

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0060

WASTE DISCHARGE REQUIREMENTS
FOR
JASWANT S. BAINS
SACRAMENTO PACKING PRUNE PROCESSING
SUTTER COUNTY

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

1. Jaswant S. Bains (hereafter Discharger) submitted a Report of Waste Discharge (RWD) dated March 2001 for changes in the design and operation of the existing industrial wastewater facility at the Sacramento Packing prune processing facility. The RWD was initially found to be incomplete, but additional information provided in October and December 2003, and January 2004, was sufficient to complete the RWD.
2. The Discharger's facility is at 833 Tudor Road, Yuba City (Assessors Parcel No. 25-060-059) in Section 3, T13N, R3E, MDB&M. The location of the facility is presented on Attachment A, which is attached hereto and made part of this Order by reference.

BACKGROUND

3. Sacramento Packing is a prune processing facility. Fruit orchards surround the facility. The site contains several residential bungalows, offices, weigh scales, warehouses, and prune processing operations.
4. Until December 2003, activities at the facility included only receiving, washing, and drying prunes. These activities, conducted only during the prune harvest season (August and September), involve the processing of an average of 470 tons of fresh prunes per day. The fresh fruit is first washed to remove dirt, leaves and stems. The clean prunes are then dried in 56 drying tunnels. Average wastewater flow generated by these processes is reportedly approximately 15,000 gallons per day (gpd). Waste Discharge Requirements (WDRs) Order No. 94-250 has regulated the wastewater discharge produced by those activities.
5. In December 2003, processing operations at the facility were expanded to include rehydration of dried prunes, and pitting and packaging of the rehydrated prunes. Rehydration is conducted by injection of steam into the dried prunes. The expanded operations will be conducted throughout the year at an average production rate of approximately 20 tons per day. Anticipated wastewater flow generated by these processes is estimated to be approximately 50,000 gpd.
6. Significant plant sources that now contribute to the industrial wastewater stream include water softeners, boiler blowdown water, fruit and equipment washwater, and lubrication water for the pitter. During a 2003 facility inspection, the Discharger reported that, because of malfunctioning water softeners, approximately 350 pounds of salt per day were being used in the water softeners. Since that time, the Discharger has reported the problems with the water softeners have been corrected and current water softener salt usage is reported to be 90 pounds per day.

7. Because of expansion in the prune processing operations, significant increase in the volume of wastewater flow, changes in the design and operation of the process wastewater facility, and generation of wastewater that may threaten groundwater quality, WDRs Order No. 94-250 is no longer adequate for regulating discharges from this facility and must be revised.

WASTEWATER CHARACTERISTICS

8. The wastewater produced by the prune washing/drying operation was sampled in August 2001, while the wastewater produced by the prune rehydration and pitting operation was sampled in January 2004. The results are shown on the table below:

Compound	Units	Washing/Drying Wastewater (August 2001)	Rehydration/Pitting Wastewater (January 2004)
pH	pH units	7.5	6.5
Biochemical Oxygen Demand (BOD ₅) ¹	mg/l	98	
Total Dissolved Solids (TDS)	mg/l	1060	1600
Specific Conductance	umhos/cm	1640	2400
Nitrate-N	mg/l	0.26	<0.5
Total Kjeldahl Nitrogen	mg/L		5.3
Hardness	mg/l	692	450
Barium	mg/l	0.44	
Calcium	mg/l	87	83
Iron	mg/l	17	
Lead	ug/l	13	
Manganese	mg/l	1.28	
Potassium	mg/l	22.6	56
Magnesium	mg/l	115	58
Fluoride	mg/l	<0.1	26
Total Phosphate	mg/l	1.5	
Arsenic	ug/l	8.6	
Sodium	mg/l	87	340
Chloride	mg/l	360	790
Sulfate	mg/l	106	2.2
Mercury	ug/l	<1.0	
Total Coliform Organisms (TCO)	mpn/100ml		>1600
Fecal Coliform Organisms (FCO)	mpn/100ml		>1600
E. Coli	mpn/100ml		22

¹ Five-day, 20° Celsius Biochemical Oxygen Demand

9. The results of this wastewater characterization indicate that concentrations of salt-related constituents (e.g., TDS, sodium, and chloride), arsenic, lead, and bacteriological organisms (TCO, FCO, E. Coli) may pose a threat to the groundwater below the wastewater ponds.

