



California Regional Water Quality Control Board Central Valley Region

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2 October 2007

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Bozzano Olive Ranch
P.O. Box 5009
Stockton, CA 95205-5009

CERTIFIED MAIL
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NOTICE OF APPLICABILITY OF RESOLUTION NO. R5-2003-0106, BOZZANO OLIVE RANCH AND QUALITY PACKING & SHIPPING CO., INC., SAN JOAQUIN COUNTY

Regional Water Board staff has reviewed your 7 May 2007 Report of Waste Discharge (RWD) and additional information submitted on 26 July 2007 prepared by Dellavalle Laboratory, Inc., for coverage under Resolution R5-2003-0106, *Waiver of Waste Discharge Requirements for Small Food Processors, Including Wineries, Within the Central Valley Region*. The RWD included a *Notice of Non-Applicability* for compliance with the storm water General Permit and an \$872 filing fee. Our review finds the RWD to be substantially complete.

Resolution No. R5-2003-0106 (a copy of which is enclosed), adopted by the Regional Board on 11 July 2003, is a conditional waiver of waste discharge requirements for small food processors including wineries. Based on the information you have submitted, the discharge as described in the RWD satisfies the general and specific conditions of Resolution No. R5-2003-0106 for the projected volume of wastewater to be produced.

Discharge Description

The facility will produce olive oil from raw olives. The olive mill is located at 6820 East Navone Road, Stockton, San Joaquin County. The olive mill facility consists of approximately 0.25-acres, while the land application areas consist of approximately 347 acres.

The olive mill is owned by Quality Packing and Shipping Company, Inc.; Bozzano Olive Ranch is a division of Quality Packing and Shipping Co., Inc.; and the land application areas are owned by Jack Bozzano and others identified in the table below (collectively Discharger). Bozzano Olive Ranch will apply wastewater and solid waste to the land application areas.

| <u>Site No.</u> | <u>APN</u> | <u>Owners</u> | <u>Acres</u> | <u>Crop</u> |
|-----------------|------------|---------------------------------|--------------|-------------|
| 1 | 101-120-28 | Jack Bozzano | 6.7 | Cherries |
| 2 | 089-030-23 | Bruna Pastore and Craig Formati | 18.6 | Cherries |
| 3 | 101-022-03 | Jack, Nancy, Joe Bozzano | 8.2 | Cherries |
| 4 | 101-040-22 | Richard Bozzano | 81.4 | Asparagus |
| 5 | 101-050-02 | Richard Bozzano | 126.0 | Asparagus |
| 6 | 101-120-23 | Jack and Richard Bozzano | 23.3 | Cherries |

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| <u>Site No.</u> | <u>APN</u> | <u>Owners</u> | <u>Acres</u> | <u>Crop</u> |
|-----------------|-------------------|-----------------------------|--------------|---------------|
| 7 | 101-130-55 | Jack and Nancy Bozzano | 21.7 | Cherries |
| 8 | 101-130-57 | Jack and Richard Bozzano | 44.6 | Asparagus |
| 9 | 101-270-01 | William Johnson | 7.6 | Cherries |
| <u>10</u> | <u>177-100-01</u> | <u>Bruno and Emma Cerri</u> | <u>9.5</u> | <u>Olives</u> |
| Total | | | 347.6 | |

The facility is designed to process a maximum of 4,320 tons of olives per season but the tons processed will vary with the crop and product demand. Bozzano Olive Ranch anticipates processing approximately 2,880 tons of olives per year. The amount of tons processed per year may increase with increased product demand. In California, the olive harvest typically begins in mid-September, peaks in mid-October, and is finished in mid-November. Processing will occur 24-hours a day, seven days a week during the harvest; Bozzano Olive Ranch plans to process approximately 24 tons per day.

Three types of wastewater will be generated; olive rinse water that is used to rinse the fruit prior to processing, routine cleaning wastewater, and sanitation wastewater. The sanitation wastewater is high strength and not appropriate for land application under the *Waiver*. Each of the wastewater types is further described below:

- Rinsing olives prior to processing generates olive rinse water. No chemicals are added to the rinse water. Approximately 350 gallons per day of olive rinse water will be generated when the crop is processed. It will be recycled and discharged into one of two 2,550-gallon wastewater storage tanks at the end of each day, and subsequently transferred to an 800-gallon portable tank for application in the land application areas.
- Routine cleaning wastewater will be generated during cleaning operations that are performed with hot water and no added cleaning chemicals. Routine cleaning wastewater will be contained in the same wastewater storage tank as the olive rinse water and will be discharged to the land application areas.
- Sanitation wastewater will be generated during more extensive cleaning that will occur at the end of the processing season or infrequently during the processing season, and includes floor and equipment cleaning solutions. That wastewater will contain approximately 20,000 mg/L of potassium hydroxide. Sanitation wastewater will be collected, stored in an above ground tank or drums, and hauled for disposal at East Bay Municipal Utility District (EBMUD).
- Any wastewater generated in boiler feed water treatment, if added in the future, shall also be collected and disposed off-site at EBMUD.

