CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2012-XXXX

WASTE DISCHARGE REQUIREMENTS

FOR
CARUTHERS RAISIN PACKING COMPANY, INC.
RAISIN PROCESSING PLANT
AND
MR. JON ROBINSON
FRESNO COUNTY

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

1. Caruthers Raisin Packing Company, Inc. (hereafter Caruthers Raisin) owns and operates a raisin processing plant at 12797 South Elm Avenue in Fresno County, Section 9, Township 16 South, Range 20 East, MDB&M, as shown on Attachment A, which is attached hereto and made part of this Order. Treated wastewater is discharged to 27 acres, a portion of which is owned Mr. Jon Robinson. Both Caruthers Raisin and Mr. Jon Robinson are named herein as Discharger.

2. Caruthers Raisin has operated its raisin processing plant (Plant) since 1985, where it receives, washes, stores, packages, and distributes raisins from local growers. Initially the Plant only processed raisins from adjacent fields. In 1985, the Board waived, under Resolution No. 82-036, waste discharge requirements (WDRs) for the discharge of process wastewater to land, since volumes were low and the operation was being overseen by Fresno County. Over the years Caruthers Raisin expanded its operation. In 1993, following several odor complaints, the Central Valley Water Board and Fresno County conducted a joint inspection of the Plant. Board staff required that Caruthers Raisin submit a Report of Waste Discharge (RWD). Caruthers Raisin submitted a RWD in September of 1993. The RWD indicated that Caruthers Raisin generated about 80,000 gallons per day (gpd) of raisin process wastewater, which was discharged to approximately 5 acres of cleared land to the northwest of the Plant.

3. In August 2003, Central Valley Water Board staff inspected the Plant following several odor complaints. Objectionable odors and standing water were observed in the discharge area. Following the inspection, Board staff required Caruthers Raisin to submit a revised RWD. Caruthers Raisin submitted a RWD on 22 November 2004. Staff notified Caruthers Raisin that the RWD was deficient in a 22 December 2004 letter. In the interim, Caruthers Raisin began hauling its wastewater to the Selma-Kingsburg-Fowler (SKF) Wastewater Treatment Facility for disposal. The Board also issued Caruthers Raisin a Monitoring and Reporting Program (MRP) R5-2005-0801 to characterize the discharge. Caruthers Raisin also installed a groundwater monitoring well network. Caruthers Raisin submitted several addendums to its RWD on 14 October 2004, 9 December 2004, 22 December 2005, and 31 March 2009.

4. SKF stopped accepting the wastewater in 2006, and Caruthers Raisin returned to a land discharge following Plant upgrades and improvements. The upgrades included new processing and packaging lines intended to improve efficiency and generate less wastewater. Along with the upgrades, Caruthers Raisin added screening and aeration to improve wastewater quality and increased its reuse area to 12 acres. In 2009, Caruthers Raisin leased a portion of land owned by Mr. Jon Robinson, increasing the reuse area to 27 acres. It also switched to sprinkler irrigation to improve irrigation efficiency and allow for more even distribution of wastewater.

Existing Facility and Discharge

5. The Plant's current processing capacity is approximately 30 to 40 tons of dry raisins per hour, though production varies throughout the year. During peak processing periods from late summer through fall, the Plant operates approximately 12 hours per day six days a week. During non-peak periods, Plant operation is limited to normal business hours (eight hours a day five days a week).

6. Wastewater at the Plant is generated from rinsing of raisins and wash down of the equipment lines. Caruthers Raisin installed a flow meter in April 2008. Flows vary significantly throughout the year depending on the rate of production. The average monthly discharge ranges from 0.06 mgd to as high as 0.12 mgd during peak season operation.

7. Wastewater is generated in batches from the raisin rinse tank and equipment wash down. The wastewater drains into a concrete standpipe where chemicals, such as Liquid Optomizer and lime, are added for odor and algae control and pH adjustment. In addition, Hasa-Chlor, a Sodium Hypochlorite solution, is used to clean the equipment.

8. The wastewater is pumped through a slotted rotating drum screen to remove solids. Screenings are collected in storage bins and sold for use as cattle feed. Following the screen, the wastewater is stored in a series of three 9,000-gallon aboveground tanks. The tanks are aerated to control odors and reduce the biochemical oxygen demand (BOD) of the wastewater. The treatment appears to have a side benefit in the observed reduction of nitrogen concentrations in the wastewater since 2006.

9. Typical wastewater contains high concentrations of BOD and total dissolved solids (TDS) as a result of the high sugar content of the raisins. The following table depicts average wastewater concentrations for constituents of concern based on analytical data from 2006 through 2010:

Constituent/Parameter	Units	2006	2007	2008	2009	2010
pH	s.u.	6.7	7.0	6.1	6.9	6.4
Electrical Conductivity (EC)	µmhos/cm	900	800	750	630	650
BOD	mg/L	7,300	4,500	5,200	3,500	3,700
Total Nitrogen (TN)	mg/L	60	40	31	31	41
Total Dissolved Solids (TDS)	mg/L	7,100	4,000	4,000	3,000	3,100

Constituent/Parameter	Units	2006	2007	2008	2009	2010
Fixed Dissolved Solids (FDS)	mg/L	575	436	440	300	250
Flow	mg	- - -	- - -	19	23	27

The data show that there has been a significant decrease in constituent concentrations since June 2006 when Caruthers Raisin began treating is wastewater. BOD and total nitrogen concentrations have been reduced almost 50% between 2006 and 2010.