WASTEWATER TREATMENT SYSTEM

10. Wastewater generated from prune processing activities (fruit washing, process/equipment cleaning, steam injection/pitting, and boiler blowdown) is currently collected in floor drains, flows via an unlined sump to a ditch, and is then transferred by means of a temporary portable pump from the ditch to a percolation/evaporation (P/E) pond. The P/E pond has a capacity of 2.2 million gallons while maintaining two feet of freeboard.
11. An aerated pond treatment system has been designed to replace the existing system. A site plan showing the designed wastewater system is provided in Attachment B, which is attached hereto and made part of this Order by reference.
12. When the system is completed, process wastewater will flow via floor drains to a sump. From the sump, wastewater will be pumped through a hydrosieve screen that will remove solid particles, and will then be discharged to the first aeration pond. Waste will then flow by gravity to the second aeration pond and from that pond to the P/E pond for storage and disposal.
13. The two aeration ponds have been constructed, but are not yet in operation. Because the expanded prune processing operations are already occurring, and because the wastewater facility designed to treat and dispose of process wastewater from those expanded operations is not yet operational, this Order provides a timeline for completion of the wastewater facility improvements.
14. The two aeration ponds are unlined. The bottoms of the aeration ponds are approximately 10 feet below the original ground surface and the bottom of the P/E pond is approximately five feet below the original ground surface.
15. The aeration ponds have an approximate volume of 65,000 gallons each.
16. The design treatment capacity of the filtration/aeration system is 90,000 gallons per day with the capability of producing effluent with an average biochemical oxygen demand (BOD) concentration of 40 mg/l.
17. Wastewater flow volumes are currently estimated, as there is no flow meter on the system. The Discharger will be required to install a flow meter and monitor wastewater flow on a daily basis.
18. The RWD contains a water balance for the wastewater treatment, storage, and disposal system. The water balance was based on annual wastewater discharge of 20.5 million gallons (90,000 gpd during August and September, and 50,000 gpd during the rest of the year) and average historic annual rainfall amounts recorded between 1948 and 1993. The water balance indicates that the wastewater system has sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation for that return period. A water balance based on 100-year annual return rainfall amounts has not been provided, but is required by this Order.

SOLID WASTE

19. Leaves, stems and waste prunes removed by washing screens during the prune drying season are returned to the orchard in the form of compost or are spread and cultivated directly into the soil. Prune pits, culls, and solids removed by a vibrating separator during the rehydration/pitting process are disposed of at a cogeneration plant.

SITE SPECIFIC CONDITIONS

20. The site topography relatively is flat. Surface and near surface soils consist of primarily of silts and clays with lesser amounts of sands and gravels. The Discharger has not provided data regarding the permeability of the soil in the vicinity of the facility.
21. Average annual rainfall for the area is 20.87 in/year. The 100-year return annual total rainfall was not reported. The average evapotranspiration rate for the area is 46.65 in/year.
22. The site is located within an area that is protected from the 100-year flood by levees, dikes, or other structures that may be subject to possible failure or overtopping during larger floods.
23. Domestic wastewater is reportedly disposed of separately from the process wastewater. The septic tank/leachfield domestic wastewater disposal system is regulated by Sutter County Environmental Health Department.

GROUNDWATER CONDITIONS

24. An industrial water supply well exists on the property and provides process water for this facility. Specific details regarding this well, such as well depth, depth to groundwater, and well construction details were not included with the RWD. The well location is shown on Attachment B. The well was sampled on 16 August 2001 and on 4 November 2003. Selected average concentrations from those two sampling events are presented below:

Constituent	Units	Concentration
Total Dissolved Solids	mg/l	890
Specific Conductance	umhos/cm	1600
Arsenic	ug/l	4
Barium	mg/l	0.3
Boron	mg/l	0.3
Calcium	mg/l	105
Sodium	mg/l	80
Chloride	mg/l	350
Iron	mg/l	ND (0.05)
Magnesium	mg/l	80
Manganese	mg/l	0.8
Potassium	mg/l	3.5
Nitrate (as N)	mg/L	0.25
PH	Std. Unit	7.7

25. A 1993 site geotechnical report, included in the RWD, identified the first encountered groundwater at 10 to 12 feet below the ground surface. Based on this information, it appears that there is minimal separation between the bottom of the unlined ponds and first encountered groundwater. The RWD indicates that the separation between the aeration pond bottoms and groundwater is less than two feet, and between the P/E pond bottom and groundwater is approximately five feet.

