scald tanks. There the outer skin and hair is removed, all skin and organs are either: sold, sent to a rendering plant, and/or disposed of at a Class III solid waste disposal facility. The swine carcasses are then given a final rinse prior to refrigeration.
9. Federal regulations require that the carcass processing areas be cleaned at least every eight hours to maintain sanitary conditions. During cleanup, equipment, walls and floors are rinsed and then scrubbed with detergents and sanitizing agents. Phosphorus based detergents are commonly used as are chlorine solutions and other bactericidal compounds.
10. Wastewater generated from the various process areas is transferred via a drainage collection system in the floor. The wastewater flows through the floor drains and is collected in two large concrete pits behind the facility before being discharged into the first of eleven ponds operated in series. The wastewater cascades by gravity from one shallow pond to the next, which allows for separation of solids and aeration to occur. The wastewater treatment ponds are earthen bermed structures with a maximum depth of 4 feet. The shallow depth promotes aeration of the wastewater and allows the Discharger to easily clean the sludge from the pond bottoms each summer. Wastewater from pond 11 is then blended with irrigation water and applied to 30 acres of grassland used for animal fodder/grazing. The cumulative volume of the 11 ponds will contain approximately 115 days of discharge from the plant, maintaining a two (2ft) freeboard.
11. Very little manure collects in the pens because swine arrive in the morning and are not feed prior to processing. All swine that arrive at the facility in the morning typically remain in the pens less than 3 hours prior to processing. The small amount of manure that does collect in the pens is hosed down into a drain which flows to the two concrete pits before entering the treatment pond system.

12. Monitoring data collected on 14 January 2010 and 11 May 2010 indicated the wastewater concentrations for constituents of concern as follows:

<b>Constituent</b>	<b>Units</b>	<b>Pond 1 Effluent</b>	<b>Pond 11 Effluent</b>
Average Daily Flow	mgd	0.012	0.012
BOD	mg/L	2,520*	196
Nitrate (as Nitrogen)	mg/L	<0.4	<0.4
Ammonia (as Nitrogen)	mg/L	252*	322
TKN	mg/L	509*	373
TOC	mg/L	592	57.6
EC	µmhos/cm	4,740*	2,080*
FDS	mg/L	1,190	662*
Chloride	mg/L	255	128*
TDS	mg/L	2,960	904*
* = Based on samples collected on 5/11/2010			

13. The average BOD removal efficiency based on this data was 94%. Total nitrogen analysis indicates a 49% average removal efficiency and fixed dissolved solids concentrations in the effluent from Pond 11 were about 44% lower than the influent to Pond 1 based on the May data. It should be noted that this is a limited data set and additional monitoring will be required to establish a reliable and adequate data set.
14. Domestic wastewater is discharged separately to a septic tank/leachfield system under permit regulated by Glenn County.
15. Wastewater from the Facility is discharged to land owned by the Discharger. The land application area consists of approximately 30 acres which has been planted with Ryegrass, Bermuda grass, and clover. The acreage is grazed by 70 head of cows for feed/fodder. The acreage is fenced and the herd is managed to limit overgrazing.
16. The treated wastewater is blended with irrigation water at the north end of the field during the flood irrigation cycle. According to the RWD, backflow prevention devices were placed on all irrigation wells to prevent wastewater from traveling into the wells.
17. The estimated annual salt load to the Land application area from the wastewater has been calculated to be 522 lbs/acre/year based on a 662 mg/L fixed dissolved solids (FDS) concentration from Pond #11 measured in January 2010.

18. The RWD estimated BOD and nitrogen loading rates for the 30 acre Land Application Area to be 156 lbs/acre/year for BOD and 285 lbs/acre/year for Nitrogen. These calculations were based on an average daily discharge flow of 0.012 mgd and BOD<sub>5</sub> and nitrogen concentrations of 196 mg/L and 373.4 mg/L, respectively from samples collected in January and May 2010.

