

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

STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 25-26, 2014
Prepared on July 11, 2014

ITEM NUMBER: 11

SUBJECT: **Rescission of Waste Discharge Requirements for Dole Fresh Vegetables, Inc. (Order No. 94-36) and enrollment in the *General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste* (Order No. R3-2004-0066)**

STAFF CONTACT: Tom Kukol, 805/549-3689, tkukol@waterboards.ca.gov

KEY INFORMATION:

Discharger: Dole Fresh Vegetables, Inc.
Location: 32655 Camphora-Gloria Rd. Soledad, Monterey County
Discharge Type: Vegetable process water
Treatment: Screening and settling in an aerated pond
Disposal: None
Recycling: Applied to agricultural land
Existing Order: Individual WDR Order No. 94-36

THIS ACTION: **Rescind individual WDR (Order No. 94-36) and direct Executive Officer to enroll facility under general WDR (Order No. R3-2004-0066)**

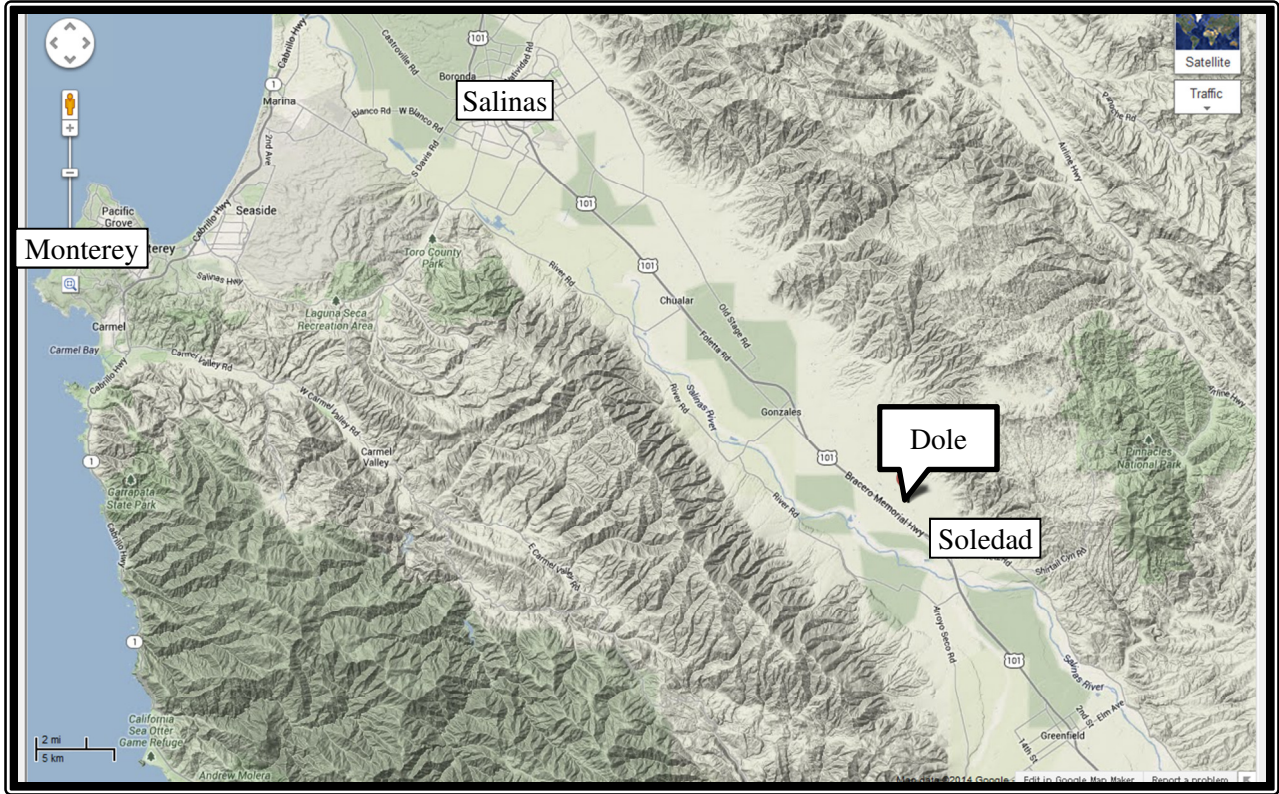
SUMMARY

Dole Fresh Vegetables, Inc. (or "Dole") processes leafy vegetables near Soledad. Dole's operation produces washwater that is recycled for surrounding agricultural needs. In 1994, the Water Board adopted individual waste discharge requirements (WDRs) to regulate the washwater recycling. Those WDRs are over 20 years old and are due to be reviewed. Due to Dole's stellar compliance record, the post-1994 emergence of general fruit and vegetable processing WDRs, and the Water Board's preference for regulating discharges under general WDRs, staff recommends rescinding Dole's individual WDRs in favor of regulating the discharge under the general fruit and vegetable processing WDRs. At Dole's request, and considering Dole's water quality history, staff's recommendation includes a reduction of the general fruit and vegetable processing WDRs' standard monitoring requirements.

DISCUSSION

Location

Dole Fresh Vegetables, Inc. (or "Dole") operates a leafy vegetable processing facility in Monterey County, near Soledad, at 32655 Camphora-Gloria Road, as shown in the following location maps:



Production Facility Description

About 650 mostly seasonal employees working three shifts (two production, one cleanup) process some 50 different types of vegetables into 200 "active" stock keeping units (SKUs). Vegetables are typically harvested, transported, processed, packaged, and shipped within 36 hours. At the processing plant, vegetables are received in palletized harvest bins weighing 600 to 900 lbs. each, 20 bins per flatbed trailer. After weigh-in and physical inspection, vegetables are cooled to 35-38 °F in a conveyORIZED vacuum cooler to remove field heat. Forklifts designed to handle 20 bins at a time (10 pallets stacked two high) move entire flatbed loads from trucks to the cooler. After