
Central Valley Regional Water Quality Control Board

13 October 2023

Doug Van Beek
Turning Leaf Organics (Tipton)
14808 Road 152
Tipton, CA 93272

CERTIFIED MAIL
7022 2410 0000 2157 9118

NOTICE OF APPLICABILITY

**WATER QUALITY ORDER 2020-0012-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING
OPERATIONS
TURNING LEAF ORGANICS (TIPTON)
TULARE COUNTY
GLOBAL ID T10000021413**

On 12 June 2023, Turning Leaf Organics (hereafter Discharger) submitted a Notice of Intent (NOI) to obtain coverage under *General Waste Discharge Requirements for Commercial Composting Operations, State Water Resources Control Board Order WQ 2020-0012-DWQ* (General Order) for its composting operations located at 14808 Road 152 Tipton, CA 93272 (Facility). The Discharger had previously submitted a Technical Report titled *Waste Discharge Requirements for Composting Operations Turning Leaf Organics Composting Notice of Intent/Technical Report* (Technical Report) on 30 May 2023. The Technical Report was signed and stamped by Kyle Parreira (RCE 89070). A filing fee of \$7,770.00 was received on 23 June 2023.

This *Notice of Applicability* (NOA) was developed after the review of the NOI and submitted reports as described in the attached Staff Memorandum, which is a part of this NOA. Based on staff's review, the Facility can meet the conditions of the General Order and is hereby covered under General as a **Tier II** composting operation. The enrollee identification number is Order **2020-0012-DWQ-R5F012**. The Discharger must comply with all Tier II requirements of the General Order.

The filing fee for the Facility is based on the Threat to Water Quality and Complexity rating of 3B. The submitted \$7,770 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 familiarize yourself with the contents of the enclosed Staff Memorandum and all of the requirements of the General Order. The

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

Discharger is 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. The Facility must meet the hydraulic conductivity requirements of the General Order for its working surfaces and drainage ditches **by 30 June 2024**. The General Order states 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.
2. The Discharger shall install a lined detention pond and pan lysimeter meeting the requirements of the General Order **by 30 June 2024**. 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 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;
 - b. 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 engineered alternative proposed in the *Pond Design Work Plan* and described in the attached Staff Memorandum is hereby approved.

3. Submit a post-construction certification report to the Central Valley Water Board for review and approval 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.
4. Prior to any facility expansion, a technical report with design information will need to be submitted for approval by the Central Valley Water Board at least 90 days

prior to the new construction of working surfaces, stormwater (detention) basins, berms, ditches, or any other water quality protection containment structure. The design information must include water balance calculations for detention basins and wastewater conveyance features.

5. Any expansion of facility operation must meet the requirements of the General Order and be approved by the Central Valley Water Board prior to commencement of composting operations in any new area.

Attachment B of the General Order includes specific monitoring and reporting requirements that you must comply with, including routine monitoring and reporting to the Central Valley Regional Water Quality 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 2024**, 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 website. Confirmation of Geotracker upload is to be emailed to: centralvalleyfresno@waterboards.ca.gov. To ensure that your email 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:	Turning Leaf Organics
Facility Name:	Turning Leaf Organics (Tipton)
County:	Tulare County
Global ID:	T10000021413

If you have any questions, please contact Daniel Benas at 559-445-5500 or daniel.benas@waterboards.ca.gov.

Original Signed by Scott J. Hatton
For Patrick Pulupa
Executive Officer

Enclosure: Staff Memorandum

cc: CalRecycle WPCMDivision@CalRecycle.ca.gov
Jessica Gocke JGocke@tularecounty.ca.gov
Helia Van Beek helia@turningleaforganics.com
Kyle Parreira kylep@4-creeks.com

Central Valley Regional Water Quality Control Board

TO: Scott J. Hatton
Supervising Water Resource Control Engineer

Kristen S. Gomes
Senior Water Resource Control Engineer

FROM: Daniel B. Benas
Water Resource Control Engineer

DATE: 13 October 2023

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2020-0012-DWQ, TURNING LEAF ORGANICS – TIPTON COMPOSTING FACILITY, TULARE COUNTY, GLOBAL ID T10000021413

