



Central Valley Regional Water Quality Control Board

18 October 2022

Robert Rankin South Kern Industrial Center, LLC P.O. Box 265 Taft, CA 93268

NOTICE OF APPLICABILITY

WATER QUALITY ORDER 2020-0012-DWQ GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING OPERATIONS SOUTH KERN INDUSTRIAL CENTER FERTILIZER MANUFACTURING FACILITY KERN COUNTY GLOBAL ID T10000020187

On 18 July 2022, South Kern Industrial Center LLC (SKIC or Discharger) submitted a *Notice of Intent* (NOI) and technical report for the South Kern Industrial Center Fertilizer Manufacturing Facility (Facility). The technical report, NOI, and filing fee were submitted to obtain coverage as a Tier II facility under *Water Quality 2020-0012-DWQ, General Waste Discharge Requirements for Composting Operations* (General Order) for composting related operations at the Facility. <u>The complete General Order</u> can be accessed at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/w qo2020_0012_dwq.pdf

This *Notice of Applicability* (NOA) was developed after the review of the NOI and technical report as described in the attached Staff Memorandum which is a part of this NOA. Based on staff's review, the proposed Facility will meet the conditions of the General Order and is hereby covered under General Order **2020-0012-DWQ-R5F006** as a **Tier II** composting operation. The Discharger must comply with all Tier II requirements of the General Order.

The filing fee for the Facility is based on Threat to Water Quality and Complexity rating of 3B. The submitted \$7,486 filing fee covers the first year permitted by this NOA. The Discharger shall submit the required annual fee (as specified in the annual billing issued by the State Water Resources Control Board) until the NOA is officially terminated.

To fully comply with this NOA, please read the contents of the enclosed Staff Memorandum and all of the requirements of the General Order. The Discharger is MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER responsible for implementing all operations in a manner that complies with the General Order. Any noncompliance with this General Order constitutes a violation of the Water Code, and is grounds for enforcement action, and/or termination of enrollment under this General Order.

Conditions of this Composting General Order include but are not limited to:

- 1. Prior to any facility expansion, a technical report with design information will have to be submitted at least 90 days prior to new construction of working surfaces, detention ponds, berms, ditches, or any other water quality protection containment structure for approval by the Central Valley Water Board staff.
- 2. A post-construction report must be submitted within 60 days of completing all construction activities associated with all applicable containment and monitoring structures, as required for compliance with this General Order and the MRP.
- 3. A revised NOI is required to be submitted at least 90 days prior to:
 - adding a new feedstock, additive, or amendment;
 - changing material or construction specifications;
 - changing a monitoring program; or
 - changing an operation or activity not described in the approved NOI and technical report.

Attachment B of the General Order includes specific monitoring and reporting requirements that must be complied with, including routine monitoring and reporting to the Central Valley Regional Water Control Board. The first year Annual Monitoring and Maintenance Report as identified in the General Order must be submitted to the Central Valley Water Board no later than **1 April 2023**, and then annually by 1 April each year.

All reports and other correspondence must be converted to searchable Portable Document Format (PDF) and submitted electronically to our Geotracker database under Global ID T10000020187. Confirmation of Geotracker upload is to be emailed to: centralvalleyfresno@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Attention:	Title 27 Unit
Discharger Name:	South Kern Industrial Center LLC
Facility Name:	South Kern Industrial Center Fertilizer
	Manufacturing Facility
County:	Kern
CIWQS Place ID:	882908

If you have any questions regarding this letter or the attached Staff Memorandum, please contact Daniel Benas at (559) 445-5500 or <u>Daniel.Benas@waterboards.ca.gov</u>. Sincerely,

Original Signed by Scott J. Hatton for: Patrick Pulupa Executive Officer

Enclosure: Staff Memorandum

cc: CalRecycle <u>WPCMDivision@CalRecycle.ca.gov</u> Robert Rankin <u>RRankin@synagro.com</u> Karen Sanford <u>KarenS@kerncounty.com</u> Sangeeta Lewis <u>lewisengineering@sbcglobal.net</u> Brian Cataldo <u>bcataldo@synagro.com</u>





Central Valley Regional Water Quality Control Board

TO: Scott J. Hatton Supervising Water Resource Control Engineer

> Clay L. Rodgers Assistant Executive Officer

FROM: Kristen S. Gomes Senior Water Resource Control Engineer

Daniel B. Benas Water Resource Control Engineer

DATE: 18 October 2022

SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2020-0012-DWQ, SOUTH KERN INDUSTRIAL CENTER FERTILIZER MANUFACTURING FACILITY, SOUTH KERN INDUSTRIAL CENTER LLC, KERN COUNTY, GLOBAL ID T10000020187