### Site-Specific Conditions

19. The Facility is in an arid climate characterized by hot dry summers and mild winters. The rainy season generally extends from November through March. Occasional rains occur during the spring and fall months, but summer months are dry. Average annual precipitation and evaporation in the vicinity of the Facility and the Land Application Area are about 17.9 inches and 40.45 inches, respectively, according to information published by the California Department of Water Resources and California Irrigation Management Information System.
20. Storm water at the Facility is kept separate from the process wastewater areas as all processes that generate wastewater are housed within the facility's main building. Only the swine holding area receives rainfall, that water is captured and sent to the treatment ponds. All ponds are bermed to prevent storm water entry into the treatment pond system.
21. According to Federal Emergency Management Agency (FEMA) maps, the Facility and Land Application Area lay outside of the 500-year flood zone (0.2% annual chance) or in an area in which flood hazards are undetermined, but possible.
22. Land use in the vicinity of the Facility and the Land Application Area is primarily agricultural. Primary crops grown in the area include corn, cotton, and alfalfa. Other crops such as walnuts, tomatoes, and almonds are also grown in the area according to DWR land use data for Glenn County. Irrigation water is supplied primarily by groundwater.

### Groundwater Considerations

23. Regional groundwater in the area is encountered at about 50 feet below ground surface (bgs) and flows eastward toward the Sacramento River, according to information in *Lines of Equal Elevation of Water in Wells in Unconfined Aquifer*, published by Department of Water Resources, Fall 2011.
24. Source water for the Facility is provided by three onsite groundwater wells ranging in depth from 200 to 420 feet. Source water characteristics for the Facility are shown in the table below:

Parameter	Basin Plan Water Quality Objective	Groundwater Monitoring Wells	Supply Well <sup>2</sup>	Irrigation Well <sup>3</sup>	DWR Well <sup>4</sup>		DWR Well <sup>5</sup>
		Ave	Max	Max	Ave	Max	Max
EC (umhos/cm)	900 <sup>1</sup>	763	na	na	na	673	na
TDS (mg/L)	500 <sup>1</sup>	432	385	353	375	389	459
FDS (mg/L)	none	na	na	na	na	na	na
Sulfate (mg/L)	250 <sup>1</sup>	na	na	na	53	56	53
Chloride (mg/L)	106 <sup>1</sup>	46.5	na	na	39	40	62
Nitrate as N (mg/L)	10	14.8 <sup>6</sup>	7.39	0.57	12.1	15	12
Notes: <sup>1</sup> – Secondary MCL <sup>2</sup> – Well is 200 feet deep <sup>3</sup> – Well is 420 feet deep <sup>4</sup> – Well 22N02W04C002M – sampled in 2000 and 2006, approximately 1 mile NE of facility <sup>5</sup> – Well 22N02W03A004M – sampled in 2000, 340 feet deep, approximately 2.5 miles NE of facility <sup>6</sup> – Background well had 14.0 mg/L nitrate							

25. Currently there is a groundwater-monitoring network at the Facility that consists of three (3) shallow wells. Groundwater sampling, direction and flow in the shallow aquifer have been inconsistent and a better understanding of the local hydrogeology is necessary. Further investigation of the facility’s groundwater characteristics is required under Item #15 of the Section F. Provisions of this permit. [Attachment D](#) contains locations of the existing groundwater monitoring wells.

**Basin Plan, Beneficial Uses and Regulatory Considerations**

26. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (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 Resources Control Board. Pursuant to Water Code section 13263(a), WDRs must implement the Basin Plan.
27. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, requires waters designated as domestic or municipal supply to meet the MCLs specified in Title 22, California Code of Regulations. The Basin Plan’s incorporation of

these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. 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.

28. The Basin Plan establishes numerical and narrative water quality objectives for surface water and groundwater within the basin. Numerical water quality objectives are maximum limits directly applicable to the protection of designated beneficial uses of the water. The Basin Plan requires that the Central Valley Water Board, on a case-by-case basis, follow specified procedures to determine maximum numerical limitations that apply the narrative objectives when it adopts waste discharge requirements.
29. Title 22 in Table 64449 B establishes recommended, upper, and short term ranges for EC, TDS, chloride, and sulfate. The recommended and upper ranges are 900  $\mu\text{mhos/cm}$  and 1,600  $\mu\text{mhos/cm}$  for EC, 500 mg/L and 1,000 mg/L for TDS, and 250 mg/L and 500 mg/L for chloride and sulfate.
30. The list of crops in Finding 22 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge, but is representative. Based on climate, and soil type, it is not likely that crops sensitive to salt and boron will be capable of being grown in the area; however, further information regarding the types of crops grown, background groundwater conditions, and overall effluent quality is necessary to make a final determination.