On 12 June 2023, Turning Leaf Organics (hereafter Discharger) submitted a Notice of Intent (NOI) to obtain coverage under *General Waste Discharge Requirements for Commercial Composting Operations, State Water Resources Control Board Order WQ 2020-0012-DWQ* (General Order) for its composting operations located at 14808 Road 152 Tipton, CA 93272 (Facility). The Discharger had previously submitted a Technical Report titled *Waste Discharge Requirements for Composting Operations Turning Leaf Organics Composting Notice of Intent/Technical Report* (Technical Report) on 30 May 2023. The Technical Report was signed and stamped by Kyle Parreira (RCE 89070). A filing fee of \$7,770.00 was received on 23 June 2023.

SITE CONDITIONS

The Facility operates on approximately 40 acres located within the unincorporated area of Tulare County at the intersection of Avenue 144 and Road 152, approximately 10 miles west of the City of Porterville. The Facility is located on APN 232-160-003 and owned by the Van Beek Brothers Dairy.

The Technical Report includes the *Geotechnical Engineering Investigation Report*, dated 7 April 2023 and prepared by BSK, which states “The California Department of Water Resources [DWR] indicates the depth to regional groundwater at the project site is greater than 50 feet below ground surface (bgs).” A review of the DWR SGMA Date Viewer shows that area groundwater ranges between 90-100 feet bgs using spring 2022 data.

The Technical Report provides average annual pan evaporation data from class “A” pan in irrigated pasture environments near the Bakersfield area (1958-2010- 65.17 inches) and Fresno area (1968-2010 - 68.07 inches). The magnitude of the 25-year 24-hour

design storm event is estimated to be 2.54 inches according to the NOAA Atlas 14 Point Precipitation Frequency Estimates data server.

Land use within one mile of the Facility consists of agricultural farmland in all directions with a dairy facility to the east. Water supply to the Facility is by one off-site well. The nearest domestic well is approximately 1,000 feet from the northeast corner of the 40-acre composting area. The Friant-Kern Canal runs along the southern edge of the Facility. The ground surface is graded to direct precipitation runoff away from the canal and towards the proposed detention pond. The closest natural waterway is the Tule River which runs approximately 2.85 miles north of the Facility. The Technical Report references the FEMA Flood Insurance Rate Map, Panel 1615 of Community Panel Number 06107C161E, dated 16 June 2009, which indicates that the Facility is not within the 100-year peak storm event designation (Zone A) and that flood protection is not required for the operational area of the Facility.

The Technical Report included the *Geotechnical Engineering Investigation Report Turning Leaf Composting Facility* (Geotechnical Report), dated 7 April 2023, which described the subsurface condition of the Facility. The subsurface consists of clayey sand with various fines content, underlain by layers of sandy clay, clayey and silty sand, and poorly graded sand to the maximum depth explored (41.5 feet bgs).

COMPOSTING OPERATIONS

A 17 March 2022 Tulare County Special Use Permit Minor Modification (MIM 21-056 for PSP 83-007 (PC)/ MIM17-043) approved the establishment of a composting yard at the existing dairy facility. The Technical Report indicates that the Facility receives up to 219 cubic yards (273 wet-tons) of compostable material per day consisting of animal manure from nearby dairy facilities. The Facility has the capacity to store up to 35,000 tons (28,000 cubic yards) at any given time and receive a maximum of 79,999 cubic yards (99,999 wet-tons) per year.

Incoming feedstock is screened as necessary and composted in open windrows for 90-120 days and is then cured until stabilized.

