

## INFORMATION SHEET

ORDER R5-2016-00XX  
DELTA PACKING, INC.  
WASTE DISCHARGE REQUIREMENTS  
SAN JOAQUIN COUNTY

### Facility Description

Delta Packing, Inc. owns and operates two fruit processing facilities (Northern Line and Southern Line) located at 6021 East Kettleman Lane (Northern Line) and 5932, 5950, 5990, and 6050 East Kettleman Lane and 14860 and 14818 North Wells Lane (Southern Line) in Lodi, San Joaquin County. The Northern Line packs, cools, and processes mostly cherries during the processing season (generally April to May). At the Northern Line, all wastewater, including storm water, is discharged to two unlined on-site ponds (Ponds 1 and 2).

The Southern Line, which previously provided cold storage for fruit, will be expanded to include a cherry processing and packing line, similar to the Northern Line, to increase the processing capacity. Wastewater, including storm water, will be discharged to approximately 18 acres of vineyards that are leased from property owner, John Tecklenburg. Therefore, Delta Packing and John Tecklenburg are jointly referred to as "Discharger" and are responsible for compliance with the Waste Discharge Requirements (WDRs).

The discharge has not been previously regulated under WDRs. On 1 July 2015, a Report of Waste Discharge (RWD) was submitted for the Northern Line to apply for Waste Discharge Requirements (WDRs) and on 19 January 2016, additional information was submitted to support the RWD and include the land application areas and planned expansion for the Southern Line.

### Current Wastewater Process and Land Application Areas

The Northern Line produces approximately 9,900,000 pounds of cherries and the Southern Line is projected to process approximately 2,700,000 pounds of cherries.

At the Northern Line, all wastewater is collected in two sumps (Sump 1 and Sump 2) and then discharged to Pond 1. Pond 1 is unlined without aeration and has volumetric capacity of 1,633,000 gallons, including 2-foot freeboard. Pond 1 has a very low percolation rate due to the presence of a distinct soil layer that is largely impervious to water at approximately 10 feet bgs. This pond is used for evaporation only. Pond 2 is unlined without aeration, has a volumetric capacity of 3,068,505 gallons, including the 2-foot freeboard, and is used for evaporation and percolation. Pond 2 is mainly used for collecting storm water from the northern portion of the site and overflow from Pond 1. To date, Pond 2 has not received any wastewater.

Wastewater at the Southern Line will be collected in two sumps and two drains and pumped to an exterior sump where the water will then be pumped to approximately 18 acres of land application areas. The LAAs consist of three zones; Zones 1, 2, and 3 are approximately 4.79 acres, 3.7 acres, and 9.5 acres, respectively. The majority of site storm water will be collected in one on-site storm drain which is connected to the external sump for discharge to the LAAs. An additional storm water drain is located off-site, just south of the property boundary. This

drain collects storm water from the eastern portion of the site. This storm water is not in contact with any process water and is not connected to the process water collection system. Tailwater will be controlled by berms surrounding the LAAs.

WDRs Order R5-2016-XXXX allows a maximum annual wastewater flow of up to 36 million gallons per year (MGY) for each line.

### Wastewater Characterization

Wastewater data from the sumps and ponds at the Northern Line show iron and manganese at concentrations exceeding WQOs. The Discharger believes that the use of the Peracetic acid to disinfect the fruit is causing the metals to dissolve into solution, likely from residual fertilizers and pesticides on the fruit. Over time, while the Peracetic acid decomposes, the metals oxidize to immobile states and will precipitate out of solution.

Out of four wastewater samples analyzed for total nitrogen from Pond 1, total nitrogen was detected in one sample at a concentration of 19 mg/L, which exceeds the primary MCL. The next highest concentration is 1 mg/L. The Discharger and the analytical laboratory agree that the 19 mg/L concentration is likely a data point outlier or an analytical error. The total nitrogen in the wastewater does not appear to represent wastewater quality.

Wastewater characterization samples have not been collected from Pond 2 because Pond 2 has yet to receive excess wastewater from Pond 1.

### Groundwater Quality

There are no shallow groundwater monitoring wells on-site or nearby. One source well and one agricultural well are present at the Northern Line, and two source wells are located at the Southern Line. Up-gradient and down-gradient off-site drinking water and agricultural wells are located within 2 miles of the Discharger. However, the source wells and off-site wells have deep screen intervals and do not represent shallow groundwater quality. The data from these wells can be used for a general comparison between the wastewater quality and the area's groundwater quality. The analytical data from the sources wells, agricultural well, and up- and down-gradient wells do not have concentrations of constituents greater than WQOs. Depth to groundwater is approximately 80 to 90 feet bgs.

### Antidegradation

The iron, manganese, and total nitrogen in the wastewater from the Northern Line are unlikely to impact groundwater due to the depth of groundwater (>80 feet bgs), the presence of an impermeable soil layer at 10 feet bgs, and the low mobility of the constituents. The metals will precipitate out of solution to a more immobile state within the soil column prior to reaching groundwater. The Discharger believes the total nitrogen concentration is a data outlier or a laboratory error and does not represent wastewater quality. Due to the uncertainty in the presence of total nitrogen, it was evaluated for potential impacts to groundwater. Total nitrogen is not likely to impact groundwater because there is sufficient unsaturated vadose

zone where excess nitrogen can be mineralized and denitrified by soil microorganisms. In addition, the new LAAs for the Southern Line will maximize nitrogen uptake by crops and minimize the potential for nitrogen to degrade to groundwater.

#### Flow and Effluent Limitations

Effectively immediately, discharge to the ponds at the Northern Line and the LAAs at the Southern Line shall not exceed 100,000 gallons per day for each facility. Effective the date of adoption for these WDRs, wastewater discharge limits for the LAAs will include a daily maximum loading rate BOD limit of 300 lb/ac/yr.

#### Groundwater Limitations

Effective immediately, for constituents that have the potential to impact groundwater (specifically dissolved iron and manganese, and total nitrogen), the WDRs will prohibit any statistically significant annual increase in concentrations in wastewater samples. If annual average concentrations statistically increase over time, this Order requires that the Discharger either demonstrate that continuing the discharge will not result in the degradation of groundwater or implement additional treatment or control to ensure compliance with the protection of groundwater.

The Order requires monthly monitoring and reporting, and submittal of an annual report. The annual report will include a comprehensive evaluation of the effectiveness of the past year's wastewater application operations in terms groundwater protection, including results of the source water monitoring and calculation of annual average wastewater concentrations for the monitored constituents. The annual report will also include a discussion of compliance, any corrective actions taken, and any planned operational changes that may affect the character of the wastewater.