10. The Plant's domestic wastewater is discharged separately to a septic tank/leachfield system regulated by Fresno County.

Reuse Area

11. Following treatment, the wastewater is distributed to a sprinkler irrigation system and used to irrigate about 27 acres of cropland, hereafter called the Reuse Area. The Reuse Area is divided into two areas identified as LAA-1 and LAA-2. LAA-1 consists of approximately 12-acres of land owned by Caruthers Raisin (APN No. 042-100-13S and 042-100-14S) and includes a portion of the former five-acre disposal area. The property leased from Mr. Robinson consists of approximately 15 acres, hereafter identified as LAA-2 (APN No. 042-100-07). Both areas are double-cropped with Sudan grass and a winter mix of wheat and oats. The crop in LAA-1 is harvested and sold as cattle feed, while LAA-2 is used as a pasture for cattle and horses owned by Mr. Robinson (about 10 to 15 animals).

12. The irrigation system is divided into seven sections and irrigation is rotated between the sections on a seven day cycle. Daily application areas range from six acres to approximately three acres in size. During the summer, additional irrigation water may be applied to meet crop demand.

13. A water balance provided in the May 2009 RWD addendum, and calculated based on a 100-year wet year, indicates that the Plant and reuse areas have sufficient hydraulic capacity to handle flows during winter months except during periods of heavy rainfall. The Discharger has indicated that processing operations will cease during periods of prolonged rainfall or when conditions become saturated since most of the support areas for the operation remain uncovered. This Order has specific conditions which prohibit the Discharger from applying process wastewater to the Reuse Area within 24 hours of a storm event of measurable precipitation or when soils become saturated.

14. To prevent overspray of process wastewater onto the athletic field of the Alvina Elementary School north of LAA-2, the irrigation system is set such that the sprinklers directly adjacent to the school are approximately 75 feet from the northern property line and are equipped with deflectors. In addition, the closest two irrigation lines to the school are set to operate on weekends when school is not in session. Earthen berms are also present along the northern property line to prevent runoff onto school property.

15. Food processing wastewater typically contains elevated concentrations of TDS resulting from the fruit and vegetable products or from materials used for production. Typically a percentage of the TDS is organic, which will generally decompose into its component elements and can be utilized by plants and microorganisms in the soil. In contrast, FDS is that portion of the TDS which consists of inorganic constituents which can accumulate in the soil. Excess salt loading can lead to salt accumulation in soil reducing plant yields. The excess salt is than leached to groundwater where it will degrade groundwater quality. Growing and harvesting crops provides a means to remove some of the salt constituents in soil.

    Harvested crops are expected to remove a portion of the inorganic salt constituents (or FDS) from the soil, particularly calcium, magnesium, potassium, phosphorus, nitrate, and ammonia. Beneficial ions such as calcium, magnesium, and potassium improve the physical properties of the soil and are essential for plant growth.

16. In 2009, the TDS concentration of the discharge ranged from 1,000 to 5,500 mg/L. A comparison of TDS to FDS concentrations ranging from 150 to 400 mg/L shows an average ratio of organic to inorganic material in the waste stream of about 10:1. Assuming an average FDS concentration of 350 mg/L and an annual flow of 25 million gallons, the estimated salt load to the Reuse Area from process wastewater would be about 2,700 lbs/acre/year.

17. Nitrogen can be introduced to the Reuse Area through three main sources: process wastewater, manure, and fertilizers. Using the average total nitrogen concentration of the discharge of 31 mg/L and an annual flow limit of 25 million gallons, the estimated nitrogen load to the Reuse Area from process wastewater would be about 240 lbs/acre/year. Based on an annual nitrogen uptake of 440 lbs/acre/year for a double cropped field of Sudan grass and winter wheat (*Western Fertilizer Handbook*, 9th edition), it is estimated that the crops will obtain approximately 55% of their required nitrogen from process wastewater. The addition of fertilizers and/or manure from grazing animals on LAA-2 may contribute to the overall nitrogen loading to the Reuse Area. This Order includes a provision requiring Caruthers Raisin to prepare a Nutrient and Wastewater Management Plan that will address the use of LAA-2 for grazing animals and ensure agronomic loading rates will be maintained.

18. Based on information provided in Caruthers Raisin's Self-Monitoring Reports submitted in accordance with MRP R5-2005-0801, the discharge contains concentrations of total coliform organisms that often exceed 1,600 MPN/100 mL. In addition, samples collected for fecal coliform organisms occasionally exceed 1,600 MPN/100 mL. The source of the bacteria in the waste stream has yet to be determined, though the likely presence of birds and other animals attracted to the raisins as well as open aeration tanks and wash down of open surfaces around the processing equipment are possible sources. This Order requires Caruthers Raisin to continue monitoring for total and fecal coliform and includes a provision requiring Caruthers Raisin to identify the source and nature of the bacteria in the waste stream and ensure that it does not represent a hazard to human health or the environment.

