INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-XXXX
FOR COUNTY OF KERN
FOR POST-CLOSURE MAINTENANCE AND CORRECTIVE ACTION
LEBEC SANITARY LANDFILL
KERN COUNTY

The County of Kern (hereinafter Discharger) owns and maintains the Lebec Sanitary Landfill (facility) about one mile southwest of Lebec. The 96.55-acre facility contains one closed, unlined 13.5-acre waste management unit.

The California Regional Water Quality Control Board (Central Valley Water Board) adopted Waste Discharge Requirements (WDRs) Order 98-078 on 17 April 1998, which classified the waste management unit (Unit) as a Class III unit for the discharge of municipal solid waste as defined in Title 27, California Code of Regulations, Section 20005 et seq. (hereafter Title 27). On 27 October 2000, the Central Valley Water Board issued Order 5-00-243 that modified Order 98-078 to allow for the construction of the final cover with an engineered alternative design. The proposed Order revises the existing WDRs to regulate post-closure maintenance and to implement a corrective action program.

Cleanup and Abatement Order 98-707 (CAO) was issued on 24 April 1998. The CAO required the Discharger to install an adequate detection monitoring program, complete an evaluation monitoring program, and implement a corrective action program that complies with the provisions of Title 27. The CAO also required the Discharger to submit assurances of financial responsibility for the initiation and completion of corrective action for all reasonable and foreseeable releases. The Discharger has complied with each item in the CAO.

The waste management facility lies in a canyon in the San Emigdio Mountains, at the southern end of the Tulare Lake Hydrologic Basin of the San Joaquin Valley. The native ground surface elevation ranges between approximately 3,720 feet above mean sea level at the southeastern boundary of the facility and 4,400 feet above mean sea level at the northern facility boundary. The facility is located between a faulted bedrock complex comprised of granitic and metamorphic rocks and the western edge of the deep alluvial Ridge Basin.

The depth to first encountered groundwater ranges from about 48 feet to 97 feet below the native ground surface. Groundwater elevations range from about 3,760 feet above mean sea level to 3,973 feet above mean sea level. Monitoring data indicate background groundwater quality for first encountered groundwater has an electrical conductivity ranging between 1,790 and 2,335 micromhos/centimeter, with total dissolved solids ranging between 1,176 and 1,867 milligrams per liter. The direction of groundwater flow is generally to the southeast. The average groundwater gradient is approximately

0.12 feet per foot and the average groundwater velocity is approximately 215 feet per year.

Volatile organic compounds (VOCs) that are not naturally occurring have been detected in groundwater along the point of compliance. The VOCs consistently detected in groundwater are cis-1,2-dichloroethene, dichlorodifluoromethane (Freon 12), and trichlorofluoromethane (Freon 11).

The Discharger submitted an Evaluation Monitoring Program Report in February 2001. The nature of the release of waste constituents from the waste management unit is associated with landfill gas migration. The extent of the release plume is approximately 300 feet east of the eastern edge of the Unit. The vertical extent of the release is limited to the alluvium overlying the bedrock beneath the facility.

The Discharger completed an Engineering Feasibility Study in accordance with Section 20425(c) of Title 27. The Engineering Feasibility Study concluded that the most technically and economically feasible corrective action alternative is landfill gas extraction and monitored natural attenuation.

The Discharger completed construction of a final cover system in October 2003. The engineered alternative design final cover consists of the following: a two-foot thick soil foundation layer; a geosynthetic clay layer; and a one-foot thick vegetated soil layer. Construction of a passive landfill gas extraction system was integrated with the final cover construction. The system has been continuously operated since its installation.

This order requires full containment of wastes and does not permit degradation of surface water or groundwater. Further antidegradation analysis is therefore not needed. The discharge is consistent with the antidegradation provisions of State Water Resource Control Board Resolution 68-16.