STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 4-5, 2008
Prepared on November 4, 2008

ITEM NUMBER: 31

SUBJECT: Rescission of Waste Discharge Requirements Order No. 93-05 for Gibson Farms Dry-Yard Facility, San Benito County and Coverage under the General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste (Order No. R3-2004-0066)

KEY INFORMATION

Discharger:	Gibson Farms, Inc.
Location:	7751 Fairview Road, Hollister, California
Discharge Type:	Food Processing
Treatment:	Current: Particle screening, pH stabilization, and facultative percolation pond. Proposed: Parabolic hydrasieve particle screening, floating aerator, pH control, and lined pond system.
Design Capacity:	16,000 gallons per day used for irrigating 10 acres of apricot orchards.
Discharge Volume:	Wastewater volume is 6,000 to 11,000 gallons per day during the process season, which is June through July. The facility generates a minimal amount of wastewater due to occasional facility washdown events during the off-season (August through May).
Recycling:	None
Existing Order:	93-05
This Action:	**Rescind Waste Discharge Requirements Order No. 93-05**

SUMMARY

The Regional Board adopted Waste Discharge Requirements (WDR) Order 93-05 on February 5, 1993, to regulate food processing wastewater discharges from the Gibson Farms Dry-Yard (hereafter, "Discharger") facility in San Benito County. After several recent inspections, reviewing the Discharger's case history, and receipt of a Notice of Intent application, Water Board staff recommends rescinding Order 93-05 and regulating the fruit wash wastewater using the Central Coast Region General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste, Order No. R3-2004-0066 (General Order). The San Benito County Environmental Health Department regulates the low volume domestic wastewater from this facility.

DISCUSSION

The Discharger operates an apricot drying operation located at 7751 Fairview Road, Hollister in San Benito County. Fresh apricots are trucked into the facility, washed, dehydrated, and then shipped out to various vendors. During the operating season (June through July) the facility processes up to 1,000 tons of apricots. Process wastewater flow averaged 7,500 gallons per day (gpd) for the past two years with a peak flow of 11,000 gpd. The current process wastewater treatment consists of screening, pH stabilization, and an unlined facultative pond.

Water Board staff inspections of the facility in the past two years indicate the Discharger inadequately manages the process wastewater treatment system, which has the potential to cause impacts to Las Viboras Creek (located along north border of facility) and groundwater. Additionally, the Discharger has a history of submitting incomplete reports per Monitoring and Reporting Program No. 93-05. The current WDR Order No. 93-05 is over 15 years old, and is long overdue for restructuring based on new industry standards. Water Board staff has reviewed the Discharger's WDR and past operating conditions and believes the facility will be better managed through the General Order. Enrollment of the facility into the General Order will provide the Discharger with established fruit processing facility design guidelines, specifications, and monitoring requirements geared toward eliminating potential impacts to surface waters and groundwater. It will also provide for fair business operating practices, which the Water Board has established throughout the Central Coast service area for all fruit and vegetable process facilities.

Water Board staff required the Discharger to provide a work plan by September 30, 2008. The work plan indicates the Discharger will implement wastewater administrative and engineering control measures at the facility prior to start-up of the 2009 operating season and prior to enrollment into the General Order. The Discharger has indicated it will install a parabolic hydrasieve prior to the septic tanks, line the existing percolation pond, install a floating aerator in the pond, perform pH control, and will reuse the effluent wastewater by irrigating 10 acres of apricot orchards owned by the Discharger.

Domestic wastewater is disposed of in a separately piped septic system. The San Benito County Environmental Health Department regulates the domestic wastewater treatment and disposal.

Surface Hydrology

Las Viboras Creek is located immediately north of the facility. It flows in a northwesterly direction for about six miles to the Pajaro River. Las Viboras Creek is ephemeral; it flows only during heavy rains. The facility lies within FEMA Zone A (no base flood elevation established – September 27, 1991 data) 100-year flood plain along Las Viboras Creek. Therefore, there is potential for flooding during the wet season.