Other Considerations for Food Processing Waste

19. Excessive application of food processing wastewater to land can create objectionable odors, soil conditions that are harmful to crops, and degradation of underlying groundwater. 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. Irrigation with high strength wastewater results in high BOD loading on the day of application. If the rate of oxygen transfer into the soil is not adequate, anaerobic or reducing conditions may result and lead to nuisance conditions. In addition, anaerobic conditions in soil can cause dissolution and leaching of some metals. 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.

21. Historic average BOD loading rates to the former 5-acre disposal area were on the order of 700 to 800 lbs/acre/day. With treatment of the wastewater and expansion of the Reuse Area, current cycle average BOD loading rates range from less than 20 lbs/acre/day to about 350 lbs/acre/day, with an average annual BOD loading rate of about 74 lbs/acre/day.

    This Order sets a monthly cycle average BOD loading rate for the Reuse Area of 150 lbs/acre/day consistent with Risk Category 2 in the Guidance Manual prepared by the California League of Food Processors for discharges using sprinkler application to land with well drained soils. According to the Guidance Manual discharges to land under Risk Category 2 pose a minimal risk of unreasonable degradation to groundwater provided reasonable care is taken to properly manage the reuse area. The Order also includes Provisions requiring Caruthers Raisin to complete a site specific 2-year loading study and groundwater evaluation to confirm that the specified BOD loading rate will be protective of groundwater.

Site-Specific Conditions

22. The Plant 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 pan evaporation in the area is about 59 inches, according to information published by the California Department of Water Resources (DWR). Average annual precipitation in the area, based on a 30-year record, is about 8.8 inches, according to the National Weather Service Forecast Office. According to DWR, the annual precipitation with a 100-year return period is approximately 23 inches.

23. According to the USDA Natural Resources Conservation Service (NRCS) *Soil Survey of Eastern Fresno Area, 1971*, soils in the area consist of Delhi loamy sand, Hesperia sandy loam, and Hanford sandy loam. These soils are moderately deep with a silty substratum at a depth of about three to six feet. Water holding capacity is low to moderate above the silty substratum. These soils are suitable for growing raisin grapes, cotton, corn, alfalfa, and row corps.

24. Runoff in and around the Plant is collected in onsite storm water basins. All storm water in an around the Plant is directed to these storm water basins. The main processing and storage areas are covered and there are no storm drains in the immediate vicinity of these areas. Caruthers Raisin is not required to obtain coverage under a National Pollutant Discharge Elimination System general industrial storm water permit since all storm water runoff is retained onsite and does not discharge into a water of the United States.

25. According to Federal Emergency Management Agency (FEMA) maps, the Plant and Reuse Areas lay outside of the 500-year flood zone.

26. Land use in the vicinity is primarily agricultural and rural residential. There is an elementary school which adjoins LAA-2 to the north, and there are a few commercial businesses to the east of the Plant along Elm Avenue. According to DWR land use data for Fresno County published in 2000, primary crops grown in the area include grapes, and almonds. Orchard crops such as peaches, pears, pistachios, plums, and nectarines were also identified as well as some pasture and row crops. Irrigation water is supplied primarily by groundwater.

Groundwater Considerations

27. Regional groundwater in the area is encountered at about 130 feet below ground surface (bgs) and flows to the southwest according to information in *Lines of Equal Elevation of Water in Wells in Unconfined Aquifer* (DWR, Spring 2009).

28. Source water for the Plant is provided by two on-site wells. The 2008 Consumer Confidence Report indicates that the source water is relatively good, with an EC of about 300 µmhos/cm, and NO_3-N of 2.8 mg/L. There are two additional water supply wells on the property: one is an irrigation well and the other is a non-potable well used to supply an emergency eye wash station.

29. Caruthers Raisin installed three monitoring wells at the site in July 2005. Data collected from 2005 to 2008 indicates groundwater flow was consistently to the southwest, which was also consistent with regional groundwater flow reported by DWR. Based on groundwater flow direction, monitoring well MW-1 was an up-gradient well and monitoring wells MW-2 and MW-3 were down-gradient of the Plant and Reuse Area LAA-1.

30. Historic groundwater monitoring shows that groundwater down-gradient of LAA-1 has been degraded for salinity and metals. Groundwater data shows an increase of 350 to 400 µmhos/cm in EC and an increase of about 200 mg/L in TDS between up-gradient and down-gradient monitoring wells.

31. Concentrations of iron, manganese, and arsenic are also elevated in down-gradient monitoring wells. Between 2005 and 2008, iron and manganese in MW-2 and MW-3 exceeded the secondary Maximum Contaminant Levels (MCLs) of 0.3 mg/L and 0.05 mg/L, respectively. Elevated metals and decreased NO_3-N and sulfate concentrations between up-gradient and down-gradient monitoring wells is evidence of reducing conditions associated with a high organic load that can cause leaching of metals from soil.

32. Since the monitoring wells were installed, groundwater levels in the area have dropped significantly. By October 2008, all three monitoring wells were dry. Following a recent rise in groundwater levels, Caruthers Raisin was able to sample two of its monitoring wells (MW-1 and MW-2), in May 2011. However, monitoring well MW-3 was still dry and water levels in MW-1 and MW-2 were low.