### **Antidegradation Analysis**

31. State Water Resources Control Board Resolution 68-16 (*Policy with Respect to Maintaining High Quality Waters of the State*) (hereafter the "Antidegradation Policy") prohibits degradation of high-quality groundwater unless it has been shown that:
  - a. The degradation is consistent with the maximum benefit to the people of the state.
  - b. The degradation will not unreasonably affect present and anticipated future beneficial uses.
  - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and
  - d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.
32. Limited degradation of groundwater by some of the typical waste constituents associated with discharges from a meatpacking facility, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The economic prosperity of valley communities and associated industry is of

maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

33. There are no other additions of nitrogen to the land application field from crop amendments. However, based on the limited volume of the discharge, the character of the waste, the direct application of wastewater to the land application area, the use of supplemental irrigation water, and site-specific soil and groundwater conditions, the discharge has minimal potential to degrade groundwater quality. However, it is still appropriate to require that the Discharger not allow the salinity of the wastewater to increase. In addition, the Discharger is required to calculate and report loading rates monthly for BOD and annually for nitrogen and inorganic TDS.
34. Any degradation that might occur due the application of wastewater to the land application areas cannot be monitored separately from degradation due to regular agricultural practices. All wells sampled in the area up to 2 miles away indicated nitrates slightly above the water quality objective of 10 mg/L. The loading rates calculated for Nitrogen (285 lb/ac/yr), based on 2 sampling events, were slightly above the crop uptake of 200 lbs/acre/yr of nitrogen for a Risk Category 1, in accordance with the Manual of Good Practice for Land Application of Food Processing/Rinse Water (the Food Processing Manual), published by the California League of Food Processors, which measures the acceptability of wastewater application according to risk categories. Risk Category 1 is the lowest Risk Category that is indistinguishable from good farming operations. It should be noted that although the Food Processing Manual has not been subject to scientific peer review, the Central Valley Water Board was consulted during its preparation. Compliance with the guidelines in the Food Processing Manual demonstrates that the Discharger is implementing treatment and control measures consistent with those promoted by the industry to limit the potential for groundwater degradation. The Discharger has indicated that they are in the process of removing the blood out of the waste stream as a step to reduce nitrogen levels in the effluent. Additionally, the Discharger is also evaluating additional irrigation land for additional land application area if warranted.
35. The Discharger submitted an simple anti-degradation analysis for constituents of concern that have the potential to degrade groundwater as a result of the discharge include salts (primarily EC, sodium, chloride, and nitrate), nutrients, and coliform organisms, based on the limited anti-degradation analysis submitted. This Order requires monitoring of wastewater, groundwater, the onsite water supply, irrigation water supply, land application area, and solids handling to ensure that the degradation allowed by this Order is consistent with Resolution 68-16.
36. Based on limited sampling, it appears that groundwater has been impacted in the area of the facility (electrical conductivity and nitrates), but these impacts do not appear to be due to the operation of the Facility. For example, nitrate concentrations in the shallow wells exceed the primary MCL, but these concentrations do not appear to be a result of the discharge, as these concentrations are similar to those in upgradient wells. Nonetheless,

this Order requires the Discharger to perform additional groundwater investigation to assess possible impacts from the discharge and to assess general groundwater quality.

37. The Discharger currently provides treatment or control of the discharge that incorporates:
  - a. Limiting the amount of time that the swine spend in the holding pen area.
  - b. Non-feeding of the swine while being held for processing.
  - c. An eleven pond passive treatment system that can contain up to 115 days of the facility's wastewater discharge.
  - d. Blending of wastewater with irrigation water to meet the agronomic requirements for crop growth or other measures to ensure even distribution of wastewater over the area irrigated.

