CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2014-0066

WASTE DISCHARGE REQUIREMENTS

FOR
HARRIS WOOLF CALIFORNIA ALMONDS
BALLICO PROCESSING FACILITY
MERCED COUNTY

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

1. The Gold Hills Nut Company submitted a Report of Waste Discharge (RWD) dated 11 November 2009 to support the discharge of almond processing wastewater to land generated from its Ballico Processing Facility (Facility). The Gold Hills Nut Company was purchased by Harris Woolf California Almonds, (Harris Woolf or Discharger), a general partnership of Woolf Farming of California, Inc., and Harris Farms, Inc., both California Corporations, in August 2010. Harris Woolf submitted an addendum to the RWD on 24 April 2013.

2. Harris Woolf owns and operates the Facility and is responsible for compliance with these Waste Discharge Requirements (WDRs). The Facility was constructed in 1994 and has operated and discharged almond processing wastewater since that time.

3. The Facility is at 11805 Newport Road about a quarter of a mile north of the community of Ballico in Merced County, as shown on Attachment A, which is attached hereto and made part of this Order by reference.

4. The approximately 22-acre Facility consists of the almond processing plant (Plant) (five main buildings, fumigation chamber, two ponds, and associated parking) which covers about eight acres and the land application areas (LAAs), which cover about 14 acres. The Plant and LAAs are shown on Attachment B, which is attached hereto and made part of this Order by reference. To the north of the Plant is the 10-acre almond orchard used as the LAA for the reuse of wastewater. A four-acre almond orchard directly east of the Plant is proposed for use as an LAA for the reuse of wastewater. Two ponds are present along the western property boundary. The northern pond is a “Fire Water Retention Pond.” The southern pond is a wastewater retention pond used to store and distribute wastewater to the LAAs, as well as capture storm water during rain events.

5. The Plant and the proposed four-acre LAA are within APN 41-18-28 and the 10-acre LAA is APN 48-18-14. The Facility is within the northeast quarter of the northeast quarter of Section 36, Township 31 S, Range 28 E and the western half of Section 7, Township 31 S, Range 29 E, Mount Diablo Base & Meridian (MDB&M).

Existing Facility and Discharge

6. Almonds received at the Plant are sampled, fumigated, and stored until they are sized cleaned and sorted, at which time the almonds are processed, packaged, and shipped. Processing includes blanching, roasting, slicing, dicing, and grinding almonds into an almond flour or meal.

7. Wastewater generated at the Plant is primarily from the almond blanching process with the cutting process, boiler blow down, and equipment washing all adding smaller volumes of wastewater to the waste stream.

8. Wastewater is collected by channel drains in the Plant and passed through a parabolic filter, prior to being discharged into the unlined wastewater retention pond. The RWD indicates the wastewater retention pond has a capacity of about 2.6 acre feet, or 850,000 gallons. It is approximately 230 feet long, 80 feet wide, and about nine feet in depth. Wastewater from the pond either percolates/evaporates, or is discharged to the 10-acre LAA, which is currently planted with almonds.

9. Harris Woolf or its predecessor has submitted flow data in its self-monitoring reports since October 2009, but has had difficulty obtaining accurate readings from its flow meters. The Discharger indicates it has replaced the flow meters and calibrated them, but they still have difficulty recording accurate flows to the pond. The Discharger indicates the flows from the pond to the LAAs are accurate. Estimating the flow to the wastewater retention pond , Harris Woolf indicates the average dally effluent flow to the wastewater retention pond has been about 0.0225 million gallons per day (mgd), or 22,500 gallons per day (gpd), in 2013. Daily flows peak at about 30,000 gpd.

10. Harris Woolf or its predecessor has been sampling its effluent since October 2009. The average effluent quality from January 2011 through 2013 was reported as follows:

CONSTITUENT	UNITS	RESULTS
pH	Standard pH Units	6.2
Electrical Conductivity (EC)	micromhos per centimeter (umhos/cm)	672
Biochemical Oxygen Demand	milligrams per liter (mg/L)	549
Total Kjeldahl Nitrogen	mg/L	54
Ammonia as Nitrogen	mg/L	11.8
Nitrate as Nitrogen	mg/L	1.0
Sodium	mg/L	52
Chloride	mg/L	72
Total Dissolved Solids (TDS)	mg/L	699
Fixed Dissolved Solids (FDS)	mg/L	295
Volatile Dissolved Solids	mg/L	436

11. Solid waste generated at the Plant consists of almond shells from the preprocessing operations, almond skins from the blanching operations, solids removed from the

parabolic screens, and solids removed from the Pond. Solids are transported offsite for use by others (i.e., used in compost or cattle feed) or to a landfill for disposal. Harris Woolf estimated it produced about 720 tons of almond skins in 2008.

Planned Changes in the Facility and Discharge

12. The 2009 RWD indicated potentially high nitrogen loading to the 10-acre orchard north of the Plant. Almonds are reported to remove about 218 lbs/ac/yr of nitrogen per year. Harris Woolf submitted an addendum in April 2013 and proposes to continue the discharge as it has since 2009, but it will add the four-acre LAA to the 10-acre LAA for a total of 14-acres available for the reuse of effluent. Harris-Woolf recalculated loadings using a total of 14 acres for the reuse of the almond processing wastewater. The calculations indicate that with an average flow rate of about 23,500 gpd and 14-acres for the reuse of wastewater, the discharge will add about 16 inches of wastewater annually to almonds that require about 53 inches of irrigation water annually. Additional irrigation water will be required for the almond orchards.

13. This Order sets an average daily effluent flow limit of 30,000 gpd to take into consideration metering inconsistencies and loses from evaporation/percolation in the wastewater retention pond. The discharge, at a flow rate of 30,000 gpd and assuming at least 15 percent of the effluent is lost to evaporation/percolation in the pond, will add about 17.4 inches of wastewater annually to almonds in the LAAs.

14. The wastewater applied to the LAAs will add about 217 lbs/ac/yr of total nitrogen to the LAAs. The 14-acres of almond orchards can utilize up to 218 lbs/ac of nitrogen. This Order contains Provision F.12 that requires Harris Woolf to submit a nutrient management plan to assess and implement measures to ensure nitrogen is applied at agronomic rates. Harris Woolf is researching possible treatment alternatives to reduce its nitrogen load in its wastewater including installation of a nitrogen reduction treatment system and/or additional cropping with different plants/crops for greater nitrogen removal in the LAAs. Harris Woolf will describe those alternatives in the Nutrient Management Plan required by Provision F. 12.

15. Using the average TDS concentrations presented in Finding 10, the discharge will add 2,763 lbs/ac/yr of TDS to the LAAs. However, as shown in Finding 10, the average effluent TDS result is higher than the average effluent EC indicating the discharge is high in dissolved organic solids. Harris Woolf also samples its effluent for FDS, and FDS concentrations are typically used for estimating salt loads in discharges high in organic solids. Using the average FDS concentration of 295 mg/L, the discharge will add 1,166 lbs/ac/yr of FDS to the LAAs.

16. Excessive application of food processing wastewater to land can create objectionable odors, soil conditions that are harmful to crops, and unreasonably degrade 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.

17. Biochemical oxygen demand (BOD) loading estimates indicate the discharge will add a monthly average of about 8 lbs/ac/day of BOD. The Discharger indicates it typically irrigates with wastewater on a 3-day cycle average (wastewater applied on day 1, allowed to rest for a minimum of 2 days prior to another discharge of wastewater) or greater. The discharge at the proposed rate will not organically overload the vadose zone and it should not degrade the underlying groundwater.