BASIN PLAN, BENEFICIAL USES, AND REGULATORY CONSIDERATIONS

26. 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 Resources Control Board. Pursuant to §13263(a) of the California Water Code (CWC), waste discharge requirements must implement the Basin Plan.
27. Surface water drainage in the area is to that portion of the Feather River between the Fish Barrier Dam and the Sacramento River.
28. The beneficial uses of the Feather River from the Fish Barrier Dam to the Sacramento River are municipal and domestic supply, agricultural irrigation supply; water contact recreation; non-contact water recreation; warm freshwater habitat, cold fresh water habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
29. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.
30. State Water Resources Control Board (State Board) Resolution No. 68-16 (the Antidegradation Policy) requires that the Board, in regulating the discharge of waste, must maintain the high quality of 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 Regional Board's policies (e.g., quality that exceeds water quality objectives). Resolution No. 68-16 also requires that waste discharged to high quality waters be required to meet waste discharge requirements, which will result in the best practicable treatment or control of the discharge.
31. The Discharger has not submitted any information showing that it should be allowed to degrade the groundwater as described in State Board Resolution No. 68-16, and therefore no degradation is allowed. Upon completion of all tasks required by this Order, this discharge of waste should not degrade surface water or groundwater quality. This Order establishes effluent limitations that are protective of the beneficial uses of the underlying groundwater, and requires a salinity reduction plan, a wastewater pond lining plan, and the installation and monitoring of groundwater monitoring wells to assure that the discharge of waste is not impacting the underlying groundwater. Based on the result of the scheduled tasks, this Order may be reopened to reconsider effluent limitations and other requirements to comply with Resolution 68-16.
32. Section 13267(b) of California Water Code provides 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, or any citizen or domiciliary, or political agency or entity of this state who*

has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

The technical reports required by this Order and the attached “Monitoring and Reporting Program No. R5-2004-0060” are necessary to assure compliance with these Waste Discharge Requirements (WDRs).

33. California Department of Water Resources standards for the construction and destruction of groundwater wells is 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 CWC section 13801, apply to all monitoring wells.
34. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 may be appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.
35. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on 16 November 1990 (40 CFR Parts 122, 123, and 124). The State Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The Discharger has not yet obtained coverage under General Permit No. CAS000001, and is required to do so.
36. The action to revise WDRs for the Sacramento Packing wastewater facility is exempt from provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.
37. The discharge of wastewater is exempt from the requirements of Title 27. The exemption, pursuant to Section 20090(b), is based on the following:
 - a. The Regional Board is issuing waste discharge requirements,
 - b. The discharge complies with the Basin Plan, and
 - c. The wastewater does not need to be managed according to Title 22 CCR, Division 4.5, and Chapter 11, as a hazardous waste.
38. Pursuant to California 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.

PUBLIC NOTICE

39. All the above and the supplemental information and details in the attached Information Sheet, incorporated by reference herein, were considered in establishing the following conditions of discharge.
40. The Discharger and interested agencies and persons were notified of the intent to prescribe WDRs for this discharge and provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
41. In a public meeting, all comments pertaining to the discharge were heard and considered.

IT IS HEREBY ORDERED that Order No. 94-250 is rescinded and that, pursuant to Sections 13263 and 13267 of the California Water Code, Jaswant S. Bains, his agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.
3. Discharge of waste classified as 'hazardous,' defined in Section 20164 of Title 27, CCR, or 'designated,' as defined in Section 13173 of the California Water Code, is prohibited.
4. The discharge of process wastewater to the domestic wastewater system is prohibited.
5. The discharge of domestic waste to the process wastewater treatment system is prohibited.
6. Discharge of process wastewater to other than the aeration ponds and the percolation/evaporation pond shown on Attachment B is prohibited.
7. The use of the ditch to transport the wastewater to the percolation/evaporation pond is prohibited after **1 October 2004**.