Groundwater

The Discharger's facility is located within the Hollister sub-basin of the Gilroy-Hollister groundwater basin. The Central Coast Water Quality Control Plan (Basin Plan) designates beneficial uses of groundwater in the Hollister sub-basin for municipal and agricultural uses. The Basin Plan establishes specific groundwater objectives for the Hollister groundwater sub-basin as follows:

TABLE 1 – GILROY-HOLLISTER, HOLLISTER SUB-BASIN SPECIFIC GROUNDWATER OBJECTIVES

Constituent	Total Dissolved Solids	Chloride	Sulfate	Boron	Sodium	Nitrogen
Numerical Objective (mg/L)	1,200	150	250	1.0	200	5

Depth to groundwater in the Hollister sub-basin was measured as 85 feet below grade surface (ft bgs) on September 1, 1992. Since then, water levels in the Hollister sub-basin have risen significantly. Records of groundwater levels measured between October 2004 and October 2005 indicate the average depth to groundwater around the Discharger's facility is 22 ft bgs. Recharge to the shallow aquifer occurs through percolation of process wastewater, rainfall, percolation of irrigation water, and flow from adjacent groundwater areas. Groundwater in this sub-basin flows west towards the Pacific Ocean. Waste Discharge Order 93-05 did not require the Discharger to monitor

groundwater chemical characteristic data around the facility location; therefore, impacts to groundwater from the facility's wastewater are unclear.

Water Supply
An onsite domestic well located at the apricot processing shed and the San Benito County Water District provide for domestic water supply. The Discharger provides annual water supply well data. Table 2 below indicates the following water quality characteristics for the past six years:

TABLE 2 – GIBSON FARMS DRY-YARD FACILITY DOMESTIC WATER SUPPLY WELL CHARACTERISTICS FROM 2002 THROUGH 2007

Constituent / Date	Total Dissolved Solids (mg/L)	Calcium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Nitrate as N (mg/L)	Nitrate as NO_3 (mg/L)
July 2002	970	120	81	170	74	61	13	--
July 2003	1,000	110	68	160	72	61	11	--
July 2004	900	120	69	160	77	67	13	--
July 2005	820	110	61	No Data	73	74	11	--
July 2006	850	110	61	No Data	73	68	--	44
July 2007	770	110	57	No Data	73	69	--	44

Aside from relatively high total dissolved solids and nitrate levels, historical water supply data indicates it is of acceptable quality for washing fruit but not for potable uses.

Flow Rates
The Discharger processes fruit primarily from June through July each year. The average wastewater flow rate for the past two fruit processing seasons is 7,500 gpd. This flow includes equipment washdown events. During the remaining months of the year there is only minimal wastewater generated for facility equipment washdown. Process flows from the Discharger's facility currently discharge to a percolation pond. The pond capacity is approximately 450,000 gallons. WDR Order 93-05 limits process wash-water flow to 16,000 gpd.

Existing Monitoring Requirements
Under existing Order 93-05, the Discharger is required to perform annual water supply and effluent monitoring. Effluent monitoring requires daily estimated volumes and single grab samples analyzed for total dissolved solids, pH, calcium, magnesium, sodium, chloride, nitrate (as nitrogen), and sulfate. Water supply monitoring requires single grab samples analyzed for the same suite of constituents as the effluent wastewater.

Effluent Characteristics
Average concentrations for select effluent constituents are included in Table 3.

TABLE 3 – GIBSON FARMS DRY-YARD EFFLUENT CHARACTERISTICS

Constituent / Date	Total Dissolved Solids (mg/L)	Calcium (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Nitrate as N (mg/L)	Nitrate as NO_3 (mg/L)
July 2002	1,220	130	84	180	75	50	13	--
July 2003	1,860	120	73	160	80	63	9.7	--
July 2004	1,130	120	67	170	73	65	12	--
July 2005	1,200	110	69	No Data	77	75	11	--
July 2006	1,200	120	64	No Data	75	68	--	42
July 2007	1,100	120	63	No Data	78	71	--	29
June 2008 Inspection	**4,200**	--	86	**320**	--	**340**	--	--

Effluent data provided by the Discharger indicates the wastewater becomes slightly elevated in total dissolved solids (TDS) with the remaining constituents almost similar to water supply characteristics. However, data collected by Water Board staff from the percolation pond during a routine inspection of the facility in June 2008 indicates extremely elevated levels of TDS, chloride, and sodium. The discrepancy in effluent TDS results from the Discharger and Water Board staff inspection data indicates that either the Discharger has modified its effluent characteristics in 2008 or collects its effluent sample from a location other than from the percolation pond.

Other characteristics observed during the June 2008 facility inspection by Water Board staff include percolation pond nuisance odors, pH levels depressed below 5.0, and dissolved oxygen levels less than 1.0 mg/L.