33. Though two wells are insufficient to establish groundwater flow and gradient, it is reasonable to assume, based on previous flow directions and similar differences in groundwater elevations between MW-1 and MW-2, that groundwater flow beneath the site remains to the south-southwest, making MW-1 the assumed up-gradient well and MW-2 the assumed down-gradient well. The following table compares average constituent concentrations for groundwater samples collected from 2005 to 2008 to concentrations reported during the May 2011 sampling event:

		Up-Gradient		Down-Gradient			
Constituent	Units	MW-1		MW-2		MW-3	
		Average	May 2011	Average	May 2011	Average	May 2011
EC	µmhos/cm	840	950	1,200	1,300	1,200	ns
TDS	mg/L	540	600	730	780	730	ns
Alkalinity	mg/L	230	230	640	680	500	ns
NO_3-N	mg/L	20	24	0.07	< 0.02	2.3	ns
Chloride	mg/L	48	50	52	38	69	ns
Sulfate	mg/L	60	74	40	26	55	ns
Calcium	mg/L	95	150	120	160	110	ns
Sodium	mg/L	69	68	132	95	136	ns
Magnesium	mg/L	22	56	35	58	28	ns
Iron	mg/L	1.8	< 0.05	3.0	< 0.05	5.4	ns
Manganese	mg/L	0.05	< 0.01	2.3	0.41	0.6	ns
Arsenic	ug/L	2.0	< 2	5.5	< 2	2.6	ns

ns = Not sampled (well was dry)

34. The May 2011 sampling shows that groundwater iron, manganese, and arsenic concentrations in down-gradient monitoring well MW-2 have decreased significantly compared to previous sampling events, showing an improvement in groundwater quality. In May 2011, iron and arsenic concentrations in MW-2 were both below water quality objectives, and manganese concentrations, while still above the secondary MCL of 0.05 mg/L, at 0.41 mg/L was almost six times lower than during previous sampling events.

35. EC and TDS concentrations in MW-2 at 1,300 umhos/cm and 780 mg/L increased slightly and still exceed the recommended lower secondary MCLs, but they remain below the upper secondary MCLs. EC and TDS concentrations also increased in up-gradient monitoring well MW-1 at the same magnitude observed in MW-2, indicating a possible source other than the discharge.

36. As discussed previously, with the treatment added in 2006, which has reduced the BOD concentration of the wastewater by almost 50%, and expansion of the Reuse Area, the organic load from the discharge is significantly less than in the past. In addition, Caruthers Raisin has implemented several irrigation best management practices, such as sprinkler irrigation, 7-day resting periods, and disking between harvests, to prevent or reduce the potential for the discharge to cause reducing conditions in soil. It is anticipated that with the reduced organic load and implementation of best management practices that water quality beneath the site will continue to improve over time. This Order includes a provision requiring Caruthers Raisin to complete a loading study and expand its monitoring well network to continue monitoring changes in groundwater quality.

Basin Plan, Beneficial Uses and Regulatory Considerations

37. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, revised January 2004* (hereafter Basin Plan) designates beneficial uses, establishes numerical and narrative water quality objectives, contains implementation plans and policies for protecting all waters of the basin, and incorporates by reference plans and policies of the State Water Board. Pursuant to Water Code section 13263(a), these waste discharge requirements must implement the Basin Plan.

38. The Plant is in Detailed Analysis Unit 236 within the Kings Basin hydrologic unit. The Basin Plan designates the beneficial uses of underlying groundwater as municipal and domestic supply; agricultural supply; and industrial service and process supply.

39. Surface runoff is to the southwest toward Liberty Levee and Murphy Slough. The Basin Plan designates the beneficial uses of valley floor waters as: agricultural, industrial service and process supply, water contact and non-contact recreation, warm freshwater habitat, wildlife and rare threatened and endangered species habitat, and groundwater recharge.

40. The Basin Plan establishes narrative water quality objectives for Chemical Constituents, Tastes and Odors, and Toxicity. The Toxicity objective 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. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.

41. The Basin Plan's Chemical Constituents water quality objective requires that, at a minimum, waters designated as domestic or municipal supply must meet the MCLs specified in Title 22 of the California Code of Regulations ("Title 22"). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

42. 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 a valley wide drain is constructed to carry salts out of the basin. Until the drain is available, the Basin Plan establishes several salt management requirements, including:

    a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum electrical conductivity (EC) shall not exceed the EC of the source water plus 500 µmhos/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 good quality groundwater shall not exceed an EC of 1,000 µmhos/cm, a chloride content of 175 mg/L, or a boron content of 1.0 mg/L.