B. Discharge Specifications:

1. The monthly average wastewater discharge shall not exceed 50,000 gpd except during prune harvest season (August and September), when the limit is 90,000 gpd as a monthly average.
2. Neither the treatment nor the discharge shall cause a condition of nuisance or pollution as defined by the CWC, §13050.

3. The discharge shall not cause the degradation of any water supply.
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 the Groundwater Limitations.
5. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the property owned by the Discharger.
6. As a means of discerning compliance with Discharge Specification No. 5, the dissolved oxygen content in the upper zone (one foot) of any wastewater treatment or disposal pond shall not be less than 1.0 mg/L.
7. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge.
8. No wastewater shall be discharged with partial treatment. As of **1 October 2004**, all process wastewater discharged at the facility must be treated in the aeration ponds.
9. The pond shall be managed to prevent the breeding of mosquitoes. In particular,
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the waste surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, and/or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
10. The wastewater treatment and pond system shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
11. The freeboard in all ponds, including aeration ponds, shall never be less than two feet, as measured vertically from the water surface to the lowest point of overflow.
12. The wastewater treatment, storage, and disposal system shall have sufficient capacity to accommodate wastewater flow and seasonal precipitation. 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.
13. On or about **15 October** each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specifications No. 11 and No. 12.

C. Interim Effluent Limitations:

1. Wastewater discharged from the second aeration pond to the percolation/evaporation pond shall not exceed the following monthly average effluent limits, or such concentrations as the Discharger determines necessary to ensure compliance with the Groundwater Limitations:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Maximum Concentration</u>
BOD	mg/L	40
Total Dissolved Solids	mg/L	1500

2. Wastewater discharged to the percolation/evaporation pond shall not have a pH of less than 6.5 or greater than 8.4.
3. In order to fully protect groundwater quality, the Board may revise these interim effluent limitations based upon the results of the tasks described in the Provisions.

D. Solids/Sludge Disposal Requirements:

1. Collected screenings, sludge, and other solids removed from process wastewater shall be disposed of in a manner that is consistent with Title 27, Division 2, Subdivision 1 of the CCR and approved by the Executive Officer.
2. Fruit processing sludge and other solids shall be removed from the process equipment, sumps, etc. as needed to ensure optimal operation and adequate hydraulic capacity. Fruit processing solids drying operations, if any, shall be designed and operated to prevent leachate generation.
3. Storage and disposal of processing wastewater sludge shall comply with existing Federal, State, and local laws and regulations, including permitting requirements and technical standards.
4. Any proposed change in solids use or disposal practice from those described in Finding No. 19 shall be reported to the Executive Officer at least 90 days in advance of the change.

E. Groundwater Limitations:

The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.

F. Provisions:

1. 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 §6735, 7835, and 7835.1. To demonstrate compliance with §415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

