INFORMATION SHEET

ORDER NO.
SOUTH KERN INDUSTRIAL CENTER, LLC.
FOR OPERATION
BIOSOLIDS STORAGE AND COMPOSTING FACILITY
KERN COUNTY

South Kern Industrial Center, LLC., a California Limited Liability Company, hereafter referred to as Discharger, plans to construct and operate a 100-acre municipal biosolids composting facility. The proposed composting facility will be located in southwestern Kern County approximately 18 miles southwest of Bakersfield and 12 miles east of Taft on South Lake Road.

The Discharger plans to compost treated municipal biosolids with bulking agents consisting of agricultural byproducts (manure, cotton stalks, etc.); yard residue (grass clippings, leaves, etc.); and use it as a soil amendment for sale on commercial markets. The maximum annual receipt of composting feedstocks will be 670,000 cubic yards.

When constructed, the 100-acre composting facility will be enclosed by a five-foot berm. The facility will include a 20-acre primary and secondary aerated static piles (ASPs) area; a 2-acre receiving building/mixing equipment area; a 5-acre daily feedstock, additive storage and preparation areas; a 5-acre onsite finished product areas; a maximum 4.0-acre process water basin, and a maximum of 1.5-acre storm water retention basin. Precipitation drainage from the Unit will be collected in the retention basin and recycled onto the composting windrows for moisture control.

The biosolids will be collected from wastewater treatment plants regulated by Orders adopted by various regional boards and transported to the composting facility. The biosolids will be received and unloaded in the compost area and composted in aerated static piles.

Biosolids used for composting will be tested by the generator prior to shipment to the composting facility. Only biosolids that meets the requirements for non-hazardous biosolids specified in Title 22 CCR, Division 4, Chapter 11, Article 3, California Code of Regulations (CCR), and complies with 40 CFR 503 for exceptional quality compost, will be accepted at the composting site.

The composting facility is on the floor of the southern San Joaquin Valley. Surface drainage is toward the Buena Vista Lake Bed, which contains the Buena Vista Aquatic Recreation Area in the Kern Delta Hydrologic Area 557.10 of the Tulare Lake Basin. The designated beneficial uses of Buena Vista Aquatic Recreation Area, as specified in the Basin Plan, are agricultural supply, industrial service and process supply, water contact and non-contact water recreation, warm fresh water habitat, preservation of rare, threatened and endangered species, and groundwater recharge.

The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal, agricultural, and industrial supply.

The first encountered groundwater in a perched zone is about six to twelve feet below the native ground surface. Groundwater elevations range from 311 feet MSL to 317 feet MSL. This groundwater appears to be a perched zone. Results of sampling from the perched groundwater indicates that groundwater quality has an electrical conductivity (EC) ranging between 8,600 and 22,000 micromhos/cm, with total dissolved solids (TDS) ranging between 6,100 and 19,000 mg/L., and a chloride concentration ranging between 1,700 mg/L and 2,800 mg/L. These exceed the California and the Federal Drinking Water Standards for Secondary Maximum Contaminant Level (MCL) of 500 mg/L for Total Dissolved Solids and 250 mg/L for chloride.

Regional unconfined groundwater occurs at a depth of 36 feet (281 feet MSL) below ground surface. Results of groundwater sampling from this aquifer indicate that the groundwater has an electrical conductivity of 2,800 micromhos/cm, a total dissolved solids concentration ranging between 2,700 mg/L and 3,100 mg/L, and a chloride concentration ranging between 20 mg/L and 43 mg/L. The groundwater from the regional aquifer exceeds California Secondary Maximum Contaminant Level (MCL) of 500 mg/l for Total Dissolved Solids. However, the samples do not exceed the California Secondary Maximum Contaminant Level (MCL) of 250 mg/L for chloride.

The measured hydraulic conductivity of the native soils underlying the Unit range between 1.6×10^{-4} and 3.3×10^{-6} cm/sec.

The feedstock and some of the additives for composting are classified as nonhazardous solid waste or designated waste as defined in Title 27. Biosolids contain metals and high concentrations of nitrogen compounds that could cause levels of nitrates in surface or ground water to exceed applicable water quality objectives, salts that could cause dissolved solids to exceed objectives, and microorganisms, including disease-causing pathogens. Therefore, biosolid composting operations would normally be regulated under the Title 27 regulations as a Class II waste pile that treats designated waste.

Site specific characteristics, including low rainfall, poor quality groundwater, the manner in which waste will be handled (static aerated piles), and the collection and recycling of all storm water and collected leachate, will help to protect the groundwater from degradation and the loss of designated beneficial uses.

Additionally, this Order requires the Discharger to construct a low hydraulic conductivity liner system for incoming feedstock storage area(s), treatment (composting) area(s), and finished product storage area(s) to minimize downward flow to protect groundwater; the construction of a storm water retention basin that can accommodate runoff from a 25-year, 24-hour storm event to protect surface water; the construction of a lined process-water basin that will store liquid wastes such as truck wash wastewater, leachate, condensate, and any storm water that has come in contact with the feedstocks, composting piles, or finished compost to protect surface water and groundwater. This Order also requires quarterly groundwater monitoring and annual monitoring of the surface impoundments.

Based on the site specific characteristics, the threat to the beneficial uses of surface and ground water posed by the proposed composting operation is not commensurate with the stringent monitoring, siting, construction, and design standards applicable to a Class II waste pile, under the Title 27 regulations, so long as it meets, and continues to meet, the requirements of this Order.

Section 20200(a)(1) of Title 27 CCR allows the Regional Board to make a finding that "… a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article." The Title 27 regulations do not provide for a waste pile of lower classification than Class II. However, based on a review of the Discharger's Report of Waste Discharge and on the lower risk to water quality cited in this Order, the Regional Board finds, pursuant to Title 27 CCR Section 20200(a)(1), that the operation is not subject to the Class II waste pile liner requirements contained in the Title 27 regulations so long as the operation continues to meet the requirements of this Order.

This Order requires the submission of a work plan for the installation of a groundwater detection monitoring system, installation of the groundwater detection monitoring system, and submission of a water quality protection standard based on background water quality in accordance with Title 27 CCR.

The Board of Supervisors of the County of Kern certified and adopted the Environmental Impact Report (EIR) for this project on 22 October 2002 in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and CEQA guidelines (14 CCR Section 15000 et seq.). The pertinent mitigation measures contained in the EIR were incorporated into the tentative Waste Discharge Requirements and the attached Monitoring and Reporting Program No. ____.

The action to issue waste discharge requirements for this new facility is complies with the provisions of the California Environmental Quality Act (CEQA), Public Resource Code Section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, CCR, Section 15301.

CMM:cmm/rac:5/25/2005