Staff is currently following up on these observations.

Compliance History
As of October 2000, the following enforcement actions have occurred for the Discharger's facility:

Date	Violation
October 12, 2000	Failure to submit annual report.
October 18, 2002	Failure to submit annual report.
September 20, 2006	Fax to Discharger stating 2006 Annual Report failed to provide chloride results and requiring analysis for nitrate as nitrogen and not as nitrate.
July 31, 2007	Site inspection findings indicate effluent discharges to percolation pond containing oil and grease from equipment leaks. Requested Discharger to file a NOI by October 31, 2007.
March 10, 2008	Notice of Violation indicating incomplete 2007 Annual Report and failure to submit NOI by October 31, 2007.
August 5, 2008	Notice of Violation indicating illegal discharges to Las Viboras Creek, extreme nuisance odors, high TDS levels in percolation pond, low pH levels in percolation pond, sludge and wood debris disposal along banks of percolation pond, and addition of sodium hydroxide and other biological chemicals to effluent without prior approval by Water Board staff.

The Discharger's past compliance history supports the proposed action to enroll the facility into the General Order, which requires a more stringent monitoring and reporting program.

General Order R3-2004-0066
General Order R3-2004-0066 (attached), entitled Central Coast Region General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste, Finding 1 states:

> In accordance with California Water Code Section 13263(i), fruit and vegetable processing facilities covered under these General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste (hereafter "General WDRs"), (a) produce waste by similar operations, (b) involve similar types of waste, (c) require similar treatment standards, and (d) are more appropriately regulated under General WDRs than individual WDRs.

The Discharger's facility processes apricots in a manner that is specifically listed as a typical fruit and vegetable facility for which the General Order is applicable. The General Order implements applicable Water Board standards, prohibitions, and requirements to protect water quality. It is limited in applicability to facilities defined as creating a byproduct of the cutting, cleaning, cooling, drying, sorting, juicing, or packaging of fruits or vegetables, excluding waste from wineries and mushroom farms.

Monitoring requirements under the General Order are based on tiered effluent flow rates. The Discharger is required to monitor water supply, production volumes, chemical usage, influent characteristics, pond(s) levels and chemistry, effluent characteristics, disposal areas, solid waste disposal, and groundwater characteristics. Given that the Discharger has been required to perform annual water supply and effluent monitoring under existing Order 93-05, and nearby groundwater wells currently exist, there are convenient sampling locations available.

Historical groundwater monitoring data does not demonstrate if the Discharger's wastewater disposal system has a negative effect on groundwater quality. Therefore, to begin observations of groundwater quality and to maintain consistency among similar dischargers, Water Board staff recommends establishing groundwater monitoring as required by the General Order.

In summary, the Discharger's wastewater volume, continuity, and character are consistent with those allowed under the General Order. Rather than revise existing Order 93-05, it is appropriate to regulate the Discharger via the General Order. If the Water Board regulates the discharge under the General Order, individual WDRs would not be necessary, and the Regional Board can rescind Order 93-05. If the Regional Board approves the rescission then the Executive Officer will authorize, by letter, the Discharger coverage under the General Order.

ENVIRONMENTAL SUMMARY

Waste Discharge Requirements for existing facilities are exempt from provisions of the California Environmental Quality Act (Public Resource Code, Section 21100 et seq.) in accordance with Section 15301, Chapter 3, Title 14 of the California Administrative Code.

COMMENTS

Water Board staff notified the Discharger by letter dated August 20, 2008, of staff's recommendation to rescind Waste Discharge Requirements Order 93-05 and approve coverage via the General Order. Water Board staff invited the Discharger to submit written comments by September 19, 2008. The Discharger did not submit any comments by the September 19, 2008, nor after that date, nor from any other interested parties to the proposed rescission of WDR Order No. 93-05 and enrollment into the General Order.

RECOMMENDATION

Rescind Order No. 93-05 and concur with the Executive Officer's proposed enrollment of the facility into the General Order.

ATTACHMENTS

1. Gibson Farms Dry-Yard Facility Site Map
2. Existing Waste Discharge Requirements Order 93-05
3. Waste Discharge Requirements Order R3-2004-0066
4. Monitoring and Reporting Program No. R3-2004-0066 modified for the Gibson Farms Dry-Yard Facility