In addition, this Order requires that the Discharger develop and implement a Salinity Evaluation and Minimization Plan and a Wastewater and Nutrient Management Plan that will describe all control measures taken to reduce the salinity of the discharge. This plan will also identify any additional methods that could be used to further reduce the salinity of the discharge to the maximum extent feasible. The Board finds that these treatment and control measures are equivalent or better than those employed by similarly-situated dischargers, and that these measures may be considered "BPTC" for this discharge. This Order also establishes operational requirements, limitations, and prohibitions that will ensure that the discharge will not unreasonably affect present and anticipated beneficial uses of groundwater or result in groundwater quality less than that prescribed in state and regional policies. The limited degradation authorized by this Order is consistent with the maximum benefit of the people of the state, as explained in Finding 32. Therefore, the degradation authorized by this Order is consistent with the Antidegradation Policy.

### **Designated Waste and Title 27**

38. Data obtained from on-site monitoring wells, as well as the agricultural wells, indicates that the groundwater is impacted by nitrates and electrical conductivity. It is unknown if the impacts are due to the facility operations or the general agricultural use/practices of the area. This Order requires the Discharger to provide additional evidence (Title 27 Exemption Analysis) for the conditional wastewater exemption (Section 20090 of Title 27), which includes the following conditions:
  - a. the applicable Regional Board has issued WDRs, reclamation requirements, or waived such issuance;
  - b. the discharge is in compliance with the applicable water quality control plan; and
  - c. the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

39. The Discharge authorized herein is exempt from the requirements of Title 27 pursuant to Title 27, section 20090(b) because:
- i. The Central Valley Water Board is issuing WDRs.
  - ii. The discharge is in compliance with the Basin Plan, and;
  - iii. The treated wastewater discharged to the ponds does not need to be managed as hazardous waste.

This Order will require the Discharger to continue to evaluate whether this exemption is applicable to the discharge.

### **Threat and Complexity Determination**

40. Based on the threat and complexity of the discharge, the Facility is determined to be classified 2-C as defined below:
- a. "Category "2" threat to water quality, defined as,— "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, defined as, "Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal."

### **CEQA**

41. To fulfill requirements imposed by the California Environmental Quality Act ("CEQA")(Pub. Resources Code, § 21000 et seq.), Glenn County prepared and circulated an Initial Study and Mitigated Negative Declaration that contained an analysis of the potential for the operation of the facility to result in significant environmental effects. The Board, acting as a responsible agency, was consulted during the development of these documents. On 20 January 2010, Glenn County certified the Initial Study and Mitigated Negative Declaration.

### **General Findings**

42. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

43. Water Code section 13267(b) states that:

In conducting an investigation specified in subdivision (a), the 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.

The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2013-XXXX are necessary to assure compliance with these waste discharge requirements. The Discharger operates the Facility that discharges the waste subject to this Order.

44. The California Department of Water Resources set standards for the construction and destruction of groundwater wells, as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to Water Code section 13801, apply to all monitoring wells.
45. 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.

**Public Notice**

46. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
47. All comments pertaining to the discharge were heard and considered in a public meeting.

**IT IS HEREBY ORDERED** that, pursuant to Water Code sections 13263 and 13267, the Olson Meat Company, and its 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 wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated wastes, except as allowed by Provision E.2 of Standard Provisions and Reporting Requirements, is prohibited.

3. Discharge of hazardous wastes, as that term is defined in California Code of Regulations, title 22, section 66261.1 et seq., is prohibited. Discharge of waste classified as 'designated', as defined in Water Code section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
4. Application of treated wastewater in a manner or location other than that described herein is prohibited.
5. Discharge of irrigation tailwater from the wastewater land application area to any off-site area or drainage course is prohibited.

