

## INFORMATION SHEET

ORDER R5-2017-XXXX  
MONARCH NUT COMPANY, LLC

WASTE DISCHARGE REQUIREMENTS  
TULARE COUNTY

### **Facility Description**

Monarch Nut is a pistachio and blueberry processing facility (Facility) that has been in operation for over 25 years. The Facility is located at Southwest Corner of Avenue 8 and Road 188 near the Richgrove Community Service District in Tulare County. The Facility consists of one pistachio processing plant and four blueberry processing plants. Blueberry processing occurs year round and pistachio processing generally occurs annually during an approximate five week period beginning in September.

Discharges from the Facility are regulated under WDRs Order 92-190, which was adopted on 25 September 1992. In 2014, the Facility began upgrading the wastewater system. All unlined wastewater ponds were removed and a large, double lined "Title 27" like pond, referred to as the Wastewater Lagoon, was constructed. In addition, the Facility converted the pistachio hulling system to a dry hulling process which significantly reduced the volume of wastewater generated. All wastewater is discharged to the new Wastewater Lagoon and then used for pistachio and almond orchard irrigation and dust control over 1,664 acres of land application areas (LAAs).

### **Wastewater Process**

All wastewater is captured in concrete vaults and discharged to the Wastewater Lagoon located in northeastern portion of the Facility. Storm water and defrost water from two of the four blueberry plants are collected in a concrete vault, which does not receive wastewater, and is then discharged to an unlined pond and storm water ditch. Maximum daily wastewater flow rates measured between 2007 and 2015 ranged from 0.57 to 2.42 million gallons.

### **Groundwater Quality**

The Facility has three groundwater monitoring wells (MW1, MW2, and MW4) ranging in depths from 178 to 205 feet bgs. In recent years, groundwater levels have lowered by at least 30 feet, resulting in the wells going dry. MW4 went dry in 2003 and MW1 and MW2 have been dry since 2005 and 2011, respectively. Prior to the wells going dry, groundwater samples from MW1 and MW2 contained concentrations of nitrates and aluminum greater than WQOs and sodium at concentrations exceeding the lowest water quality goal. Regional groundwater data compiled from on-site source wells and seven irrigation/source water wells located around the Facility identified nitrate as nitrogen and sodium concentrations exceeding the nitrate WQO and the lowest agricultural water quality goal for sodium. A comparison of groundwater data from on-site monitoring wells and nearby water supply wells demonstrates uniform levels of nitrate as nitrogen and sodium pollution both in source water and groundwater beneath the area surrounding the Facility. It is unclear if the Facility has contributed to nitrate as nitrogen pollution prior to recent wastewater system upgrades, but it can be concluded that if wastewater discharge from the Facility impacted groundwater, it is not the sole source of groundwater pollution.

### **Antidegradation**

TDS, sodium, and chloride in wastewater have the potential to degrade groundwater. However, the wastewater system at the Facility was upgraded in 2015 and all unlined wastewater ponds were removed and a new double lined Wastewater Lagoon was constructed. Groundwater beneath the Facility is over 200 feet deep and any constituents in soil will likely attenuate before reaching groundwater and therefore, pose a low threat to groundwater quality. Groundwater impacts from the upgraded wastewater system are unlikely.

### **Legal Effect of Rescission of Prior WDRs or Orders on Existing Violations**

The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.

### **Flow and Effluent Limitations**

Effectively immediately, the maximum annual flow limit is 98 million gallons, with a daily maximum of 1.5 million gallons per day. Daily maximum loading rate limit for BOD<sub>5</sub> is 100 lb/ac/yr.

### **Groundwater Limitations**

Continued groundwater monitoring is not required at this time. However, release of waste constituents from any treatment, storage, delivery system, or land application area associated with the discharge shall not cause or contribute to groundwater to contain constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater. Release of waste constituents from any portion of the facility shall not cause groundwater to:

1. For constituents identified in Title 22, contain constituents in concentrations that exceed either the Primary or Secondary MCLs established herein.
2. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

### **Provisions**

By 1 December 2017, the Discharger shall submit a Best Practicable Treatment or Control Workplan that evaluates options for further salinity reduction and nutrient management.

The Monitoring and Reporting Program is designed to verify compliance with effluent limitations and operational requirements of the WDRs.