2. All of the following reports shall be submitted pursuant to §13267 of the CWC, and shall be prepared by a California registered professional, as described in Provision F.1.
 - a. By **15 May 2004**, the Discharger shall submit a letter certifying that a registered California professional (as described in Provision F.1) has been retained under contract to prepare the plans and reports required in Provisions F.2.c through F.2.i.
 - b. By **1 June 2004**, the Discharger shall either apply for coverage or submit a Notice of Non-Applicability for Order No. 97-03-DWQ, Discharges of Storm Water Associated With Industrial Activities.
 - c. By **1 July 2004**, the Discharger shall submit a *Salinity Reduction Plan*. The plan shall evaluate the process wastewater system and propose methods to reduce the concentration of salt-related constituents in the wastewater. At a minimum, the plan shall consider the salt-related chemicals that enter the process wastewater, cleaning and sterilization procedures, and the discharge of water softener reject and of boiler blowdown to reduce the salinity of the wastestream. The plan shall include an implementation schedule to reduce the salinity of the wastestream. Implementation of the entire plan shall be completed by **1 October 2004**.
 - d. By **1 July 2004**, the Discharger shall submit a *Wastewater Aeration Pond Lining Plan*. The plan shall include calculations and drawings that demonstrate that the proposed aeration pond liners will ensure adequate protection of groundwater beneath the ponds from degradation. The plan need not address lining of the P/E pond. The plan shall include an implementation schedule for installation of the aeration pond liners. The pond liners shall be installed and functioning by **1 October 2004**.
 - e. By **1 August 2004**, the Discharger shall submit a *Groundwater Well Installation Workplan* and *Groundwater Sampling and Analysis Plan* prepared in accordance with, and including the items listed in, Section 1.0 of Attachment C: *Monitoring Well Installation Workplans and Monitoring Well Installation Reports*. The workplan shall propose the installation of a sufficient number of groundwater monitoring wells to monitor the groundwater in the vicinity of the wastewater ponds (upgradient and downgradient), including background groundwater quality out of the influence of waste discharge at the facility. All wells shall be designed to yield samples representative of the uppermost portion of the first encountered groundwater.
 - f. By **1 October 2004**, the Discharger shall submit a *Wastewater Facility Upgrade Completion Report* that documents the completion of the facility modifications as designed and includes as-built drawings of the upgraded facility. The report shall clearly show that the filtration and aeration systems are in use, the *Salinity Reduction Plan* has been implemented, and the aeration pond liners have been installed and are functional. As-built drawings of the pond liners shall be included. The report shall also document the installation of a wastewater influent flow meter. In addition, the report shall demonstrate that the domestic wastewater generated by the toilets in the new processing building has been routed to a septic tank/leachfield system permitted by Sutter County. The report shall also include a water balance based on the flow limits prescribed by this Order and seasonal precipitation. Design seasonal precipitation

should be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

- g. By **1 October 2004**, the Discharger shall submit and implement an *Operation and Management Plan (O&M Plan)* for the wastewater treatment and disposal facility. At a minimum, the *O&M Plan* should describe (a) the practices used to treat the wastewater within limits specified in this Order, (b) the operation and maintenance procedures for the treatment system, (c) the practices used to prevent overflows or spills of untreated wastewater or effluent, (d) the locations of flow and effluent sampling points, (e) maintenance procedures for the wastewater ponds, and (f) the locations of the solid waste disposal areas, methods of disposal, and the daily practices associated with the disposal of the solid waste. A copy of the *O&M Plan* shall be kept at the facility for reference by operating personnel and they shall be familiar with its contents.
- h. By **1 December 2004**, the Discharger shall submit a *Monitoring Well Installation Report* that contains the information in Sections 2.0 of Attachment C. The sampling workplan shall specify proposed sampling techniques designed to ensure that representative samples of sufficient volume are obtained and analyzed.
- i. By **1 February 2006**, the Discharger shall submit a *Background Groundwater Quality Study Report*. For each groundwater monitoring parameter/constituent identified in the MRP, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the wastewater ponds. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), or equivalent, and shall be based on data from at least four consecutive quarterly (or more frequent) groundwater monitoring events. For each monitoring parameter/constituent, the report shall compare measured concentrations for compliance monitoring wells with the calculated background concentration. The report shall also evaluate whether the interim effluent limits contained in this Order are protective of water quality.

If the *Background Groundwater Quality Study Report* shows that the wastewater discharge has impacted, or is likely to impact groundwater quality, then upon request of the Executive Officer the Discharger shall submit a *Groundwater Mitigation Plan* which shall evaluate contaminant control alternatives, describe a preferred alternative, and provide a proposed timeline to meet the Groundwater Limitations of this Order. The selected contaminant control alternative must comply with State Water Resources Control Board Resolution No. 68-16 and be consistent with the most recent Basin Plan.

3. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2004-0060, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
4. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

5. In the event of any change in control or ownership of land or waste discharge facilities described herein, 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 this office.
6. The Discharger shall submit to the Regional Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then the Discharger shall state the reasons for noncompliance and shall provide a schedule to come into compliance.
7. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to §313 of the "Emergency Planning and Community Right to Know Act of 1986."
8. The Discharger shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.
9. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by this Order and by the Executive Officer pursuant to Section 13267 of the California Water Code. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or recession of this Order.
10. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
11. The Regional Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, 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 23 April 2004

THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0060

FOR
JASWANT S. BAINS
SACRAMENTO PACKING PRUNE PROCESSING
SUTTER COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring of the influent wastewater, wastewater ponds, effluent, solid waste, and groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All wastewater samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Process wastewater flow monitoring shall be conducted continuously using a flow meter and shall be reported in cumulative gallons per day.