**B. Land Application Area Specifications:**

1. The monthly average flow rate of the wastewater discharge shall not exceed 0.011 mgd and shall not exceed a yearly maximum discharge of 2.8 million gallons per year.
2. The interim annual flow-weighted average fixed dissolved solids (FDS) of the discharge to the ponds shall not exceed 750 mg/L.
3. The chloride concentration of the discharge to the wastewater ponds shall not exceed 175 mg/L.
4. Nitrogen loading shall not exceed 200 lbs/acre/year as prescribed by agricultural loading rates for grazing land.
5. BOD loading shall not exceed 50 lbs/acre/day as prescribed by agricultural loading rates for grazing land.
6. The perimeter of the Land Application Area shall be graded to prevent ponding along public roads or other public areas and prevent runoff onto adjacent properties not owned or controlled by the Discharger.
7. No physical connection shall exist between wastewater piping and any domestic water supply or domestic well, or between wastewater piping and any irrigation well that does not have an air gap or reduced pressure principle device.
8. Hydraulic loading of wastewater and irrigation shall be at reasonable agronomic rates designed to minimize the percolation of wastewater and irrigation water below the root zone (i.e., deep percolation).
9. Irrigation with wastewater shall be performed in a manner to preclude runoff of wastewater from the land application area to adjacent property during saturated conditions.
10. Application of waste constituents to the land application Area shall be at reasonable agronomic rates to preclude creation of a nuisance or degradation of groundwater, considering the crop, soil, climate, and irrigation management system. The annual

nutritive loading of the Land Application Area, including the nutritive value of organic and chemical fertilizers and of the wastewater, shall not exceed the annual crop demand.

11. The land application area shall be managed to prevent breeding of mosquitoes. More specifically:
  - a. All applied irrigation water must infiltrate completely within a 48-hour period;
  - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation; and
  - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store recycled water.

**C. Discharge Specifications:**

1. 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.
2. Objectionable odors shall not be perceivable beyond the limits of the Facility or the Land Application Area at an intensity that creates or threatens to create nuisance conditions.
3. Wastewater storage ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the winter. 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.
4. On or about 1 October of each year, the available storage pond capacity shall at least equal the volume necessary to comply with Discharge Specification C.3.
5. Storage ponds shall be managed to prevent breeding of mosquitoes. In particular,
  - a. An erosion control plan should assure that coves and irregularities are not created around the perimeter of the water surface.
  - b. Weeds shall be minimized through control of water depth, harvesting, and herbicides.
  - c. Dead algae, vegetation and other debris shall not accumulate on the water surface.
  - d. Vegetation management operations in areas in which nesting birds have been observed shall be carried out either before or after, but not during, the 1 April to 30 June bird nesting season.

6. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of groundwater limitations.
7. Freeboard in Pond 11 shall not be less than 2 feet as measured from the water surface to the lowest point of overflow.
8. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

**D. Solids Specifications**

1. Any handling and storage of solids and sludge at the Facility or the Land Application Area shall be temporary, and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations of this Order.
2. Collected screenings, sludge, and other solids removed from the liquid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, rendering plants, 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.
3. Any proposed change in solids use or disposal practice shall be reported to the Executive Officer at least 90 days in advance of the change.

**E. Groundwater Limitations:**

1. The most probable number of coliform organisms over any seven-day period shall be less than 2.2/100 ml.
2. Ground waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.
3. Ground water shall not contain concentrations of radionuclides in excess of the applicable maximum contaminant levels (MCLs).
4. Ground waters shall not contain taste- or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
5. Ground waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial use(s).

**F. Provisions:**

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as *Standard Provisions*.
2. The Discharger shall comply with Monitoring and Reporting Program (MRP) R5-2013-XXXX, which is part of this Order, and any revisions thereto as adopted by the Central Valley Water Board or approved by the Executive Officer. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger self-monitoring reports.
3. The Discharger shall keep at the Facility a copy of this Order, including its MRP, Information Sheet, attachments, and Standard Provisions, for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. The Discharger must 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 the Order.
5. All technical reports required herein 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. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
6. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Central Valley Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter 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.