Site-Specific Conditions

18. Source water is provided from an onsite production well set along the southern edge of the 4-acre LAA. The well is reported to be set at a depth of 440 feet below the ground surface (bgs), with screened intervals at 240 to 260 feet bgs, and 340 to 440 feet bgs. The well was completed with a bentonite seal from about 5 feet bgs to 200 feet bgs. Source water quality is summarized in the following table.

CONSTITUENT	UNITS	RESULTS
Electrical Conductivity	umhos/cm	182
Total Dissolved Solids	mg/L	158
Chloride	mg/L	22
Nitrate as Nitrogen	mg/L	1.0

19. The land surface in the area of the Facility and the LAAs is relatively flat, but naturally slopes gradually to the southwest. The elevation of the Facility is about 150 feet above mean sea level.

20. According to Federal Emergency Management Agency maps (Map Number 06047C0200G) the Facility and the LAAs are not located within a 100-year flood plain. The Merced River is about 3 miles south of the Facility.

21. Soils in the vicinity of the LAAs are predominantly the Atwater loamy sand with the Delhi sand present at the southern portions of the LAAs according to the Web Soil Survey published by the United States Department of Agriculture Natural Resources Conservation Service. The soil in the vicinity of the Facility and the two ponds is almost entirely the Delhi sand. Most of the subject property is underlain by a hardpan layer that is present at about three feet bgs on the east side of the property and about seven feet bgs on the west side.

22. The Atwater loamy sand and the Delhi sand are described as well drained with low available water capacity and are Class 3s soils. Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

The “s” subclass indicates the soil is limited mainly because it is shallow, droughty, or stony.

23. The Ballico area is characterized by warm, dry summers and cool wet winters. The rainy season generally extends from November through March. Average annual precipitation and pan evaporation for the area are about 12 inches and 53 inches, respectively. The maximum annual precipitation for a 100-year rainfall return period is estimated to be about 21 inches.

24. Surrounding land uses are primarily agricultural and consist mostly of deciduous fruit and nut crops including almonds and some areas planted with peaches and nectarines. The area also grows lesser amounts of berry crops such as strawberries and Bush berries (raspberries, blackberries, etc.). Additional uses include urban residential, residential, and light industrial. The community of Ballico is about a quarter mile to the south.

Groundwater Conditions

25. Groundwater in the area occurs in an unconfined aquifer of the Turlock Groundwater Basin. The depth to water in the unconfined aquifer is approximately 70 feet bgs, according to information in *Lines of Equal Elevation of Water in Wells in Unconfined* Aquifer, published by DWR, Spring 2010. Regional flow of the unconfined aquifer is generally to the northeast.

26. Harris Woolf installed three groundwater monitoring wells, MW-1 through MW-3, in October 2009. The general direction of groundwater flow is to the east and the depth to the underlying groundwater is about 75 feet bgs. MW-1 was installed as a background or upgradient well near the southeast corner of the property. MW-2 is set near the northeastern corner and downgradient of the 10-acre LAA where wastewater is applied. MW-3 is set along the eastern property boundary, and is directly downgradient of MW-1, the four-acre LAA, the Facility, and the wastewater retention pond.

27. The averages for selected constituents from June 2010 through April 2013 are summarized in the following table.

CONSTITUENTS	UNITS	MW-1	MW-2	MW-3
Electrical Conductivity	umhos/cm	1170	812	1140
Total Dissolved Solids	mg/L	828	618	828
Chloride	mg/L	42	23	35
Sodium	mg/L	105	47	61
Bicarbonate	mg/L	279	212	245
Total Hardness	mg/L	383	319	480
Calcium	mg/L	96	83	128
Magnesium	mg/L	31	26	37
Potassium	mg/L	2.7	2.4	3.1
Nitrate as Nitrogen	mg/L	40	17	34

28. The best water quality is observed in MW-2, which is on the downgradient edge of the 10-acre LAA. Water quality in MW-1 and MW-3 is nearly identical. The EC and TDS averages from MW-1 and MW-3 exceed the "Recommended" Secondary maximum contaminant levels (MCLs) for EC and TDS (900 umhos/cm for EC and 500 mg/L for TDS) but are lower than the "Upper" Secondary MCLs (1,600 umhos/cm for EC and 1,000 mg/L for TDS). The nitrate as nitrogen averages exceed the Primary MCL for nitrate as nitrogen of 10 mg/L.

29. A review of the results indicates the majority of the results in MW-1 (the upgradient well), are slightly higher than those observed in downgradient MW-3 and much higher than those in downgradient MW-2. Additional upgradient or regional groundwater data was reviewed to assess upgradient groundwater quality.

30. The United States Geological Survey (USGS) monitors or has monitored 21 groundwater monitoring wells within a 5 mile radius of the Facility. Most are deeper supply wells that have little value for comparing water quality results, but two wells (Well 3727**421**20443601 and 3727**461**220443601) are located about two miles west and generally upgradient of the Facility and appear to monitor first encountered groundwater. The depth of the wells was not listed, but the depth to water was recorded and has ranged from about 55 to 65 feet bgs since 1994 with water levels dropping to 65 feet bgs in 2012. The depth to groundwater in these wells is about the same but slightly less than (shallower) the depth to water observed in the Harris Woolf wells.

31. Samples were collected from well 3727**421**20443601 during four monitoring events from August 1994 to March 2006. Samples were collected from well 3727**461**220443601 during nine monitoring events from August 1994 to August 2012. The data for the two USGS wells is shown below. The first number listed is the average of the results with the range of the results presented below in parentheses.

USGS WELL 3727**421**20443601

EC (umhos/cm)	TDS (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Nitrate as Nitrogen (mg/L)
1,013	725	39	68	32
(912 – 1,020)	(636 – 842)	(31 – 46)	(63 – 72)	(31 – 32)

USGS WELL 3727**461**20443601

EC (umhos/cm)	TDS (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Nitrate as Nitrogen (mg/L)
1,086	767	54.8	59.0	38.4
(932 – 1,310)	(682 – 901)	(31 – 73)	(53 - 67)	(33 – 48)

32. The results from the upgradient USGS wells are nearly identical to the results recorded in Harris Woolf wells MW-1 and MW-3. EC and TDS results in the USGS wells are slightly lower than those in MW-1 and MW-3, but all exceed the recommended Secondary MCLs for EC and TDS, and are lower than the Upper MCLs for both constituents. Nitrate concentrations are about the same (greater than the Primary MCL of 10 mg/L), with results of the USGS wells falling between the values presented for MW-1 and MW-3. The USGS results indicate the values in MW-1 and MW-3 represent regional groundwater quality. The discharge in combination with the fresh water used to irrigate the 10-acre LAA appears to be actually improving groundwater quality, as shown by the results from MW-2.

33. Supplemental irrigation water for the LAAs is obtained from an onsite irrigation well that was formerly owned by the Turlock Irrigation District (now owned by Harris Woolf). One sample was collected and analyzed in March 2009. The results are shown in the following table.

CONSTITUENT	UNITS	RESULTS
Electrical Conductivity	umhos/cm	410
Total Dissolved Solids	mg/L	293
Chloride	mg/L	13
Nitrate as Nitrogen	mg/L	1.0

Basin Plan, Beneficial Uses, and Regulatory Considerations

34. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins,* Fourth Edition (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Water Code section13263(a), waste discharge requirements must implement the Basin Plan.

35. Local drainage is to the southwest and the natural unimpeded surface flow would be to the Merced River, which is about three miles south of the Facility. The Highline Canal is about a mile west of the facility, but surface flow cannot enter the canal. The beneficial uses of the Merced River from McSwain Reservoir to the San Joaquin River, as stated in the Basin Plan, are municipal and domestic supply (MUN); agricultural supply; industrial service supply; industrial process supply; hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; migration of warm and cold aquatic organisms; and warm and cold water spawning.