43. This Order sets Groundwater Limitations at the naturally occurring background water quality concentrations or the applicable water quality objectives, as follows:

    a. The applicable NO_3-N water quality objective for groundwater designated as municipal (MUN) is the Primary MCL of 10 mg/L NO_3-N. It is unclear whether the upgradient groundwater nitrate concentration of 20 mg/L is due to natural causes. Nonetheless, best practicable treatment and control (BPTC) for land application of food processing wastewater limits nitrogen loading of recycled wastes to agronomic rates protective of designated beneficial uses of groundwater as a MUN supply. Therefore, the Groundwater Limitation for NO_3-N in this Order is set at 10 mg/L.

    b. Wescot's *Water Quality for Agriculture, FAO Irrigation and Drainage Paper No. 29, Rev 1* (1985) and similar references indicate an EC of 700 umhos/cm minimizes salinity stress on the most salt-sensitive crops. There is no evidence that salt-sensitive crops are grown in the area; the predominant crops for the area,

specifically grapes and almonds, can tolerate irrigation water with an EC up to 1,000 µmhos/cm with no reduction in crop yield. This Order sets a groundwater limit for EC of 1,000 µmhos/cm, and limits the EC in the discharge to the EC of the source water (12-month rolling average) plus 500 µmhos/cm. Considering predominant crop types and irrigation methods in the immediate area, these limits are expected to preclude impairment of agricultural beneficial uses and is within the range of the secondary MCL for EC consistent with beneficial uses for municipal and domestic supply.

With an average EC of 600 to 750 µmhos/cm, the EC of the discharge is less than 1,000 µmhos/cm and will not unreasonably threaten present and anticipated beneficial uses.

c. Consistent with the Basin Plan and as described in with Finding 41, this Order limits the chemical constituent concentrations in groundwater to, at minimum, the MCLs specified in Title 22.

d. Also consistent with the Basin Plan, this Order prohibits the discharge from causing or contributing to groundwater containing taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

Antidegradation Analysis

44. State Water Resources Control Board Resolution No. 68-16 ("*Policy with Respect to Maintaining High Quality Waters of the State*") (hereafter Resolution 68-16 or "Antidegradation Policy") prohibits degradation of groundwater unless it has been shown that:

    a. 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;

    b. The discharger employs BPTC to minimize degradation;

    c. The degradation will not unreasonably affect present and anticipated future beneficial uses; and

    d. The degradation is consistent with the maximum benefit to the people of the State.

45. Constituents of concern that have the potential to cause degradation include, in part, organics, nutrients, and salts.

    a. To reduce the organic load of its discharge, Caruthers Raisin has added treatment and reduced the strength of its wastewater by almost 50%, expanded its Reuse Area, and implemented best management practices (BMP) measures (switching to

sprinkler irrigation, establishing resting periods of 7-days between applications, and disking between harvests) significantly reducing the organic load to the Reuse Area and minimizing the potential for anoxic and reducing conditions in soil. These measures are expected to prevent odor and nuisance conditions and preclude iron and manganese degradation of groundwater from organic loading. Groundwater iron and manganese concentrations from historic operations have improved in recent years and are expected to continue to improve over time. This Order requires Caruthers Raisin to expand the Plant's groundwater monitoring well network to monitor changes in groundwater quality and to complete a 2-year loading study to evaluate existing BOD loadings and determine maximum cycle average BOD loading rates that will protect groundwater.

b. For nitrogen, shallow groundwater up-gradient of the Reuse Area already contains NO_3-N in excess of water quality objectives. Reduction of nitrogen through the treatment process and application of wastewater at agronomic rates for both nutrient and hydraulic loading should preclude degradation of groundwater by nitrates from the discharge. Groundwater down-gradient of the discharge does not exceed the MCL for NO_3-N of 10 mg/L, and is not expected to exceed it in the future.

c. For salinity, with a source water EC of 300 µmhos/cm, the discharge with an average EC of 600 to 750 µmhos/cm meets the Basin Plan limits for EC of 500 µmhos/cm over source or 1,000 µmhos/cm maximum for discharges to areas that may recharge good quality groundwaters. In addition, a portion of the EC of the discharge is from organic sources or from nutrients beneficial for plant growth (i.e., calcium, magnesium, and potassium), which will be further treated in the soil profile and removed by crops, and as such is not anticipated to result in the degradation of groundwater exceeding water quality objectives.

While the discharge is consistent with Basin Plan limits for salinity, groundwater monitoring data shows increases in EC and TDS concentrations over background in down-gradient monitoring wells. It is believed that the elevated EC and TDS concentrations are, in part, the result of increased bicarbonate, calcium, and magnesium in down-gradient wells due to past organic overloading of the reuse area. The reduced organic load and implementation of BPTC measures are expected to preclude the discharge from causing continued increases in bicarbonate alkalinity in groundwater.

46. Caruthers Raisin aids in the economic prosperity of the region by direct employment of 100 to 140 people, and provides a tax base for local and county governments. In addition, it provides needed services for valley raisin growers by providing a local processing center where they can take their raisins to be processed, packaged, and shipped for retail sale. Provided that discharges from the Plant comply with State and Central Valley Water Board plans and policies, authorized degradation due to the continued operation of Caruthers Raisin is to the maximum benefit to the people of the State.

Treatment and Control Practices

47. Caruthers Raisin provides treatment and control of the discharge that incorporates:

    a. Dry sweeping to remove solids and reduce the amount of wastewater generated,
    b. Screening to remove excess solids from the waste stream,
    c. Hauling of solids offsite for use as cattle feed,
    d. Aeration to reduce effluent BOD concentrations,
    e. Sprinkler irrigation to more evenly distribute the wastewater,
    f. Rest periods between applications to allow for reaeration of the soil,
    g. Tilling between crop harvests to maintain soil structure, permeability, and treatment capacity;
    h. Organic loading rates consistent with those recommended by the California League of Food Processors as unlikely to cause unacceptable groundwater degradation;
    i. Application of nitrogen at agronomic rates;
    j. Hydraulic loading at rates to preclude standing water on the reuse areas; and
    k. Groundwater monitoring to monitor the impact of the discharge on groundwater.