7. In the event of any change in control or ownership of land or waste treatment and storage facilities presently owned or controlled by the Discharger, 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 appropriate Central Valley Water Board office (currently, the Fresno office).
8. To assume operation 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 California Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
9. As described in the *Standard Provisions*, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
10. At least **90 days** prior to termination or expiration of any agreement involving a land application use area that may jeopardize compliance with this Order due to lack of disposal capacity, the Discharger shall notify the Executive Officer in writing of the situation and of what measures have been taken or are being taken to ensure full compliance with this Order.
11. **Salinity Evaluation and Minimization Plan.** By 1 July 2014, the Discharger shall submit a Salinity Evaluation and Minimization Plan detailing all control measures taken to reduce the salinity of the discharge. The plan should also identify any additional methods that could be used to further reduce the salinity of the discharge to the maximum extent feasible, include an estimate on load reductions that may be attained through the methods identified, and provide a description of the tasks, cost, and time required to investigate and implement various elements in the Salinity Evaluation and Minimization plan.
12. **Soil Investigation and Crop Management Plan.** By 1 July 2014, the Discharger shall conduct a Soil Investigation and Crop Management Plan of the 30-acre land application area and submit a technical report documenting the results of the soil investigation, and develop a cropping plan or evaluate additional alternatives to prevent degradation of groundwater, and submit a time schedule to implement the selected alternative.
13. **Wastewater and Nutrient Management Plan.** By 1 July 2014, the Discharger shall submit a comprehensive Wastewater and Nutrient Management Plan for the land application areas. The Wastewater and Nutrient Management Plan shall include: (a) a

description of the types of crops to be grown, (b) crop water use and uptake rates, (c) supporting data and calculations for monthly and annual nutrient balances to meet agronomic loading rates considering the crop, soil, climate, and irrigation management system.

14. **Solids Handling and Management Plan. By 1 July 2014**, the Discharger shall submit a comprehensive Solids Handling and Management Plan for solids generated at the facility and from the treatment pond system. Solids Handling and Management Plan shall include, but not be limited to: a description of the types of solids generated and proper handling, storage and disposal methods for each of the solids identified.
15. **Groundwater Monitoring and Assessment Investigation. By 1 July 2014**, the Discharger shall submit an update to the existing Groundwater Monitoring and Assessment Investigation. This analysis should include an assessment of the existing groundwater within the vicinity of the disposal area, as well as an assessment of the existing groundwater monitoring system that is currently being utilized. The updated investigation shall also include (at a minimum the following items):
  - a. Identification of the beneficial uses of groundwater in the discharge vicinity as designated in the applicable water quality control plan.
  - b. A comparison of predicted concentrations of waste constituents in groundwater to water quality objectives (i.e., Maximum Contaminant Levels and taste- and odor-causing substances for municipal and domestic beneficial use, salinity and salinity constituents for agricultural beneficial use).
  - c. Evaluation of how the discharge may impair the designated beneficial uses of underlying groundwater.
  - d. Description of additional treatment or control measures that have been or will be implemented.
  - e. Where groundwater may be degraded by the discharge, a justification why the degradation is consistent with the maximum benefit of the people of the state.
16. **Compliance Schedules for Final Groundwater Limitations and Exemption from Title 27 for Treatment of Process Wastewater in the Ponds.** This Order requires compliance with the final groundwater limitations within 24 months following Order effective date. Compliance with the groundwater limitations will result in the treatment of process wastewater in the ponds meeting the preconditions for an exemption from Title 27. Therefore, this compliance schedule temporarily exempts the Discharger from compliance with Title 27 requirements to allow time for the Discharger to meet all preconditions for an exemption from Title 27. If after submittal of the Technical Report, the Central Valley Water Board determines that the Title 27 exemptions (conditional wastewater exemption) do not apply to this discharge, then the Order will be reopened to require operational modifications to bring the discharge into compliance with the Title

27 conditional wastewater exemptions, or the Discharger shall be required to modify the discharge to comply with Title 27 containment requirements. The Discharger shall comply with the following time schedule to ensure compliance with the final groundwater limitations and to demonstrate the infiltration of process wastewater from the operational pond to groundwater is in compliance with the Basin Plan:

<b>Task</b>	<b>Compliance Date</b>
i. Submit Method of Compliance Workplan/Schedule	<b>Within 3 months</b> following Order effective date
ii. Submit Technical Report summarizing groundwater monitoring results for the operational pond, and provide proof of Title 27 exemption analysis	<b>Within 21 months</b> following implementation of Task i

17. If the Central Valley Water Board determines that waste constituents in the discharge have reasonable potential to cause or contribute to an exceedance of an objective for groundwater, this Order may be reopened for consideration of addition or revision of appropriate numerical effluent or groundwater limitations for the problem constituents.

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

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order 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 may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **XXXXXXXX 2013**.

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PAMELA C. CREEDON, Executive Officer