cooling, smaller forklifts continuously supply trim-line hoppers with two bins at a time. Vegetables are conveyed down trim lines for visual inspection, cutting, drying, washing, and packing. Vegetables can move from bin to bag in 30 minutes. About 50 percent of all production is made to order; no finished goods are warehoused on-site. Most orders are shipped the same day the customer's order is placed. The plant typically ships about 60,000 cases of finished products per day but has shipped as many as 90,000. Finished products are shipped about 40 miles to a former plant in Marina, which is now a distribution center.

Quality assurance (QA) incorporates Hazard Analysis and Critical Control Points (HACCP), with three shift supervisors and 22 technicians monitoring critical control points such as water temperatures, chlorine levels, plant temperatures, and metal detectors. The plant's QA lab inspects incoming raw materials and samples finished products for specifications such as cut, size, package weight, shelf life, and mix ratio. QA technicians and product teams apply statistical process control (SPC) to tighten package fill-weight variances. Microbiological testing is conducted by an independent lab, and plant technicians use 3M Petrifilms for quick quantitative indications of bacterial growth on equipment surfaces.

Waste Streams

The Dole plant is designed to convert 285 million pounds of raw vegetables into 250 million pounds of finished products per year. Dole salads and pre-cut vegetables offer 100-percent usable product to the consumer, so about twelve percent of raw-vegetable weight (about 100,000 pounds per day) is removed as waste.

Dole currently generates approximately 35 million pounds per year of "cull material" from its vegetable processing. The cull material consists of lettuce trim including core, outer leaves, etc. The majority of the cull material is disposed of into trailers where it is used for various purposes including cattle feed. Very little goes into Dole's waste stream.

Dole generates approximately 226 million gallons of waste washwater per year. Produce is washed with citric acid and chlorine solution for the purpose of disinfection and to maintain freshness. The plant operates year-round. Peak flow rate is 600 gallons per minute (GPM) or just over 1,000,000 gallons per day (GPD). Average flow rate is approximately 665,000 GPD. Chemicals added to water during process are gaseous chlorine (a stabilized chlorine solution using calcium carbonate as a stabilizing agent), sodium hypochlorite, and citric acid. Disinfectants used in the process are gaseous chlorine and sodium hypochlorite. Sanitizers used in the plant are all chlorine based. Some cleaners used in the plant are acid-based cleaners.