36. The beneficial uses of underlying groundwater, as set forth in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial service supply; and industrial process supply.

37. The Facility is in the Consolidated Hydrologic Area (No. 535.50) of the San Joaquin Valley Floor Hydrologic Unit, as depicted on hydrologic maps prepared by State Water Resources Control Board in August 1986.

38. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, require waters designated MUN to meet the State drinking water MCLs specified in Title 22. The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

39. The Basin Plan establishes narrative water quality objectives for Chemical Constituents, Taste and Odors, and Toxicity. The Toxicity objective, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.

40. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 umhos/cm. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 umhos/cm if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

41. The list of crops in Finding 24 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge, but it is representative of current and historical agricultural practices in the area.

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

43. Many surface waters and local groundwater supplies have been degraded with salt. In some areas, the high salinity is naturally occurring, but in many areas it is due to the acts of man. In 2006, the Central Valley Water Board, the State Water Board, and stakeholders began a joint effort to address salinity and nitrate problems in the region and adopt long-term solutions that will lead to enhanced water quality and economic sustainability. Central Valley Salinity Alternatives for Long-Term

Sustainability (CV-SALTS) is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program.

Antidegradation Analysis

44. State Water Resources Control Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) 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 degradation will not unreasonably affect present and anticipated future beneficial uses.

    c. The discharger employs best practicable treatment or control (BPTC) to minimize degradation, 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 of high quality waters include, in part, organics, nutrients, and salts. However, the discharge is not expected to cause groundwater to exceed water quality objectives because:

    a. Organic loading rates of the existing discharge are low and the discharge is not anticipated to degrade groundwater due to organic loading. BOD loading is estimated to add about 8 lbs/ac/day with application at no less than a three day cycle average. The discharge with a BOD loading rate of 8 lbs/ac/day and a three day cycle average will prevent organic overloading of the LAAs such that the discharge authorized should not contribute to underlying groundwater degradation from organic loading.

    b. For nitrogen, this Order limits the application of wastewater to agronomic rates for both nutrient and hydraulic loading. Total nitrogen loading estimates indicate the discharge will add about 217 lbs/ac/yr, while the almond orchard will utilize about 218 lbs/ac/yr. This Order contains Provision F.12 that requires Harris Woolf to submit a nutrient management plan to assess and implement measures to ensure nitrogen is applied at agronomic rates. This should not contribute to groundwater exceedances of the Primary Maximum Contaminant Level for nitrate nitrogen plus nitrite nitrogen of 10 mg/L.

    c. Regarding salinity in general, average EC and TDS values in the wastewater since 2011 are 675 umhos/cm and 699 mg/L, respectively. These values are less than the first encountered groundwater upgradient of the Facility. The average EC results in upgradient groundwater have ranged from about 1,013

umhos/cm to 1,170 umhos/cm, while the average TDS results from the upgradient wells range from 725 to 828 mg/L. TDS is composed of both volatile dissolved solids (VDS) and dissolved salts or FDS. The proportion of VDS to FDS in wastewater varies with the source, but 50 percent or more of the TDS in food processing wastewater may be in the volatile form as shown by the effluent results summarized in Finding 10 of this Order. The VDS can be biologically treated by soil microorganisms in a well-managed land application system, when wastewater is not over-applied. FDS can be reduced by plant uptake of nutrients, primarily nitrates, phosphorus, and potassium (and to a lesser degree calcium, magnesium, and sulfur). FDS loading is estimated to add 1,166 lbs/ac/yr, which should not cause unreasonable degradation of the underlying groundwater.

Treatment and Control Practices

46. The Discharger provides treatment and control of the discharge that incorporates:

    a. Screening of solids and sediment from the waste stream.
    b. Application of wastewater to the LAAs at agronomic rates for almonds.
    c. Application of wastewater at rates that will not allow wastewater to stand for more than 48 hours.
    d. Resting periods between wastewater applications.
    e. At least daily inspection of the LAAs during times of discharge.
    f. Preparation of a Salinity Management Plan to evaluate potential methods to reduce the salinity of its discharge, and
    g. Appropriate solids disposal practices.

47. These Treatment and Control Practices are reflective of BPTC of the discharge.

Antidegradation Conclusions

48. This Order contains Discharge Specifications B.2 and B.3 that limit the EC of the discharge to 900 umhos/cm and a daily average flow of 30,000 gpd, respectively. This Order also contains Land Application Area Specifications D.1 and D.2 that limit the discharge to agronomic rates for almonds and does not allow the discharge to stand for longer than 48-hours after the discharge ceases, respectively. The application of wastewater to the 14-acre LAAs at the loading rates authorized by this Order will not cause unreasonable groundwater degradation with nitrate as nitrogen or salts.

49. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason exists to accommodate growth and limited groundwater degradation around the Facility,

provided that the terms of the Basin Plan are met. Degradation of groundwater by some of the typical waste constituents released with discharge from an almond processor after effective source reduction, treatment, and control, and considering the best efforts of the Discharger and magnitude of degradation, is of maximum benefit to the people of the State.

Designated Waste and Title 27

50. California Code of Regulations, title 27 (hereafter 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 a provision that exempts wastewater under specific conditions. This exemption, found at Title 27, section 20090, is 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, reclamation requirements, or waived such issuance;
>
> (2) The discharge is in compliance with applicable water quality control plan; and
>
> (3) The wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

51. 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.

General Findings

52. Based on the threat and complexity of the discharge, the facility is determined to be classified as 3B as defined below:

    a. Category 3 threat to water quality: “Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.”

    b. Category B complexity, defined as: “Any discharger not included [as Category A] 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."

53. 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.

54. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

55. Water Code section 13267(b) states:

> In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region … shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

56. The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2014-0066 are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

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

58. The County of Merced issued Conditional Use Permit No. 3747 to the Gold Hills Nut Company in 1993 to construct an almond processing facility. Merced County circulated a draft Mitigated Negative Declaration in 1993 for the 22-acre Facility (including the four-acre orchard proposed for use as an LAA in this Order) and adopted the Mitigated Negative Declaration on 9 March 1994. The Facility has been in use as an almond processing facility continuously since 1994. This Order for the current facility does not authorize any additional construction activities and imposes regulatory requirements that are protective of the underlying groundwater quality. As a result, the existing discharge is exempt from the requirements of CEQA in accordance with California Code of Regulations, title 14, section 15301.

Public Notice

59. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

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

61. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that pursuant to Water Code sections 13263 and 13267, the Harris-Woolf California Almond Company, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Bypass 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*.

4. Application of wastewater in a manner or location other than that described in the report of waste discharge and herein is prohibited.

5. The discharge of almond processing wastewater to a septic system is prohibited.

6. Application of residual solids to the LAAs is prohibited.

7. Discharge of domestic wastewater to the wastewater pond, LAA, or any surface waters is prohibited.

B. Discharge Specifications

1. The Discharger shall measure the volume of the wastewater discharged to the wastewater retention pond and the volume of wastewater discharged to the LAAs. Compliance shall be determined at FM-01 and FM-02 as described in Monitoring and Reporting Program R5-2014-0066.

2. The 12-month rolling average EC of the discharge shall not exceed 900 umhos/cm. Compliance with this effluent limitation shall be determined monthly.

3. The monthly average daily discharge flow to the LAAs shall not exceed 30,000 gpd.

4. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

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

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. The treatment, storage, and disposal areas shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

8. Objectionable odors shall not be perceivable beyond the limits of the Facility and/or the LAAs at an intensity that creates or threatens to create nuisance conditions.

9. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

10. On or about **1 October** of each year, available capacity of the pond shall at least equal the volume necessary to comply with Discharge Specifications B.7 and B.9.

11. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

    a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.

    b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

    c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

    d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

C. Solids Specifications

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

1. Any handling and storage of solids and sludge 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, composting sites, soil amendment sites) operated in accordance with valid WDRs issued by a regional water quality control board will satisfy this specification.

3. Any proposed change in solids disposal practices shall be reported to the Executive Officer in writing at least **90 days** in advance of the change. Screenings (solids removed from the parabolic screens) may be land applied to the disposal area provided that, at least **60 days** prior to application, the Discharger submits a loading analysis that demonstrates the land application of solids will not cause an exceedance of any specification or groundwater limitation of this Order.

D. Land Application Area Specifications

1. Application of waste constituents to the LAAs 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 LAAs, including the nutritive value of organic and chemical fertilizers and of the wastewater shall not exceed the annual crop demand.

2. Wastewater shall not be discharged to the LAAs in a manner that causes wastewater to stand for greater than 48 hours after irrigation ceases.

3. Wastewater shall be applied to the LAAs with appropriate resting periods. The maximum application period shall be one day (24 hours). The minimum rest period shall be at least twice the preceding application period.

4. Any irrigation runoff shall be confined to the LAAs and shall not enter any surface water drainage course or storm water drainage system.

5. The perimeter of the LAAs 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.

6. The volume of wastewater applied to the LAAs on any single day shall not exceed reasonable agronomic rates based on the vegetation grown, pre-discharge soil moisture conditions, and weather conditions.

7. Hydraulic loading of wastewater and supplemental irrigation water including precipitation shall be at reasonable agronomic rates designed to:

    a. Maximize crop nutrient uptake;
    b. Maximize breakdown of organic waste constituents in the root zone; and
    c. Minimize the percolation of waste constituents below the root zone.

8. The irrigation with wastewater shall be managed to minimize erosion within the LAAs.

9. The LAAs shall be managed to prevent breeding of mosquitoes. In particular:

    a. All applied irrigation water must infiltrate completely within 48 hours;
    b. Tailwater ditches shall be maintained essentially 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 wastewater.

10. No physical connection shall exist between wastewater and any domestic water supply or domestic well, or between wastewater piping and any irrigation well that does not have an air gap or reduce pressure principle device.

E. Groundwater Limitations

Release of waste constituents from any treatment unit, delivery system, or LAA associated with the Facility shall not cause or contribute to groundwater containing concentrations of constituents identified below, or natural background quality, whichever is greater.

a. Nitrate as nitrogen of 10 mg/L.

b. For constituents identified in Title 22, contain constituents in concentrations that exceed either the Primary or Secondary MCLs established therein.

F. Provisions

1. The Discharger shall comply with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991 (Standard Provisions), which are a part of this Order.

2. The Discharger shall comply with Monitoring and Reporting Program (MRP) R5-2014-0066, 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 Facility office copies 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 its respective facilities and systems of treatment and control (and related appurtenances) that are installed or used 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 only when the operation is necessary to achieve compliance with the conditions of the Order.

5. All technical reports and work plans 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 a person registered to practice in California pursuant to California Business and Professions Code Sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports and work plans 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. All reports required herein are required pursuant to Water Code section 13267.

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 Central Valley Water Board.

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. The Discharger shall submit the technical reports and work plans required by this Order for Central Valley Water Board staff consideration and incorporate comments they may have in a timely manner, as appropriate.

10. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.

11. **By 8 December 2014**, the Discharger shall submit a Salinity Management Plan, with salinity source reduction goals and an implementation time schedule for

Executive Officer approval. The control plan shall 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 control plan. The Discharger shall implement the plan in accordance with the approved schedule.

12. **By 8 December 2014**, the Discharger shall submit a Nutrient Management Plan for the Land Application Areas for Executive Officer approval. At a minimum the Plan must include procedures for monitoring the LAAs including daily records of wastewater applications and acreages, an action plan to deal with objectionable odors and/or nuisance conditions, a discussion on blending of wastewater and supplemental irrigation water, supporting data and calculations for monthly and annual water and nutrient balances, and management practices that will ensure wastewater, irrigation water, commercial fertilizers and soil amendments are applied at agronomic rates.

13. As a means of discerning compliance with Discharge Specification B.8, the dissolved oxygen (DO) content in the upper one foot of the wastewater retention pond shall not be less than 1.0 mg/L for three consecutive weekly sampling events. If the DO is below 1.0 mg/L for three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.

14. 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.

15. The Central Valley Water Board is currently implementing the CV-SALTS initiative to develop a Basin Plan amendment that will establish a salt and nitrate management plan for the Central Valley. Through this effort the Basin Plan will be amended to define how the narrative water quality objectives are to be interpreted for the protection of agricultural use. If new information or evidence indicates that groundwater limitations different than those prescribed herein are appropriate, this Order will be reopened to incorporate such limits.

16. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

17. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs 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 that the foregoing is a full true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, on 6 June 2014.

Original signed by:

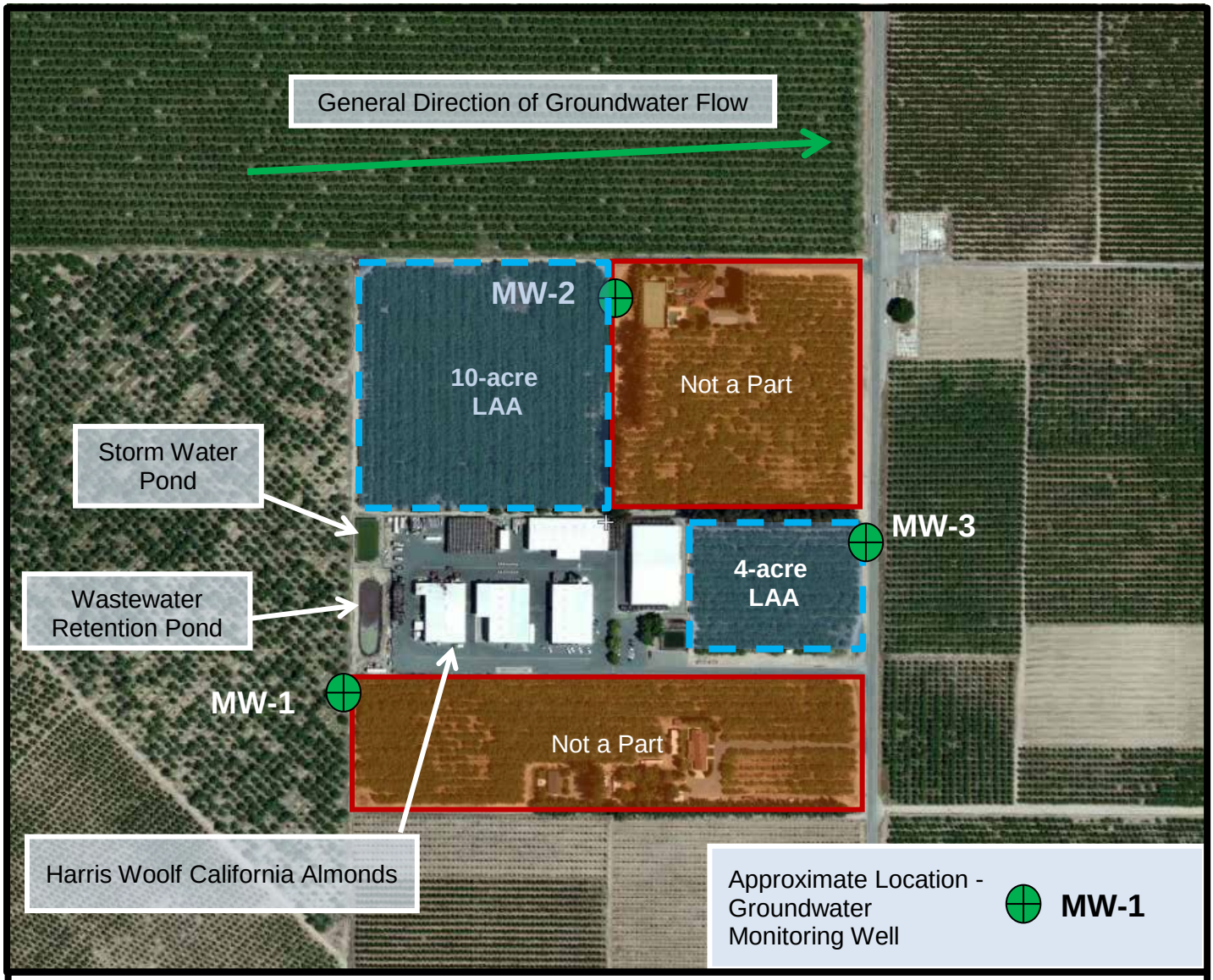
PAMELA C. CREEDON, Executive Officer

LOCATION MAP

ORDER R5-2014-0066
WASTE DISCHARGE REQUIREMENTS
FOR
HARRIS WOOLF CALIFORNIA ALMONDS
BALLICO FACILITY
MERCED COUNTY

0 0.5 1.0
Approximate Scale in Miles

ATTACHMENT A



SITE MAP

HARRIS WOOLF CALIFORNIA ALMONDS

ORDER R5-2014-0066

WASTE DISCHARGE REQUIREMENTS
FOR
HARRIS WOOLF CALIFORNIA ALMONDS
BALLICO FACILITY
MERCED COUNTY

Approximate Scale in Feet

0 500 1000 1500

ATTACHMENT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2014-0066
FOR
HARRIS WOOLF CALIFORNIA ALMONDS
BALLICO PROCESSING FACILITY
MERCED COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to Water Code section 13267.

The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP. Changes to sample location shall be established with concurrence of Central Valley Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. All analyses shall be performed in accordance with ***Standard Provisions and Reporting Requirements for Waste Discharge Requirements***, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as pH) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions.

Analytical procedures shall comply with the methods and holding times specified in the following: *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA); *Test Methods for Evaluating Solid Waste* (EPA); *Methods for Chemical Analysis of Water and Wastes* (EPA); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA); *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

A glossary of terms used within this MRP is included on page 10.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Point Name	Monitoring Location Description
FM-01 and FM-02	Location where the volume/flow of wastewater can be measured prior to discharge to the wastewater retention pond (FM-1) and the location where the volume/flow of wastewater can be measured prior to discharge to the LAAs (FM-2).
EFF-01	Location where a representative sample of the Plant's wastewater can be obtained prior to discharge to the wastewater retention pond.
MW-1 through MW-3,	Groundwater monitoring wells MW-1 through MW-3, and any other wells added to the groundwater monitoring network.
SW-1	Supply well (SW-1) and any other supply wells added to the supply well network.
IW-1	Location where a representative sample of irrigation water (IW-1) can be obtained prior to discharge to the LAAs.
PND -01	Location where a representative sample of the wastewater retention pond can be obtained.

EFFLUENT MONITORING

The Discharger shall monitor the volume of wastewater discharged to the wastewater retention pond at FM-1 and the volume of wastewater discharged to the LAAs at FM-002. The discharge shall monitor effluent at EFF-001 for the constituents listed below. The wastewater samples shall be representative of the volume and nature of the discharges. Time of collection of the samples shall be recorded. Wastewater monitoring shall include at least the following:

Frequency	Constituent/Parameter	Units	Sample Type
Continuous	Flow	mgd	Meter
Weekly	pH	pH Units	Grab
Monthly	Electrical Conductivity	umhos/cm	24-hour composite
Monthly	Total Dissolved Solids	mg/L	24-hour composite
Monthly	Fixed Dissolved Solids	mg/L	24-hour composite
Twice Monthly	Biochemical Oxygen Demand	mg/L	24-hour composite
Twice Monthly	Nitrate as Nitrogen	mg/L	24-hour composite
Twice Monthly	Nitrite as Nitrogen	mg/L	24-hour composite
Twice Monthly	Ammonia as Nitrogen	mg/L	24-hour composite
Twice Monthly	Total Kjeldahl Nitrogen	mg/L	24-hour composite
Twice Monthly	Total Nitrogen	mg/L	24-hour composite
Annually	General Minerals	mg/L[1]	24-hour composite

1 mg/L or ug/L, as appropriate.

POND MONITORING

Effluent storage ponds monitoring shall include at least the following:

Frequency	Constituent/Parameter	Units	Sample Type
Weekly	DO[1]	mg/L	Grab

1. Should the DO be below 1.0 mg/L during a weekly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved

The Discharger shall inspect the condition of the wastewater retention pond once per week and write visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether dead algae, vegetation, scum, or debris are accumulating on the wastewater retention pond surface and their location; whether burrowing animals or insects are present; and the color of the pond water (e.g., dark sparkling green, dull green, yellow, gray, tan, brown, etc.).

GROUNDWATER MONITORING

After measuring water levels and prior to collecting samples, each monitoring well (MW-1 through MW-3) shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of the standing water within the well casing and screen, or additionally the filter pack pore volume.

The Discharger shall monitor all wells in its Groundwater Monitoring Network, and any additional wells installed, for the following:

Frequency	Constituent/Parameter	Units	Sample Type
Semi-Annually	Depth to Groundwater	Feet[1]	Measured
Semi-Annually	Groundwater Elevation	Feet[2]	Computed
Semi-Annually	pH	pH Units	Grab
Semi-Annually	EC	umhos/cm	Grab
Semi-Annually	Nitrate as Nitrogen	mg/L	Grab
Semi-Annually	Nitrite as Nitrogen	mg/L	Grab
Semi-Annually	Ammonia as Nitrogen	mg/L	Grab
Semi-Annually	Total Kjeldahl Nitrogen	mg/L	Grab
Semi-Annually	Total Nitrogen	mg/L	Grab
Semi-Annually	Arsenic	mg/L[3]	Grab
Semi-Annually	Iron	mg/L[3]	Grab
Semi-Annually	Manganese	mg/L[3]	Grab
Annually	General Minerals	mg/L[3]	Grab

1. To the nearest hundredth of a foot.
2. To the nearest hundredth of a foot above Mean Sea Level.
3. mg/L or ug/L, as appropriate

The Discharger shall maintain its groundwater monitoring well network. If a groundwater monitoring well(s) are dry for more than two consecutive sampling events, the Discharger shall submit a work plan and proposed time schedule to replace the well(s). The well(s) shall be replaced following written Executive Officer approval of the work plan and time schedule.

SOURCE WATER MONITORING

The Discharger shall collect samples at SW-1 and any wells added, and analyze them for the constituents specified in the following table. If the source water is from more than one well, the results shall also be presented as a flow weighted average of all the wells used.

Frequency	Constituent/Parameter	Units	Sample Type
Annually	EC	mg/L	Grab/Computed average
Annually	TDS	TDS	Grab/Computed average
Annually	Nitrate as Nitrogen	mg/L	Grab/Computed average
Annually	Nitrite as Nitrogen	mg/L	Grab/Computed average
Annually	Ammonia as Nitrogen	mg/L	Grab/Computed average
Annually	Total Kjeldahl Nitrogen	mg/L	Grab/Computed average
Annually	Total Nitrogen	mg/L	Grab/Computed average
Annually	General Minerals	mg/L	Grab/Computed average

LAND APPLICATION AREA MONITORING

The Discharger shall monitor the LAAs daily while wastewater is being discharged, and weekly during non-application periods. The volume of the effluent applied will be monitored at FM-002. The monitoring report shall identify the volume of the effluent applied, the specific parcels to which it is applied, the acreage to which it is applied, and the type of crops grown on each parcel. This information shall be submitted as part of the annual monitoring report in addition to a map, that shows the specific parcels that received Plant effluent.