Antidegradation Conclusions

48. This Order establishes groundwater limitations that allow some degradation, but that will not unreasonably threaten present and future anticipated beneficial uses of groundwater or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

49. The treatment and control measures described above in Finding 48 represent a higher level of water quality protection measures than those employed by other raisin processors in the Central Valley, and are consistent with the recommendations of the California League of Food Processors. In combination with the requirements of this Order, they represent BPTC.

50. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State. As described in Finding 47, Caruthers Raisin aids in the economic prosperity of the region by direct employment, supports the local economy, and provides a needed service for local raisin growers. In addition, the use of process wastewater for irrigation in place of higher quality groundwater is of further benefit to people of the State.

51. This Order requires monitoring to evaluate potential groundwater impacts from the discharge and confirm that the BPTC measures are sufficiently protective of groundwater. In addition, this Order includes provisions requiring Caruthers Raisin to prepare and implement a Salinity Control Plan and Nutrient and Wastewater Management Plan.

52. The discharge and the potential for groundwater degradation allowed in this Order (specifically for nitrates and EC) is consistent with the Antidegradation Policy since: (a) Caruthers Raisin has implemented BPTC to minimize degradation, (b) the limited degradation allowed by this Order will not unreasonably affect present and anticipated beneficial uses of groundwater, or result in water quality less than water quality objectives, and (c) the limited degradation is of maximum benefit to people of the State.

Water Reuse

53. The Basin Plan encourages the reuse of wastewater and identifies crop irrigation as a reuse option where the opportunity exists to replace an existing or proposed use of fresh water with recycled water.

Designated Waste and Title 27

54. California Code of Regulations, title 27 ("Title 27") contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste, which includes designated waste, as defined by Water Code section 13173. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt wastewater and reuse. These exemptions, found at Title 27, section 20090, are described below:

> (b) Wastewater – Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields, if the following conditions are met:
>
> > (1) The applicable regional water quality control board has issued WDRs, or waived such issuance;
> >
> > (2) The discharge is in compliance with the applicable water quality control plan; and
> >
> > (3) The wastewater does not need to be managed … as a hazardous waste.
>
> …
>
> (h) Reuse – Recycling or other use of materials salvaged from waste, or produced by waste treatment, such as scrap metal, compost, and recycled chemicals, provided that discharges of residual wastes from recycling or treatment operations to land shall be according to applicable provisions of [Title 27].

55. The discharge authorized herein is exempt from the requirements of Title 27 in accordance with Title 27, section 20090(b) because :

a. The Central Valley Water Board is issuing WDRs.

b. The discharge is in compliance with the Basin Plan, and;

c. The treated effluent discharged to the LAAs does not need to be managed as hazardous waste.

In addition, the reuse of raisin process wastewater for irrigation as authorized by this Order is exempt from Title 27 under section 20090(h) for Reuse, since the wastewater is contained and treated to make it suitable for direct beneficial reuse and is discharged in a manner consistent with crop requirements. This Order sets terms and conditions of discharge including effluent limits and discharge specifications to ensure the discharge will not impact present and anticipated beneficial uses of groundwater.

CEQA

56. On 27 July 1989, Fresno County, in accordance with the California Environmental Quality Act (CEQA)(Pub. Resources Code, § 21000 et seq.) adopted a Negative Declaration in conjunction with a Conditional Use Permit (CUP) for commercial operation of the existing raisin processing plant at 12797 S. Elm Avenue. The operation, as specified in the Negative Declaration, would generate approximately 10,000 gallons per day of wastewater, which would be used to irrigate the adjacent vineyard.

57. On 24 March 2005, Fresno County adopted a Mitigated Negative Declaration and revision of the CUP for upgrades to the existing raisin processing plant, to include new processing and packaging lines, and reuse of process wastewater for irrigation on crops. The Mitigated Negative Declaration concluded that the new equipment would improve efficiency and generate less wastewater, and included the following mitigation measures:

    a. All parking, circulation, and storage areas shall be covered with an asphalt concrete surface;

    b. The applicant shall submit a complete Report of Waste Discharge to the Central Valley Water Board prior to discharging to the reuse areas; and

    c. All onsite discharge of liquid waste materials (i.e., wastewater) shall be done in such a manner as to not adversely impact groundwater supplies or create conditions of nuisance, and “Best Practicable Treatment or Control” shall be utilized as approved by the Central Valley Water Board in such a way as to preclude potential odor and vector nuisance and adverse groundwater quality impacts.

58. Central Valley Water Board staff reviewed and concurred with the findings in the Mitigated Negative Declaration. This Order includes specific conditions intended to mitigate or avoid environmental effects on water quality. Specifically, this Order:

a. Sets limits for flow, EC, chloride, and BOD loading;

b. Requires application of wastewater at agronomic rates;

c. Establishes groundwater limits;

d. Establishes a monitoring and reporting program; and

e. Requires Caruthers Raisin to prepare a Nutrient and Wastewater Management Plan, and a Salinity Control Plan.