On 18 July 2022, South Kern Industrial Center LLC (SKIC or Discharger) submitted a *Notice of Intent* (NOI) and technical report for the South Kern Industrial Center Fertilizer Manufacturing Facility (Facility). The technical report, NOI, and filing fee were submitted to obtain coverage as a Tier II facility under *Water Quality 2020-0012-DWQ, General Waste Discharge Requirements for Composting Operations* (General Order) for composting related operations at the Facility. The technical report, dated July 2022, was titled *Technical Report South Kern Industrial Center Fertilizer Manufacturing Facility* (Technical Report) and was prepared on behalf of the Discharger by Lewis Engineering. The technical report was signed and stamped by Sangeeta Lewis (RCE 47735).

SITE CONDITIONS

The Facility is located 18 miles southwest of Bakersfield and 12 miles east of Taft on South Lake Road in Kern County, which is in Section 24, Township 32 South, Range 25 East, Mount Diablo Baseline and Meridian (MDBM). The Facility parcel has a footprint of 55.5 acres; however, the technical report states that the Facility when fully developed will only encompass 20 acres. The Facility will be developed in two phases. Phase 1 will encompass approximately 12 acres and will be utilized for bulk material operations (discussed below), and Phase 2 will encompass eight acres and will include construction of a packaging facility and a warehouse. The Facility is equipped with a

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

five-foot berm to direct surface flow around the Facility. This memorandum will only discuss Phase 1 of the Facility development.

The technical report states that the Facility overlies a portion of the Kern County Groundwater Basin as defined by the California Department of Water Resources (DWR) and that flow into or out of the basin is negligible due to the extremely low permeabilities of consolidated materials. Test holes drilled on the property in October 2021 by Krazan & Assoc. (*Geotechnical Engineering Investigation, Proposed Agricultural Fertilizer Bulk Final Product Storage Area, South Kern Fertilizer Manufacturing Facility; Krazan & Assoc, Inc.; February 2021*) in the planned location of the Phase 1 detention pond encountered perched groundwater at depths of approximately 12 feet bgs or at approximately 305 feet above msl. A review of the Department of Water Resources (DWR) SGMA Data Viewer shows that area groundwater is approximately 210 feet bgs using spring 2021 data and that regional groundwater flows to the northwest.

The technical report states that annual average precipitation is 6.19 inches, and that the average annual evaporation is 83.7 inches. The magnitude of the 25-year 24-hour design storm water is estimated to be 2.14 inches and the 100-year, 24-hour storm event is 2.97 inches according to NOAA data.

Land uses within one mile of the Facility include agriculture and vacant fields to the west, heavy industrial uses adjacent to the north and northwest. These include the Plain All American Pipeline, Baker Petrolite and Hughes Propulsion Testing facility, Henry Miller Water District, along with a Solar Farm to South and East of the Facility.

COMPOSTING OPERATIONS

The technical report indicates that active composting will not occur in the Facility, but that the Facility will be used for bulk material operations which include the following: bulk material receiving, chipping, mixing and blending of key commodities, and storage of bulk materials (i.e., compost, manure, bark, topsoil, and other beneficial soil conditioning substrates).

WORKING SURFACE REQUIREMENTS

Specification 1 under the *Design, Construction and Operation Requirements – Tier II Only* section of the General Order requires that working surfaces must be capable of resisting damage from the movement of equipment and weight of piles and have a hydraulic conductivity of 1.0×10^{-5} centimeters per second (cm/s) or less. Working surfaces must consist of one of the following:

- a. Compacted soils, with a minimum thickness of one foot;
- b. Asphaltic concrete or Portland cement concrete; or
- c. An equivalent engineered alternative specified in an NOI and/or a technical report and approved by the Regional Water Board.

The final product storage area may be excluded from the working surface hydraulic conductivity requirements under the following conditions:

- a. The area is isolated in a dedicated area away from the active and curing compost;
- b. The area is clearly marked as "final product" and
- c. The area is identified in the NOI and technical report and approved by the Regional Water Board.