In addition, the Discharger shall perform the following monitoring and loading calculations for each LAA. If supplemental irrigation water is used, samples shall be collected from the irrigation well (IW-1). The data shall be collected and presented in both a graphical (map) and tabular format and shall include the following:

Frequency	Constituent/Parameter	Units	Sample Type
Daily	Application area	Acres	n/a
Daily	Wastewater flow	Gallons	Metered
Daily	Wastewater loading	Inches/day	Metered
Daily	Supplemental irrigation	Inches/day	Metered
Daily	Precipitation	Inches	Rain gage[1]
Monthly	Total Hydraulic loading[2]	Inches/acre-month	Calculated
BOD Loading[3]			
Daily	Day of application	lbs/ac/day	Calculated
Cycle	Cycle average	lbs/ac/day	Calculated cycle average

Nitrogen loading[4]			
Annual	From wastewater	lbs/ac/yr	Calculated
Annual	From fertilizers	lbs/ac/yr	Calculated
Annual	From supplemental irrigation water	lbs/ac/yr	Calculated
Salt loading[4]			
Annual	From wastewater	lbs/ac/yr	Calculated
Annual	From supplemental irrigation water	lbs/ac/yr	Calculated

1. National Weather Service or CIMIS data from the nearest weather station is acceptable.
2. Combined loading from wastewater, irrigation water, and precipitation.
3. Loading rates to be calculated using the applied volume of wastewater, applied acreage, and average of the three most recent concentrations for BOD. The BOD loading rate shall be divided by the #days between applications to determine cycle average
4. Nitrogen and salt loading shall be calculated using the applied volume of wastewater, applied acreage, and average of the four most recent results for total nitrogen and FDS.

In addition, the Discharger shall inspect the application areas and evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in field logs and included as part of the annual monitoring report.

SOIL MONITORING

The Discharger shall establish, with Central Valley Water Board staff concurrence, a suitable number of monitoring locations within the LAA and at least two locations to represent background conditions in areas that are cropped in a manner similar to LAAs, but that do not receive applications of almond processing wastewater. The samples shall be collected and analyzed for the following constituents.

Frequency	Constituent/Parameter	Units	Sample Type
Annually	Moisture content	% volume	4 feet[1]
Annually	Cation Exchange Capacity	meq/100 grams	4 feet[1]
Annually	Soil pH	pH units	4 feet[1]
Annually	Buffer pH	mg/kg as $CaCO_3$	4 feet[1]
Annually	Sodium	mg/kg	4 feet[1]
Annually	Chloride	mg/kg	4 feet[1]
Annually	Nitrate as nitrogen	mg/kg	4 feet[1]
Annually	Total Kjeldahl Nitrogen	mg/kg	4 feet[1]

1. Samples to be analyzed shall be collected at 6-inches, 2, and 4 feet below the ground surface.

REPORTING

All monitoring results shall be tabulated and submitted in **Quarterly Reports,** which shall be due by the first day of the second month after the calendar quarter. Therefore, monitoring reports are due as follows:

First Quarter Monitoring Report: **1 May**

Second Quarter Monitoring Report: **1 August**

Third Quarter Monitoring Report: **1 November**

Fourth Quarter Monitoring Report: **1 February**

A transmittal letter shall accompany each monitoring report. The transmittal letter shall discuss any violations that occurred during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions or a time schedule for implementing the corrective actions, reference to the previous correspondence is satisfactory.

The following information is to be included on all monitoring reports, as well as report transmittal letters:

Harris Woolf California Almonds
Ballico Processing Facility
MRP Order R5-2014-0066
Contact Information (telephone and email)

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly, whether the Discharger complies with waste discharge requirements.

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

Laboratory analysis reports do not need to be included in the monitoring reports; however, the laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3. All monitoring reports that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

At any time henceforth, the State or Central Valley Regional Water Board may notify the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html) or similar system. Until such notification is given, the Discharger shall submit hard copy monitoring reports.

A. Quarterly Monitoring Reports shall include the following:

Wastewater Reporting:

1. The results of effluent monitoring specified on page 2.

2. For each month of the quarter, calculation of the maximum daily flow and the monthly average flows from the wastewater stream.
3. For each month of the quarter, calculation of the 12-month rolling average EC of the discharges using the EC value for that month averaged with the EC values for the previous 11 months for each discharge.
4. A summary of daily BOD loading rates.

Pond Monitoring Reporting

1. The results of the monitoring specified on page 3.

Land Application Area Reporting

1. The results of the monitoring and reporting and loading calculations specified on pages 4 and 5.
2. For each month that wastewater is applied to the LAAs, calculation of the monthly hydraulic load for wastewater and supplemental irrigation water in millions of gallons and/or acre-feet to each discrete irrigation area.
3. A summary of the notations made in the LAAs log during each semi-annual period. The entire contents of the log do not need to be submitted.
4. For each month, calculation of the daily BOD cycle average using the BOD results for the month.

B. Fourth Quarter/Annual Monitoring Report, in addition to the above, shall include the following:

Facility Information:

1. The names and general responsibilities of all persons in charge of wastewater handling and disposal.
2. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.
3. A statement certifying when the flow meters and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4).
4. A statement whether the current operation and maintenance manual, sampling plan, nutrient management plan, and contingency plan, reflect the Facility as currently constructed and operated, and the dates when these documents were last reviewed for adequacy.
5. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

Groundwater Reporting:

1. The results of groundwater monitoring specified on pages 3 and 4.
2. For each monitoring well, a table showing constituent concentrations for at least the last five monitoring events (2.5 years), up through the current semi-annual monitoring period.
3. A groundwater contour map based on groundwater elevations for the semi-annual monitoring period. The map shall show the gradient and direction of groundwater flow under/around the Facility and/or effluent disposal area(s). The map shall also include the locations of monitoring wells and wastewater storage and discharge areas.

Source Water Reporting

1. For each annual period, the results of the source water monitoring specified on page 4. Results must include supporting calculations.

Solids Reporting

1. Annual production of totals solids (excluding trash and recyclables) in dry tons or cubic yards.
2. A description of disposal methods, including the following information related to the disposal methods used. If more than one method is used, include the percentage disposed of by each method.
    a. For landfill disposal, include: the name and location of the landfill, and the Order number of WDRs that regulate it.
    b. For land application, include: the location of the site, and the Order number of any WDRs that regulate it.
    c. For incineration, include: the name and location of the site where incineration occurs, the Order number of WDRs that regulate the site, the disposal method of ash, and the name and location of the facility receiving ash (if applicable).
    d. For composting, include: the location of the site, and the Order number of any WDRs that regulate it.
    e. For animal feed, include: the location of the site, and the Order number of any WDRs that regulate it.

Land Application Area Reporting

1. The type of crop(s) grown, planting and harvest dates, and the quantified nitrogen and fixed dissolved solids uptakes (determined by representative plant tissue analysis). Include any soil and/or tissue sampling results.

2 The monthly and annual discharge volumes during the reporting year expressed as million gallons and inches.

3. A monthly balance for the reporting year that includes:

a. Monthly average ET_0 (observed evapotranspiration) – Information sources include California Irrigation Management Information System (CIMIS) http://www.cimis.water.ca.gov/

b. Monthly crop uptake

   i. Crop water utilization rates are available from a variety of publications available from the local University of California Davis extension office.

   ii. Irrigation efficiency – Frequently, engineers include a factor for irrigation efficiency such that the application rate is slightly greater than the crop utilization rate. A conservative design does not include this value.

c. Monthly average precipitation – this data is available at http://www.cimis.water.ca.gov/ or http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmlprcp.html.

d. Monthly average and annual average discharge flow rate.