59. Although the Mitigated Negative Declaration does not specifically address the reuse of wastewater on Mr. Robinson's property, this discharge has been ongoing since 2009, and the sprinkler system has already been installed. This Order imposes additional regulatory requirements on the discharge of waste to this LAA, and no additional construction is authorized by this Order. Therefore, the imposition of additional regulatory requirements for this existing discharge is exempt from the requirements of CEQA in accordance with California Code of Regulations, title 14, section 15301.

General Findings

60. 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.

61. Based on the threat and complexity of the discharge, the Plant is determined to be classified 2-B 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 violation of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance."

b. Category B complexity, defined as, "Any discharger not included above that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal) or any Class 2 or Class 3 waste management units."

62. 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.

63. The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2012-XXXX are necessary to assure compliance with these waste discharge requirements. The Discharger operates the Plant that discharges the waste subject to this Order.

64. 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.

65. 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

66. 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.

67. 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, Caruthers Raisin Packing Company, Inc., and Mr. Jon Robinson, and 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. 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 waste classified as ‘hazardous’, as defined in California Code of Regulations, title 23, section 2521(a) is prohibited. Discharge of waste classified as ‘designated waste’, 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. Storage of solids on areas without means to prevent leachate generation and infiltration into the ground is prohibited.

B. Discharge Specifications:

1. The average monthly flow of wastewater to the Reuse Areas shall not exceed 0.13 mgd and the total annual flow to the Reuse Areas shall not exceed 25 million gallons.

2. Neither the treatment nor the discharge of wastewater shall cause a nuisance or condition of pollution as defined by the Water Code section 13050.

3. Objectionable odors shall not be perceivable beyond the limits of the Plant or the Reuse Areas at an intensity that creates or threatens to create nuisance conditions.

4. 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.

5. The Discharger shall operate all systems and equipment to maximize treatment of the wastewater and optimize the quality of the discharge.

6. 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 devise.

C. Effluent Limitations:

1. The 12-month rolling average EC of the discharge shall not exceed the 12-month rolling average EC of the source water plus 500 µmhos/cm. Compliance with this effluent limitation shall be determined monthly.

2. The monthly average effluent EC shall not exceed 1,000 µmhos/cm.

3. The boron and chloride concentrations of the discharge shall not exceed 1.0 mg/L and 175 mg/L, respectively.

D. Reuse Area Requirements:

1. The perimeter of the Reuse Area shall be graded to prevent ponding along public roads or other public areas and prevent runoff or overspray onto adjacent properties not owned or controlled by the Discharger.

2. Crops shall be grown on the Reuse Area. Crops shall be selected based on nutrient uptake, consumptive use of water, and irrigation requirements to maximize crop uptake.

3. Hydraulic loading of wastewater and irrigation water shall be at reasonable agronomic rates designed to minimize the percolation of wastewater and irrigation water below the root zone (i.e., deep percolation).

4. The BOD loading to the Reuse Area calculated as a cycle average as determined by the method described in the attached Monitoring and Reporting Program, shall not exceed 150 lbs/acre/day.

5. Application of waste constituents shall be at reasonable agronomic rates to preclude creation of a nuisance or degradation of groundwater, considering the crop, soil, climate, and irrigation management. The annual nutritive loading to the Reuse Area, including the nutritive value of organic and chemical fertilizers and of the wastewater, shall not exceed the annual crop demand.

6. The resulting effect of the discharge on soil pH shall not exceed the buffering capacity of the soil profile.

7. The Discharger may not discharge process wastewater to the Reuse Areas within 24 hours of a storm event of measurable precipitation or when soils are saturated.

8. The Reuse Area shall be managed to prevent breeding of mosquitoes. More specifically:

   a. All applied irrigation water must infiltrate completely within 48-hours;

   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.

E. Solids Specifications

1. Any handling and storage of solids and sludge at the Plant or the Reuse 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, 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.

F. Groundwater Limitations:

1. Release of waste constituents associated with the discharge shall not cause or contribute to groundwater:

    a. Containing constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:

        (i) Nitrate as nitrogen of 10 mg/L.

        (ii) Electrical Conductivity of 1,000 µmhos/cm.

        (iii) For constituents identified in Title 22, the MCLs quantified therein.

    b. Containing taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

G. 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) R5-2012-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. .

3. The Discharger shall keep at the Plant 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 California Code of Regulations, title 16, sections 415 and 3065, 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.

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. **By < Six months following adoption of the Order >**, Caruthers Raisin shall submit a Salinity Control Plan, with salinity source reduction goals and an implementation time schedule for Executive Officer approval. The control plan should identify any additional methods that could be used to further reduce the salinity of the discharge to the maximum extent feasible (i.e., switch from a sodium based to a potassium based cleaner), 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 control plan. The Discharger shall implement the plan in accordance with the approved schedule.

10. **By < Six months following adoption of the Order >**, Caruthers Raisin shall submit a Nutrient and Wastewater Management Plan for the Reuse Area for Executive Officer approval. The Plan shall determine the amount of FDS and nutrients that crops grown in the Reuse Area(s) will take up. The objective of this Plan shall be to identify and utilize site specific data to determine the appropriate pounds per acre of process wastewater that may be applied to the Reuse Areas and identify appropriate protocols for the application of any supplemental fertilizers. The Plan should also

take into account contributions from grazing animals on Reuse Area LAA-2. The Discharger shall comply with the approved Nutrient and Wastewater Management Plan.