The technical report indicates even though the above variance conditions for final product storage will be met that the working surface will be constructed to meet the General Order requirement of a minimum one-foot compacted soil layer and hydraulic conductivity of 1.0×10^{-5} cm/s or less.

DRAINAGE DITCH REQUIREMENT

Specification 2 under the *Design, Construction and Operation Requirements – Tier II Only* section of the General Order requires that drainage ditches must be designed, constructed, and maintained to convey all precipitation and runoff from a 25-year, 24-hour peak storm event at a minimum, have a hydraulic conductivity of 1.0×10^{-5} cm/s or less, and be lined with one of the following:

- a. Compacted soils, with a minimum thickness of one foot;
- b. Asphaltic concrete or Portland cement concrete; or
- c. An equivalent engineered alternative specified in an NOI and/or a technical report and approved by the Regional Water Board.

The technical report states that the working surface of the Facility is graded to drain to the detention pond but does include drainage swales. The drainage swales were designed to assist with routing flow and were designed to meet the General Order drainage ditch requirement of a minimum one-ft compacted soil layer with a hydraulic conductivity of 1.0×10^{-5} cm/s or less.

DETENTION POND REQUIREMENTS

Specification 4 under the *Design, Construction and Operation Requirements – Tier II Only* section of the General Order requires that detention ponds must be designed, constructed, operated, and maintained to meet a hydraulic conductivity of 1.0×10^{-6} cm/s or less. These ponds must also include one of the following:

- a. A liner system consisting of a 40 thousandths of an inch (mil) synthetic geomembrane (60-mil if high-density polyethylene), underlain by either one foot of compacted clay or a geosynthetic clay liner installed over a prepared base;
- A liner system that includes Portland cement concrete designed to minimize cracking and infiltration – underlain by a 40-mil synthetic geomembrane (60-mil if high-density polyethylene); or
- c. An equivalent engineered alternative specified in an NOI and/or a technical report and approved by the Regional Water Board.

The detention pond was designed and sized by McIntosh & Associates to meet the requirements of the General Order as detailed on the *Grading Plan* (McIntosh & Associates, October 2021) included in Appendix A and design calculations included in Appendix B of the technical report. The technical report states that the design calculations are based on the Kern County Development standards that require onsite retention of runoff for a 10-year, 5-day rainfall event. At the facility site, the 10-year, 5-day rainfall event produces 2.35 inches. The General Order requires the basin to be sized based on a 25-year, 24-hour rainfall event, which is 2.14 inches; therefore, the County's standard is more conservative and exceeds the General Order requirement.

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Based on the calculations, the designed basin has excess capacity to capture the onsite stormwater run-off generated by a 25-year, 24-hour rainfall event. The required basin capacity is 2.20 ac-ft and the volume provided is 2.28 ac- ft.

The liner system for the detention pond consists of a 60-mil high density polyethylene (HDPE) geomembrane underlain by a geosynthetic clay liner installed over a prepared base. A pan lysimeter was installed under the lowest point of the pond. The detention pond liner design meets the requirements of the General Order.

MONITORING AND REPORTING

SKIC will conduct a monitoring program as prescribed in the applicable portion of Attachment B of General Order Monitoring and Reporting requirements. Results of monitoring will be reported annually in the Annual Monitoring and Maintenance report, which will be submitted by **1 April** of each year as long as the *Notice of Applicability* is in effect.

SITE CLOSURE

The technical report indicates that the SKIC will comply with the site closure requirements of the General Order. At least 90 days prior to ceasing composting operations, SKIC shall submit a *Site Closure Plan* to the Central Valley Water Board for approval. The site restoration shall include work necessary to protect public health, safety, and the environment. Upon completion of site closure activities SKIC must jointly notify the Central Valley Water Board and Local Enforcement Agency in writing.

RECOMMENDATIONS

Based on staff review of the technical report, it is anticipated that the Discharger can meet the requirements of the General Order. The Notice of Applicability can be issued and stay in effect as long as the Discharger implements all operations in a manner that complies with the requirements of the General Order.

SKIC must comply with the following items:

1. Prior to any facility expansion, a technical report with design information shall be submitted at least 90 days prior to new construction of working surfaces, detention ponds, berms, ditches, or any other water quality protection containment structure for approval by the Central Valley Water Board.

2. A post-construction report must be submitted to the Central Valley Water board within 60 days of completing all construction activities associated with all applicable containment and monitoring structures, as required for compliance with this General Order and MRP.

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- 3. A revised NOI is required at least 90 days prior to:
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