4. A summary of daily and cycle average BOD loading rates.

5. The total pounds of nitrogen applied to the LAAs from all sources (wastewaters, fertilizers, and irrigation waters) as calculated from the sum of the monthly loading to the LAAs in lbs/ac/yr.

6. The total pounds of FDS that have been applied to the LAAs, as calculated from the sum of the monthly loadings to the LAAs in lbs/ac/yr.

Soils Reporting

1. The results of soil monitoring specified on page 5. The analytical results should be presented in tabular form and include depth of sample. If no sample is collected at a specified depth it should be noted in the table along with the reason no sample was collected.

2. A site map showing the location of each sampling point. The map shall also include the locations of all monitoring wells and wastewater storage and/or discharge areas.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Original signed by:

Ordered by: _____

PAMELA C. CREEDON, Executive Officer

6 June 2014

(Date)

GLOSSARY

BOD_5	Five-day biochemical oxygen demand
CBOD	Carbonaceous BOD
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-Hour Composite	Unless otherwise specified or approved, samples shall be a flow-proportioned composite consisting of at least eight aliquots.
Daily	Samples shall be collected every day.
Twice Weekly	Samples shall be collected at least twice per week on non-consecutive days.
Weekly	Samples shall be collected at least once per week.
Twice Monthly	Samples shall be collected at least twice per month during non-consecutive weeks.
Monthly	Samples shall be collected at least once per month.
Bimonthly	Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months
Quarterly	Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October.
Semiannually	Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in April and October.
Annually	Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October.
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
General Minerals	Analysis for General Minerals shall include at least the following:

Alkalinity	Chloride	Sodium
Bicarbonate	Hardness	Sulfate
Calcium	Magnesium	TDS
Carbonate	Potassium	

General Minerals analyses shall be accompanied by documentation of cation/anion balance.

INFORMATION SHEET

ORDER NO. R5-2014-0066
HARRIS WOOLF CALIFORNIA ALMONDS
BALLICO PROCESSING FACILITY
MERCED COUNTY

Harris Woolf California Almonds (Harris Woolf) owns and operates an almond processing facility and land application areas at 11,805 Newport Road about a quarter of a mile north of the community of Ballico in Merced County.

Background
Harris Woolf processes almonds (blanches, slices, and grinds) and its predecessor at the site, Gold Hills Nut Company (Gold Hills), submitted a November 2009 Report of Waste Discharge (RWD) in order to obtain Waste Discharge Requirements (WDRs) for its discharge of process wash water to an adjacent almond orchard. Gold Hills and Harris Woolf have voluntarily sampled the effluent for a suite of constituents recommended by Central Valley Regional Water Quality Control Board staff since October 2009.

The Harris-Woolf property contains 22-acres. The almond processing plant (Plant) itself is spread over about eight acres and consists of five main buildings (pre-processing, sizing, manufacturing (processing), dry storage, and cold storage), a fumigation chamber, and two storage ponds (a Fire Retention Pond and an almond processing wastewater retention pond). The remaining property contains two orchards totaling 14-acres that are used as land application areas (LAAs).

The current LAA is a 10-acre orchard currently planted with Almonds. Wastewater is used to irrigate the orchard year round, but additional irrigation water is required as the amount of wastewater produced is insufficient to provide all of the irrigation needs of the orchard. Wastewater comprises about one third of the water need to irrigate the orchard.

Existing Discharge
Wastewater is generated from the washing, blanching, roasting, and slicing of almonds, and from the cleaning of the processing equipment. Wastewater is collected in channel drains that rout the discharge to an unlined wastewater retention pond. Wastewater from the wastewater retention pond is used to irrigate a 10-acre LAA north of the Plant. The Plant currently discharges about 22,500 gallons per day (gpd) to the wastewater retention pond. The average analytical results since 2011 for Harris Woolf's effluent are summarized in the following table.

Parameter	Units	Effluent
Electrical Conductivity (EC)	Micromhos per centimeter (umhos/cm)	672
Total Dissolved Solids (TDS)	Milligrams per liter (mg/L)	699
Fixed Dissolved Solids (FDS)	Milligrams per liter	295
Chloride	Milligrams per liter	72
Sodium	Milligrams per liter	52
Nitrate as Nitrogen	Milligrams per liter	1.0
Total Kjeldahl Nitrogen	Milligrams per liter	54
Total Nitrogen	Milligrams per liter	55

The results indicate good effluent quality with the exception of TDS, which exceeds the recommended Secondary maximum contaminant level (MCL) of 500 mg/L. However, the TDS results are higher than the corresponding EC results indicating the discharge is high in organic material and FDS was used to estimate the salt load from the discharge as discussed in the following section.

Proposed Discharge

Harris Woolf currently uses only the 10-acre orchard as an LAA, but will now use the other existing four-acre LAA for a total of 14-acres for the recycling of wastewater. Harris-Woolf revised the loading estimates presented in the 2009 RWD to include the additional four acres and a more representative effluent volume. However, the analyses only included the flows to the LAAs, not the entire flow to the wastewater retention pond. Central Valley Water Board staff updated the loading estimates based on a flow of 30,000 gpd with a loss of 15 percent of the wastewater to evaporation/percolation in the wastewater storage pond. The results indicate the proposed discharge will add up to 217 pounds per acre per year (lbs/ac/yr) of nitrogen, and the almond trees will require about 218 lbs/ac/yr. This Order contains Provision F.12 that requires Harris Woolf to submit a nutrient management plan to assess and implement measures to ensure nitrogen is applied at agronomic rates.

Salt loading using the average FDS result of 295 mg/L indicates the discharge will add 1,166 lbs/ac/yr. Biochemical oxygen demand (BOD) estimates indicate the discharge will add a monthly average of about 8 pounds per acre per day (lbs/ac/day).

Groundwater Conditions

Groundwater in the vicinity of the Facility is unconfined and is present at about 75 feet below the ground surface (bgs). Harris Woolf monitors a three well groundwater monitoring network (MW-1 through MW-3). MW-1 was installed along the western property boundary as an upgradient well, while MW-2 and MW-3 were installed as downgradient wells. MW-2 was installed on the eastern edge of the 10-acre LAA and MW-3 on the eastern edge of the Facility and the four-acre LAA. The direction of groundwater flow is generally to the east. The averages for selected constituents since June 2010 are summarized in the following table.

CONSTITUENTS	UNITS	MW-1	MW-2	MW-3
Electrical Conductivity	umhos/cm	1170	812	1140
Total Dissolved Solids	mg/L	828	618	828
Chloride	mg/L	42	23	35
Sodium	mg/L	105	47	61
Bicarbonate	mg/L	279	212	245
Total Hardness	mg/L	383	319	480
Calcium	mg/L	96	83	128
Magnesium	mg/L	31	26	37
Potassium	mg/L	2.7	2.4	3.1
Nitrate as Nitrogen	mg/L	40	17	34

The best water quality is observed in downgradient well MW-2, and the results in upgradient MW-1 and downgradient MW-3 are nearly identical with MW-1 having slightly higher values for most of the constituents. The EC and TDS averages from MW-1 and MW-3 exceed the

"Recommended" Secondary MCLs for EC and TDS (900 umhos/cm for EC and 500 mg/L for TDS), but are lower than the "Upper" Secondary MCLs (1,600 umhos/cm for EC and 1,000 mg/L for TDS). Nitrate as nitrogen results from all of the wells exceed the Primary MCL of 10 mg/L and indicate pollution of the underlying groundwater.