WATER AND WASTEWATER MANAGEMENT PLAN

The General Order requires that Dischargers provide a *Water and Wastewater Management Plan* describing how water and wastewater will be managed in accordance with the General Order. Information must include a description of and/or plan illustrating all precipitation controls, containment structures, (i.e., conveyance systems for wastewater and detention ponds), best management practices, and contingency plan including:

- a. A wastewater conveyance system for controlling run-on and runoff from the working surface.
- b. A description of how water and wastewater is obtained and used in the compost process.

- c. A description of how the operation collects and manages wastewater. Information may include, but is not limited to, quantity that is reused back into the process, description of wastewater treatment systems, other water quality permits, and best management practices (i.e. covering materials) that reduce the production of wastewater.
- d. If using a detention pond, provide a water balance demonstrating compliance with the Design, Construction and Operation Requirements section of this General Order.

The Technical Report included a *Water & Wastewater Management Plan (WWMP)*, dated 16 May 2023, to address these requirements.

TIER II DESIGN AND CONSTRUCTION REQUIREMENTS

WORKING SURFACE

The General Order states 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 Technical Report indicates that the site does not currently meet the General Order compaction requirement and proposes to meet the requirement by following the compaction recommendations in the Geotech Report for site preparation and earthwork construction which includes, in part, stripping the top layer of organic material before bringing in fill material and compacting to 92%.

PROPOSED DETENTION POND

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 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;
- b. 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.

Detention ponds must be designed and constructed with a pan lysimeter monitoring device under the lowest point of the pond, or an equivalent engineered alternative specified in an NOI and/or a technical report and approved by the Regional Water Board. The engineered alternative must provide equivalent assurance of the earliest possible detection or prevention of a release from the pond.

Attachment C of the Technical Report is a *Pond Design Work Plan* which proposes to comply with the General Order by constructing a pond with an equivalent engineered alternative to the prescriptive standard. The *Pond Design Work Plan* proposes to construct a 360 foot long, 80 foot wide, 12-foot-deep pond with a 2:1 side slope. The proposed pond will have a detention volume of 1,301,411 gallons which is more than the calculated 25-year 24-hour storm event volume of 1,177,824 gallons. Therefore, the proposed pond volume meets the pond sizing requirements.

The proposed pond design includes a double lined 40-mil Rhino Mat 1000 liner with a 160 mils thick HDPE geonet drainage layer between the liners. Appendix F of the *Pond Design Work Plan* includes manufacturer's specifications for the RhinoMat 1000 material, which indicates the liner has a hydraulic conductivity of 1.0×10^{-14} cm/sec. The proposed design incorporates a leakage collection and removal system (LCRS) between the liners, and a pan lysimeter beneath the LCRS sump. The proposed engineered alternative appears to meet the requirements of the General Order.

MONITORING AND REPORTING

The Technical Report does not propose an adequate Monitoring Program to comply with the requirements of General Order Monitoring and Reporting Requirements. The Discharger will need to comply with the applicable portions of Attachment B of the General Order Monitoring and Reporting Requirements which include sections A.1, A.2, A.5, B, and C. Results of monitoring shall be reported annually in the Annual Monitoring and Maintenance report, which shall be submitted by 1 April of each year as long as the *Notice of Applicability* is in effect.

SITE CLOSURE

The Technical Report proposes the following site closure activities:

A site closure plan will be prepared and submitted to the Board 90 days prior to implementing closure activities. Closure activities will include removal of composting material from the site. The onsite drainage pond will be decommissioned by completely draining and removing a majority of the solids. Some residual solids from the receiving and storing areas may be left in place and a majority of the site native surface soils should be exposed. De-minimis residual composting material may be left. The volume of de-minimis residual soils left in place shall be evaluated under the judgement of a qualified California Registered Professional as defined in the California Business and Professions code §§ 6700 – 6799 and §§ 7800-7887.

In addition to the above, the Discharger must jointly notify the Central Valley Water Board and Local Enforcement Agency in writing at the conclusion of the site closure activities that describes closure in accordance with the Site Closure Plan and Central Valley Water Board Requirements.

RECOMMENDATIONS

Issue the NOA with a timeline for full compliance by 30 June 2024.