Field test instruments (such as pH and dissolved oxygen) may be used provided that:

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

INFLUENT MONITORING

Process wastewater samples shall be collected from the wastewater sump. Wastewater flow shall be measured immediately before entering or immediately after leaving the sump. Influent monitoring for the process wastewater system shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow	gallons	Continuous	Daily ¹	Monthly
PH	pH Units	Grab	Weekly	Monthly
BOD ₅ ²	mg/L	Grab	Monthly	Monthly

¹ Continuous monitoring requires daily meter reading or automated data collection. A flow meter must be installed and functional no later than 1 October 2004. Prior to that time, daily flows shall be estimated.

² Five-day, 20° Celsius Biochemical Oxygen Demand.

POND MONITORING

Samples shall be collected from an established sampling station located in an area that will provide a sample representative of the water in each of the wastewater ponds. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. Monitoring of the ponds shall include, at a minimum, the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Dissolved Oxygen ¹	mg/L	Grab	Weekly	Monthly
Freeboard	feet (±0.1)	Measurement	Weekly	Monthly
Odors	--	Observation	Weekly	Monthly

¹ Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet. Samples shall be collected between 0700 and 0900 hours.

EFFLUENT MONITORING

Effluent samples shall be collected at a point between the second aeration pond and the percolation/evaporation pond. Prior to operation of the aeration ponds, effluent samples shall be collected from the percolation/evaporation pond. The monitoring reports shall clearly state the location from which the effluent samples were collected. Monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
PH	pH units	Grab	Weekly	Monthly
BOD ₅ ¹	mg/L	Grab	Monthly	Monthly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Monthly
Total Kjeldahl Nitrogen	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Coliform Organisms	MPN/100ml	Grab	Monthly	Monthly

¹ Five-day, 20° Celsius Biochemical Oxygen Demand.

SOLIDS MONITORING

The Discharger shall record and report monthly the quantity, disposal location, and method of disposal of solids. If solid waste is shipped offsite, then an estimated amount and location of disposal shall be reported in the monthly report and the hauler identified.

GROUNDWATER MONITORING

Groundwater monitoring shall commence with the fourth quarter 2004. Prior to construction and/or sampling of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Board for approval. Once installed, all new wells shall be added to the monitoring network and shall be sampled and analyzed according to the schedule below. All samples shall be collected using approved EPA methods. Water table elevations shall be calculated to determine groundwater gradient and direction of flow.

Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Depth to

groundwater shall be measured to the nearest 0.01 feet. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency⁴</u>	<u>Reporting Frequency⁴</u>
Depth to Groundwater	±0.01 feet	Measurement	Quarterly	Quarterly
Groundwater Elevation ¹	±0.01 feet	Calculated	Quarterly	Quarterly
Gradient	feet/feet	Calculated	Quarterly	Quarterly
Gradient Direction	degrees	Calculated	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100 ml	Grab	Quarterly	Quarterly
Standard Minerals ^{2,3}	mg/L	Grab	Annually	Annually
Arsenic ³	ug/l	Grab	Annually	Annually
Lead ³	ug/l	Grab	Annually	Annually

¹ Groundwater elevation shall be determined based on depth-to-water measurements from a surveyed measuring point elevation on the well.
² Standard Minerals shall include at least the following compounds: boron, calcium, iron, magnesium, potassium, sodium, chloride, sulfate, total alkalinity (including alkalinity series), and hardness.
³ Standard Minerals, arsenic, and lead shall be analyzed in the fourth quarter of the year.
⁴ Beginning with the fourth quarter, 2004.