The United States Geological Survey (USGS) monitors or has monitored several groundwater monitoring wells near the Facility. Most are deeper supply wells that have little value for comparing water quality results, but two wells (Well 3727**421**20443601 and 3727**461**220443601) are located about two miles west and generally upgradient of the Facility. The well construction details were not provided, but both wells appear to monitor first encountered groundwater in the same portion of the aquifer as do the Harris Woolf groundwater monitoring wells. The depth to water was recorded in each well to have ranged from about 55 to 65 feet bgs since 1994 with water levels dropping to 65 feet bgs in 2012. The depth to groundwater in these wells is about the same but slightly less than (shallower) the depth to water observed in the Harris Woolf wells. Analytical results are nearly the same in each well. The results from USGS well 3727**461**220443601 are summarized in the following table.

USGS WELL 3727**461**20443601					
EC (umhos/cm)	TDS (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Nitrate as N (mg/L)
1,089	755	49.6	67.3	251	37.4
(932 – 1,310)	(682 – 901)	(31 – 61)	(65 – 72)	(223 – 278)	(33.7 – 40.4)

The results from the USGS wells are nearly identical to the results from MW-1, and indicate that MW-1 represents regional ambient or upgradient groundwater quality. The results also indicate that nitrate as nitrogen pollution in groundwater is a regional problem. The results in MW-2 indicate that the discharge in combination with the fresh water used to irrigate the 10-acre LAA appears to be actually improving groundwater quality downgradient of the LAA.

Source Water

Source water is obtained from an onsite 440-foot deep supply well. The well is screened from 240 to 260 feet bgs, and 340 to 440 feet bgs. The well was completed with a bentonite seal from about 5 feet bgs to 200 feet bgs. Source water quality is presented in the following table.

CONSTITUENT	UNITS	RESULTS
Electrical Conductivity	umhos/cm	182
Total Dissolved Solids	mg/L	158
Chloride	mg/L	22
Nitrate as Nitrogen	mg/L	1.0

Basin Plan, Beneficial Uses, and Regulatory Considerations

The *Water Quality Control Plan for the Plan for the Sacramento and San Joaquin River Basins, Fourth Edition* (revised October 2007) (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. The beneficial uses for the groundwater in the Facility area are municipal and domestic supply, agricultural supply, industrial process and service supply. The beneficial uses for the surface water in the Facility area (Merced River) are municipal and domestic supply, agricultural supply, industrial service supply; industrial process supply; hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; migration of warm and cold aquatic organisms; and warm and cold water spawning.

Antidegradation

State Water Resources Control Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:

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

b. 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

c. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.

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

As discussed in the preceding groundwater section, groundwater results for EC and TDS exceed the recommended MCLs for EC and TDS of 900 umhos/cm and 500 mg/L, respectively, and nitrate concentrations exceed the Primary MCL of 10 mg/L in all of the wells. However, a review of regional and upgradient results indicate upgradient water quality has almost identical results for EC, TDS, and nitrate as nitrogen. The EC, TDS, and nitrate as nitrogen concentrations in MW-1 and MW-3 represent regional groundwater quality, not degradation/pollution from the discharge from the Plant. Results from MW-2 indicate that wastewater and irrigation water applications may be improving groundwater quality downgradient of the 10-acre LAA.

The Discharger screens solids from the waste stream prior to discharge to the wastewater retention pond, which is considered BPTC for the discharge. The WDRs include Provisions F.11 and F.12 that require the Discharger to submit Salinity and Nutrient Management Plans to further evaluate and implement measures to improve the quality of its discharge.

The Basin Plan incorporates the State's Antidegradation Policy. The Antidegradation Policy requires the Central Valley Water Board in regulating discharges of waste to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Central Valley Water Board's policies (e.g., quality that exceeds water quality objectives). Resolution 68-16 requires that the constituents contributing to degradation be regulated to meet best practicable treatment or

control (BPTC) to assure that pollution or nuisance will not occur and that the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

With wastewater application at the loading rates authorized by this Order, appropriate application and resting periods, and the inclusion of four additional acres for the reuse of effluent to land planted with almonds, the discharge will not cause impermissible degradation of the underlying groundwater.

Degradation of groundwater by some of the typical waste constituents released with discharge from a food processing facility after effective source reduction is consistent with maximum benefit to the people of the State. Harris-Woolf contributes to the economic prosperity of the region by directly employing 60 to 100 workers at the Plant, provides incomes for numerous surrounding almond growers and associated trucking firms, and provides a tax base for local and county governments. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to accommodate growth and groundwater degradation provided terms of the Basin Plan are met.

The Order establishes effluent limits and groundwater limits for the Plant that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan. The Order contains requirements for groundwater monitoring to assure that the highest water quality consistent with the maximum benefit to the people of the State will be achieved.

Title 27

Title 27 of the California Code of Regulations, section 20005 et seq (Title 27) contains regulations to address certain discharges to land. Title 27 establishes a waste classification system, specifies siting and construction standards for full containment of classified waste, requires extensive monitoring of groundwater and the unsaturated zone for any indication of failure of containment, and specifies closure and post-closure maintenance requirements. Generally, no degradation of groundwater quality by any waste constituent in a classified waste is acceptable under Title 27 regulations.

Unless exempt, release of designated waste is subject to full containment pursuant to Title 27 requirements. Title 27 Section 20090(b) exempts discharges of designated waste to land from Title 27 containment standards and other Title 27 requirements provided the following conditions are met:

a. The applicable regional water board has issued waste discharge requirements, or waived such issuance;
b. The discharge is in compliance with the applicable basin plan; and
c. The waste is not hazardous waste and need not be managed according to Title 22, CCR, Division 4.5, Chapter 11, as a hazardous waste.

The discharge from Harris Woolf's Ballico Plant meets the above requirements and is therefore exempt from Title 27.

CEQA
For the existing Facility, the County of Merced issued Conditional Use Permit No. 3747 in 1993, circulated a Mitigated Negative Declaration on 26 January 1993, and adopted the Mitigated Negative Declaration on 9 March 1994 for the operation of an Almond processing facility on 22-acres of property (~ 8 acres for the Plant and ponds, and 14-acres of almond orchards for the reuse of wastewater). This Order does not increase the discharge volume, and does not authorize any additional construction activities to the Facility. The Order imposes regulatory requirements that are protective of the underlying groundwater quality; therefore, the existing discharge is exempt from the requirements of CEQA in accordance with California Code of Regulations, title 14, section 15301.

Proposed Order Terms and Conditions

Discharge Prohibitions, Effluent Limitations, Discharge Specifications, and Provisions
The proposed Order would prohibit discharge to surface waters and water drainage courses.

The proposed Order would limit the monthly average daily discharge flow limit at 30,000 gpd.

The proposed Order would limit the EC of the discharge to 900 umhos/cm.

The discharge requirements regarding dissolved oxygen and freeboard are consistent with Central Valley Water Board policy for the prevention of nuisance conditions, and are applied to all such facilities.

The proposed WDRs would prescribe groundwater limitations that implement water quality objectives for groundwater from the Basin Plan. The limitations require that the discharge not cause or contribute to exceedance of these objectives or natural background water quality, whichever is greatest.

Monitoring Requirements
Section 13267 of the CWC authorizes the Central Valley Water Board to require monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State. Water Code Section 13268 authorizes assessment of civil administrative liability where appropriate.

The proposed Order includes effluent, groundwater, pond, source water, and solids monitoring. The monitoring is necessary to evaluate the extent of the potential degradation from the discharge.

Reopener
The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and

plans, and are intended to assure conformance with them. The proposed Order would set limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the Order.