11. **By < One year following adoption of the Order >**, Caruthers Raisin shall submit a technical report detailing the results of an investigation into the source of coliform bacteria in the waste stream. At a minimum the investigation shall include a detailed analysis of the waste stream with multiple sampling locations to determine the source of the bacteria entering the waste stream. In addition, the analysis shall include specific pathogen monitoring (i.e., E coli, etc.) to establish the type of the bacteria entering the waste stream to determine if it represents a hazard to human health or the environment. In the event that, the bacteria does pose a health concern the technical report should include a proposal and a time schedule to address these concerns and implement any mitigation measures necessary to protect human health and/or the environment.

12. **Groundwater Tasks:** Caruthers Raisin shall install and maintain a groundwater monitoring well network to monitor the horizontal and vertical impacts of historic and ongoing changes in groundwater quality associated with its discharge operations. As part of this Provision, Caruthers Raisin shall submit a Work Plan and Time Schedule to install monitoring wells to replace existing monitoring wells that have gone dry and to provide coverage of the expanded Reuse Areas.

    The Work Plan shall satisfy the information needs specified in the monitoring well installation section of Attachment B, *Standard Monitoring Well Provisions for Waste Discharge Requirements*. New and replacement wells shall comply with appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981), and any more stringent standards adopted by the Discharger or county pursuant to CWC §13801.

    The Work Plan must also include:

    - A description of the area's hydrology.
    - A discussion of the potential horizontal and vertical extent of groundwater impacts from historical as well as current discharges.
    - A description of proposed statistical methods to be used to characterize groundwater and establish background groundwater quality.

    Caruthers Raisin shall comply with the following compliance schedule in implementing the work required by this Provision:

	Task	Compliance Date
a.	Submit Work Plan and Time Schedule for monitoring well installation.	**< 30 days following adoption of Order>**

	Task	Compliance Date
b.	Commence installation of additional monitoring wells	**< 60 days following approval of Task a, but by no later than 120 following submittal of Task a>**.
c.	Submit technical report characterizing background groundwater quality and the results of the groundwater evaluation.	**< 2 years following adoption of Order>**

Technical reports and Work Plans submitted pursuant to this Provision shall be subject to the requirements of Provision G.5.

13. **Loading Study:** Caruthers Raisin shall conduct a Study to evaluate and identify the treatment and disposal capability of its reuse areas. The study shall look at current loading rates for BOD and nitrogen to the reuse areas and their potential to degrade groundwater quality. The Study shall determine the maximum loading rates that can be applied without causing exceedences of applicable water quality objectives. As part of this Study, Caruthers Raisin shall prepare and submit a Work Plan detailing proposed investigative methods and monitoring parameters for the Study.

Technical Report. Study results must be compiled into a final Technical Report. If the study shows that the existing BOD loading limits are not sufficient to ensure ongoing groundwater improvements, the Technical Report shall include recommendations for additional treatment and/or BPTC measures to lower BOD loading rates and include a proposed Time Schedule for implementation. The study may incorporate data collected as part of the Groundwater Evaluation specified in Provision G.12.

Caruthers Raisin shall comply with the following compliance schedule in implementing the work required by this Provision:

	Task	Compliance Date
a.	Submit Work Plan	**< 60 days following adoption of Order>**
b.	Implement Work Plan	**<30 days>** following Executive Officer approval of Task a.
c.	Submit Progress Report	**< 1 year >**
d.	Submit Technical Report summarizing results of the loading study, including recommendations for any improvements or additional treatment options.	**< 2 years >**

Technical Reports and Work Plans submitted pursuant to this Provision shall be subject to the requirements of Provision G.5.

Upon completion of the Tasks set forth in Provision G.13, the Central Valley Water Board will consider the evidence provided regarding the discharge and groundwater quality and, if necessary, reopen the WDRs to evaluate effluent limitations and conditions of this Order to ensure consistency with plans and policies of the Central Valley Water Board.

14. **By <60 days following adoption of the Order>,** the Discharger shall submit an engineering evaluation of the existing wastewater treatment units described in Finding Nos. 8 and 9 that characterize the treatment capacity of the system. The results of the evaluation shall be summarized in a Technical Report that provides the treatment capacity of each treatment unit in terms of appropriate BOD and nitrogen loading rates, monthly average and daily maximum influent and effluent BOD and nitrogen removal rates and concentrations, and average and peak hydraulic capacity. The Technical Report shall include all appropriate calculations and references cited.

15. If the Central Valley Water Board determines that waste constituents in the discharge have reasonable potential to cause or contribute to an exceedance of any groundwater quality objective, 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

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 _____.

PAMELA C. CREEDON, Executive Officer

Order Attachments:
A. Site Map
B. Standard Monitoring Well Provisions for Waste Discharge Requirements

Monitoring and Reporting Program R5-2012-XXXX
Information Sheet
Standard Provisions (1 March 1991) (separate attachment to Discharger only)

KC/WDH 12/27/11