REPORTING

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

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater monitoring reports shall be prepared under the direct supervision of a registered professional engineer or geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by 1 March). Monthly reports for the months of March, June, September, and December may be submitted as part of the Quarterly Monitoring Report, if desired. The monthly reports shall include the following:

1. Results of influent, pond, effluent, and solids monitoring;

2. A comparison of monitoring data to the discharge specifications and effluent limits, and an explanation of any violation of those requirements. Data shall be presented in tabular format;
3. If requested by staff, copies of laboratory analytical report(s);
4. A calibration log verifying calibration of all hand held monitoring instruments and devices used to comply with the prescribed monitoring program.

B. Quarterly Report

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Regional Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year. The Quarterly Report shall include the following:

1. Results of groundwater monitoring;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and
8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

Annual Report shall be prepared as the December monthly monitoring report. The Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of a regular December monthly monitoring report;
2. The contents of the regular quarterly monitoring report for the last quarter of the year;
3. If requested by staff, tabular and graphical summaries of all data collected during the year;
4. A comprehensive evaluation of the effectiveness of the past year's wastewater disposal operation in terms of odor control and groundwater protection, including consideration of waste constituent and hydraulic loadings, and groundwater monitoring data;
5. An evaluation of the groundwater quality beneath the land application area;
6. Estimated flows for the next calendar year;
7. A discussion of compliance and corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements; and
8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

23 April 2004
(Date)

INFORMATION SHEET

ORDER NO. R5-2004-0060
JASWANT S. BAINS
SACRAMENTO PACKING PRUNE PROCESSING
SUTTER COUNTY

Jaswant S. Bains owns and operates the Sacramento Packing, Inc. prune processing facility at 833 Tudor Road, Yuba City. Until recently, the only activities performed at this facility were the washing and drying of fresh prunes during the harvest season. The treatment and disposal of wastewater generated by these activities were regulated by Waste Discharge Requirements (WDRs) Order No. 94-250.

The Discharger has recently expanded operations to include year-round rehydration, pitting, and packaging of prunes, and has modified the process wastewater facility to accommodate the increased strength and volume of the wastewater generated. The increased fruit processing operations may generate up to 90,000 gpd of process wastewater during the harvest season and 50,000 gpd during the rest of the year.

Wastewater is generated by fruit washing, equipment/floor cleaning, fruit rehydration and pitting, and boiler blowdown and water softener reject discharge. Domestic wastewater is reportedly discharged to several small septic tank/leachfield systems that are regulated by Sutter County Environmental Health Department.

Although not yet constructed, the final process wastewater treatment system will consist of collection of wastewater in floor drains, and discharge via a settling sump and hydroseive screening to two aeration ponds (in series), prior to disposal in a 2.2 million gallon capacity percolation/evaporation pond. The Discharger is required to show that the upgraded treatment system is fully operational by 1 October 2004. The design treatment capacity of the system is 90,000 gpd with the capability of producing effluent with an average BOD concentration of 40 mg/l. The aeration ponds should maintain dissolved oxygen concentrations at levels that will control nuisance odors. However, recent wastewater characterization sampling indicated that the wastewater generated from the new operations is high in salt-related constituents and bacteriological organisms. It is anticipated that neither salt-related constituents nor bacteriological organisms would be significantly reduced in the designed treatment process.

All wastewater ponds are unlined and the groundwater table is reported to be at or near the elevation of the bottom of the aeration ponds. Because of this fact and the concern regarding elevated concentrations of salt-related constituents and bacteriological organisms in the discharged wastewater, this Order prescribes the preparation and implementation of a *Salinity Reduction Study* to reduce the concentration of dissolved solids in the discharge and a *Wastewater Aeration Pond Lining Plan* to prevent degradation of groundwater below the ponds. The installation of a groundwater monitoring network and quarterly groundwater monitoring is also required in order to ensure compliance with the groundwater limitations.

The water balance provided by the Discharger was based on average annual rainfall amounts recorded from 1948 through 1993. However, this Order prescribes that the design hydraulic capacity of the wastewater system to be based on a 100-year annual return period. Therefore, the Discharger is required to resubmit a water balance based on 100-year annual return rainfall amounts.

These WDRs also establish wastewater effluent concentration limits, require submittal of an industrial stormwater application, preparation of an operation and maintenance plan, and regular monitoring of waste solids, and wastewater and groundwater quality. Surface water drainage in the area is to the Feather River.