The process wastewater passes through an oxidation pond and is then recycled for irrigation of alfalfa and other non-human consumption crops, as well as Dole's landscaping. The quality of the pond's effluent is adequate for crop production and landscape maintenance.

Dole's sanitary wastewater goes to the City of Soledad's sanitary sewer collection system.

Water Recycling

A farmer, currently Braga Ranch, leases Dole land and, per a lease agreement, must recycle Dole's process water for use on alfalfa or oat hay crops. The wastewater is used for irrigation throughout the year. A field manager monitors the acreage to prevent saturation or ponding. As the wet season progresses, the irrigation is rotated to other acreage owned by Dole. Irrigation water is managed to preclude flow to surface water.

Regulatory Considerations

In April 1994, the Water Board adopted Order No. 94-36 imposing individual waste discharge requirements (WDRs) on the Dole Fresh Vegetables, Inc. discharge. In July 2004, the Water Board adopted Order No. R3-2004-0066 establishing general WDRs for discharges of fruit and vegetable processing waste. It is the Water Board's intent to eventually regulate nearly all fruit and vegetable processing operations under general WDRs. New operations are to be enrolled under the general WDRs. When existing individual WDRs, reach maturity and require review, are to be rescinded in favor of general WDR enrollment. The Dole Fresh Vegetables, Inc. WDRs are one of the few remaining individual fruit and vegetable WDRs and are scheduled for review.

The Water Board uses the general order for fruit and vegetable processing waste to streamline permitting and provide consistency. Staff reviewed the Discharger's file and determined that Dole's process wastewater discharge meets the conditions for enrollment under the general WDRs. Rather than revise the existing order, staff recommends the Discharger be regulated by general WDRs.

The general WDRs for fruit and vegetable processing waste implement applicable Water Board prohibitions, discharge specifications, management practices, and provisions to protect water quality. When the discharge is regulated by the general WDRs, the individual waste discharge requirements will not be necessary, and, therefore, Water Board staff recommends that the Water Board rescind Order No. 94-36 (attached).

Normally, when an individual WDR is replaced by a general WDR, the general WDRs' monitoring and reporting requirements are imposed. Dole pointed out that enrollment under the general WDRs would increase Dole's compliance costs, since the general WDRs' standard monitoring requirements are more stringent than Dole's existing monitoring requirements. The nature of Dole's discharge (vegetable washing wastewater with low solids) does not warrant the general WDRs' standard level of monitoring.

The general WDRs allow the Executive Officer to modify or waive monitoring and reporting requirements. Staff worked with Dole to reduce the general WDRs' standard monitoring requirements to an appropriate level. For this proposed enrollment, staff proposes that the Water Board impose a reduced version of the general WDRs' requirements on the Dole discharge, as shown in Attachment A to this staff report.

COMPLIANCE HISTORY

Over the last decade, Dole has been in substantial compliance with its WDRs. Staff's database of violations indicates that Dole has not had a violation in the past decade.

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

On June 6, 2014, Water Board staff used last known e-mail addresses and contact information in an attempt to notify the Discharger and known interested parties of its recommendation to rescind Waste Discharge Requirements Order No. 94-36 and approve enrollment of the Discharger under the General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste (Order No. R3-2004-0066):

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Also, on June 6, 2014, Water Board staff publicly posted its recommendation to rescind Waste Discharge Requirements Order No. 94-36 and approve enrollment of the Discharger under the General Waste Discharge Requirements for Discharges of Fruit and Vegetable Processing Waste (Order No. R3-2004-0066) on the Water Board's web site.

Water Board staff has not received any comments on the proposed rescission/enrollment.

ATTACHMENTS

- ◆ Attachment A – Annotated version of Proposed Monitoring and Reporting Program
- ◆ Attachment B – Proposed Monitoring and Reporting Program (without annotations)
- ◆ Attachment C – Existing Order No. 94-36

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