Wastewater Characterization

Olive rinse water (generated by rinsing olives prior to processing) is anticipated to be relatively moderate strength with minor amounts of biochemical oxygen demand and total dissolved solids (TDS). Olive rinse water concentration data from two similar olive mills is presented below:

| <u>Constituent</u> | <u>Units</u> | <u>McEvoy Ranch</u> ¹ | <u>CP Olive Mill</u> ² |
|---------------------------|--------------|----------------------------------|-----------------------------------|
| Biochemical Oxygen Demand | mg/L | 10.2 | 280 |
| Total Dissolved Solids | mg/L | 1,626 | 860 |
| Total Nitrogen (as N) | mg/L | 10 | 30 |
| Potassium | mg/L | 64.5 | 80 |
| Phosphorous | mg/L | 4.9 | 100 |
| Calcium | mg/L | 98.3 | 11 |
| Magnesium | mg/L | 6.5 | 10 |
| Sodium | mg/L | 132 | 14 |
| pH | Std. Unit | 7.7 | 5.3 |

¹ Petaluma, Sonoma County

² Lodi, San Joaquin County

Routine cleaning wastewater has not been characterized. It is anticipated to have higher levels of biochemical oxygen demand and TDS than olive rinse water as a result of cleaning residual oil off equipment. Because cleaning chemicals are not added to the routine cleaning wastewater, elevated concentrations of fixed dissolved solids (inorganic dissolved solids) are not anticipated to be present.

Sanitation wastewater contains higher concentrations of waste constituents and therefore may not be discharged under this waiver. Sanitation wastewater was characterized at the McEvoy Ranch Olive Mill. The data is summarized below:

| <u>Constituent</u> | <u>Units</u> | <u>McEvoy Ranch</u> |
|---------------------------|--------------|---------------------|
| Biochemical Oxygen Demand | mg/L | 17,500 |
| Total Dissolved Solids | mg/L | 20,000 |
| Total Nitrogen (as N) | mg/L | 2,500 |
| Potassium | mg/L | 3,750 |
| Phosphorous | mg/L | 150 |
| Calcium | mg/L | 375 |
| Magnesium | mg/L | 200 |
| Sodium | mg/L | 150 |
| pH | Std. Unit | 5.0 |

Land Application of Wastewater

The estimated volume of olive rinse water used to calculate the maximum loading rates was 34,000 gallons per year. No olive rinse water or routine cleaning wastewater will be applied during times when the soil is saturated. If needed, activities in the olive mill will be curtailed or modified to prevent the application of wastewater when climatic or soil conditions do not allow application.

Based on the typical volume and strength of wastewater that will be produced, the anticipated maximum hydraulic and agronomic loading rates for the proposed disposal area fall within an acceptable range. Bozzano Olive Ranch has identified Best Management Practices that will be implemented to minimize wastewater strength and potential odor problems, and to prevent hydraulic or nutrient overloading. Those practices include: source control, management of

olive mill activities consistent with climatic conditions, and spreading olive rinse water over a large land application area.

Although the TDS concentration of the combined olive rinse water/routine cleaning wastewater is likely higher than groundwater concentrations of TDS in the area, spreading the wastewater over the relatively large land application area (347.6 acres) will result in a hydraulic loading of 0.04-inch/acre. Based on the RWD the land application areas will receive approximately 1.0-lb/acre•year of dissolved solids and approximately 0.02 lbs/acre•year of total nitrogen.

Solid Waste

Solid waste produced by the facility will consist of leaves and twigs generated in olive fruit harvesting, and olive pomace generated by olive oil production. All the solid waste will be spread on the land application areas. All of the 347.6-acres of land application areas are available for solid waste application. Based on nitrogen uptake rates, the solid waste loading rates fall within acceptable levels.

Leaves and twigs will be separated from the olive fruit and deposited into a storage hopper from which they will be loaded into field spreaders. The material will be applied to the land application area and disced into the ground. Similarly, the pomace will be stored in a covered storage area, loaded into field spreaders, and disced into the ground.

The olive mill will generate approximately 1-ton per day of leaves and an amount of pomace approximately equal to the amount of fruit processed per day. The solid waste management plan described plans for handling up to 40.8 tons per day, but the amount is likely to be closer to 20 tons per day initially. As a contingency solid waste management option, Bozzano Olive Ranch can transport the waste to a landfill for disposal.

Conditional Waiver

Based on the information submitted in the RWD, the discharge as described above satisfies the general and specific conditions of Resolution No. R5-2003-0106 for the current amount of wastewater produced. Therefore, this letter serves as formal notice that Resolution No. R5-2003-0106 is applicable and waste discharge requirements for this facility are waived.

Enclosed is a copy of Resolution No. R5-2003-0106 and a site-specific Monitoring and Reporting Program (MRP) No. R5-2007-0824. **This MRP replaces MRP No. R5-2003-0106, which was adopted with Resolution No. R5-2003-0106.** As described therein, monitoring reports must be submitted for months in which the facility is actively processing olives, processing olive oil, or performing sanitation activities prior to or after processing activities.

If the discharge violates the terms or conditions of the waiver or the MRP, the Regional Board may take enforcement action, including assessment of administrative civil liability. If the method of wastewater and solids disposal changes from those described in the RWD, you must submit a new RWD. Please note that the waiver will expire on 11 July 2008, at which time you must submit a new RWD with filing fee, or cease the discharge. If your total annual flow exceeds the flow described in the RWD, if the character of the waste changes, if solid waste application creates nuisance conditions, or exceeds agronomic application rates, the

waiver is no longer applicable to your facility and you must submit a new RWD for individual Waste Discharge Requirements.

If you have any questions, please contact Timothy O'Brien at (916) 464-4616.

Original signed by

PAMELA C. CREEDON
Executive Officer

enc: General Order No. R5-2003-0106
Monitoring and Reporting Program No. R5-2007-0824

cc: w/o enc Mike Huggins, San Joaquin County Environmental Health Department, Stockton
Joe Bozzano, Stockton
Nancy Bozzano, Stockton
Richard Bozzano, Stockton
Bruno and Emma Cerri, Stockton
Kerri Foote, Herum, Crabtree, Brown, Stockton
Craig Formati, Stockton
William Johnson, Stockton
Bruna Pastore, Stockton