

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MARCH 23, 2007

Prepared on December 21, 2006

ITEM NUMBER: 15

SUBJECT: Rescission of Waste Discharge Requirements (WDR) Order No. 91-69, Enrollment Under General WDR Order No. R3-2004-0066, Christopher Ranch, Santa Clara County

KEY INFORMATION

Discharger/Producer: Christopher Ranch  
Location: 305 Bloomfield Ave., Santa Clara County  
Discharge Type: Fruit and vegetable processing wastewater  
Design: Aerated, lined ponds  
Disposal: Orchard irrigation  
Capacity: 150,000 gallons per day  
Recycling: Orchard irrigation  
Existing Orders: Waste Discharge Requirements Order No. 91-69.  
This action: Rescind Order No. 91-69

SUMMARY

Staff proposes the Board rescind WDR Order No. 91-69. If the Board rescinds the Order, then staff will enroll Christopher Ranch (Discharger) under *General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste (Order No. R3-2004-0066)*.

DISCUSSION

On February 1, 2006, the Discharger submitted a Notice of Intent to comply with the terms and provisions of Order No. R3-2004-0066. Staff requested the NOI for the following reasons:  
First, to regulate wastewater discharges consistently with other fruit and vegetable processors in the Central Coast, which include Costa Family Farms, D'Arrigo Brothers, Fresh Innovations, Pride of San Juan, Hollister Veg-Pac and Gilroy Veg-Pac;  
Second, to improve and update waste discharge requirements, including prohibitions – the General Order's Prohibition No.1 prohibits the discharge of

wastewater to surface waters which the existing Order WDR 91-69 does not provide.

The Discharger processes garlic year-round and fresh cherries and peppers seasonally, and discharges wastewater at an annual average of 0.090 million gallons per day (mgd), and up to 0.125 mgd during the peak processing month. Product washwater and area washdown water comprise most of the wastewater stream, and boiler blowdown contributes a smaller but significantly saltier fraction. The Discharger stores and treats combined wastewater and stormwater, after screening to remove solids, in four lined aerated ponds, and irrigates a 70-acre cherry orchard with the treated wastewater and Sudan-grass plantings. The Discharger aerates the pond contents to control odors and to partially stabilize the wastewater.

In an October 24, 2006 letter, the Executive Officer (EO) responded to a disease outbreak caused by E. Coli found on vegetable crops grown in the Central Coast Region. The letter required all fruit and vegetable processors in the Region to

address the possibility that E. Coli might contaminate their food products and required the Discharger to daily monitor its wastewater for fecal coliform (which includes E. Coli). However, the Discharger showed that it irrigates its cherry crop with low-flow, low-height sprayers that do not allow the wastewater to contact the cherry crop, which hangs above and out of reach of the irrigation water. Therefore, in a January 10, 2007 e-mail, the EO found that the Discharger's irrigation method poses no significant threat to public health and exempted the Discharger from the letter's monitoring and reporting requirements.

In accordance with requirements in Monitoring and Reporting Program (MRP) No. 91-69, revised in November 2003, the Discharger monitors its water supply, the wastewater in the treatment ponds, and the groundwater underlying the irrigated lands. Three wells monitor the shallow groundwater for wastewater constituents, including Total Dissolved Solids (TDS), nitrate, and other potential pollutants.

In response to the Board's concerns regarding high TDS concentrations in the discharge, the Discharger eliminated brine discharges to the treatment ponds, the source of the irrigation water. Consequently, while average pond TDS in 2002 was 1,022 mg/L, TDS in 2005 and 2006 dropped to 752 mg/L, well below the 1,000 mg/L Maximum Contaminant Level (MCL).

Samples from Monitoring Well (MW) #3 demonstrate the discharge's effect on the groundwater - which is encountered approximately 15 feet below the ground surface - because it is the well downgradient from the irrigated orchard. In 2006, groundwater from MW #3 contained TDS at an average concentration of 702 mg/L, which complies with the MCL. Beginning in 2004, groundwater samples from MW #3 have always complied with the MCL. Therefore, staff reduced the monitoring frequency for TDS, sodium, chloride and all other pollutants, except nitrogen, to semi-annually from quarterly. Staff revised MRP No. R3-2004-0066 to reflect the changes.

In 2006, MW #3 contained an average nitrate-nitrogen (NO<sub>3</sub>-N) of 5.3 mg/L, a sharp decline from the 2005 average of 20.8 mg/L; the MCL is

10 mg/L, so the 2006 discharge did not impair the groundwater's beneficial use as drinking water. Neither staff nor the Discharger's representative knows why this decline occurred. Future monitoring will confirm if the trend continues. To provide an adequate number of data for the evaluation, staff retained the quarterly monitoring for nitrate-nitrogen and Kjeldahl-nitrogen in the revised MRP.

Staff reviewed the criteria for establishing a discharge's threat to water quality (TTWQ) and complexity are attached. Staff determined the 2B classification better represents the discharge than the current 3B classification. The discharge can impair the beneficial uses of the receiving water (Category "2") rather than degrade water quality without impairing beneficial uses.

After 2003, the Discharger has attained continual compliance with enforceable water quality standards and does not require the oversight provided through regulation by an individual Order. If the Board agrees to rescind Order No. 91-69, the Executive Officer will enroll the Discharger under Order No. R3-2004-0066.

## COMPLIANCE HISTORY

As discussed above, the Discharger has improved its compliance with waste discharge requirements by reducing the concentration of TDS and nitrate in its discharge. However, in the first week of February 2007, an unknown member of the Discharger's staff opened a gate in a pipeline and thereby allowed a substantial volume of wastewater from its garlic bin washout area to enter Uvas Creek. The discharge killed numerous fish, including at least a dozen steelhead, an endangered species. The Discharger immediately closed the gate and rendered it permanently inoperative, as verified by staff inspections. Staff referred the issue to the Santa Clara County District Attorney's office and recommended enforcement.

**RECOMMENDATION**

Rescind Waste Discharge Requirements Order No. 91-69.

**ATTACHMENTS**

1. Waste Discharge Order No. 91-69
2. General Waste Discharge Requirements Order No. R3-2004-0066
3. Monitoring and Reporting Program No. R3-2004-0066