

Central Valley Regional Water Quality Control Board

12 June 2019

CERTIFIED MAIL
7018 1830 0001 2775 4150

Nyman Bradford E & Kristi J Trustee
P.O. Box 1331
Hillmar, CA. 95324-9532

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David Frazier
4243 W. Stuhr Road
Newman, CA. 95360

NOTICE OF APPLICABILITY

WATER QUALITY ORDER 2015-0121-DWQ GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING OPERATIONS D.A.T.T. COMPOSTING MERCED COUNTY

On 21 June 2018, D.A.T.T. (hereafter Discharger) submitted a Notice of Intent (NOI), Technical Report, and filing fee for the D.A.T.T. Composting Facility (Facility) to obtain coverage under Water Quality Order 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations (hereafter General Order). The Technical Report was submitted in response to Central Valley Regional Water Quality Control Board (Central Valley Water Board) 13260 letter dated 13 September 2016. The complete General Order can be accessed at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2015/wqo2015_0121_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 Facility meets the conditions of the General Order and is hereby covered under General Order **2015-0121-DWQ-R5F016** as a **Tier II** composting operation. The Discharger must comply with all Tier II requirements of the General Order.

The filing fee for the D.A.T.T. Composting Facility is based on Threat to Water Quality and Complexity rating of 3B. The submitted \$4,699 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 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:

- **By 31 December 2019**, provide a groundwater monitoring work plan with proposed well locations, details of activities to be performed, and a proposed time schedule for completion. However, if D.A.T.T. chooses not to move forward with installing a groundwater monitoring system, the Facility must meet the hydraulic conductivity specifications for working surfaces and drainage ditches by **4 August 2022** and a work plan for compliance with the hydraulic conductivity requirements must be submitted **by 31 December 2019**.
- **By 31 December 2020**, submit a revised Water and Wastewater Management Plan. This plan needs to include calculations for the proposed stormwater detention basin, a description of how water and wastewater will be managed, and a water balance demonstrating compliance with the applicable sections of the Design, Construction and Operation Requirements of the General Order.
- **By 31 December 2021**, submit engineering plans and technical specifications for the installation of a stormwater detention basin, which meets the capacity, liner system, and pan lysimeter requirements of the General Order.
- **By 4 August 2022**, construction of the stormwater detention basin must be completed.
- **By 4 August 2022**, the existing facility needs to be graded so that all surface runoff drains to the drainage conveyance system/stormwater detention basin.
- If you choose to move forward with installing a groundwater monitoring system in lieu of meeting the hydraulic conductivity requirements, calculations of statistically significant background threshold concentrations for nitrate (NO₃-N) and electrical conductivity (EC) in groundwater need to be submitted **by 4 August 2022**.
- Submit a post-construction certification report 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 the MRP.
- 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 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.
- Any expansion of facility operation must meet the requirements of the General Order prior to commencement of composting operations in any new area.

- A revised NOI is required at least 90 days prior to:
 - adding a new feedstock, additive, or amendment;
 - changing construction 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 you must comply 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 2020**, 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. Documents that are less than 50 MB are to be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger are to be transferred to a portable data storage device and mailed to this office at the address provided on the cover page.

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:	
Facility Name:	D.A.T.T. Composting
County:	Merced County
CIWQS Place ID:	828925

If you have any questions regarding this letter or the attached Staff Memorandum, please contact Elizabeth Welch at (559) 445-6127 or Elizabeth.Welch@waterboards.ca.gov.

Sincerely,

Original signed by Scott J. Hatton for

Patrick Pulupa
Executive Officer

Enclosures: Staff Memorandum

cc: Brianna St.Pierre <Brianna.St.Pierre@waterboards.ca.gov>
Esther Canal <Esther.Canal@countyofmerced.com>
John Kramer <jkramer@condorearth.com>

Central Valley Regional Water Quality Control Board

STAFF MEMORANDUM

TO: DANIEL L. CARLSON
Senior Engineering Geologist

SCOTT J. HATTON
Supervising Water Resource Control Engineer

FROM: KRISTEN S. GOMES
Water Resource Control Engineer
PE No. 79025

ELIZABETH A.M. WELCH
Water Resource Control Engineer

DATE: 12 June 2019

SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2015-0121-DWQ, D.A.T.T. COMPOSTING, MERCED COUNTY

REPORT OF WASTE DISCHARGE

On 21 June 2018, D.A.T.T. submitted a Notice of Intent (NOI) and Technical Report for the D.A.T.T. Composting Facility (Facility). The Technical Report, NOI, and filing fee were submitted to obtain coverage under Water Quality 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations (hereinafter General Order) for composting operations at the above referenced site. The Technical Report dated 21 June 2018, titled *Notice of Intent – Technical Report D.A.T.T., El Nido, California*, and was prepared by Condor Earth.

SITE CONDITIONS

The D.A.T.T. Composting Facility property is owned by Nyman Bradford and Kristi J Trustee and operated by David Frazier. The Facility is located on the 3000 block of W. Washington Rd. The closest cross street is Harmon Rd in El Nido, Merced County. The Facility is located on approximately 21 acres.

The Facility composts a mix obtained from Foster Farms Manure Storage Facility, which includes manure and carbonaceous bedding material (e.g. rice hulls, sawdust or other similar.) The Technical Report states that no additives or amendments are used. After composting is complete, the finished compost is stockpiled and covered until it is sold to customers.

The total permitted operational capacity is 12,500 cubic yards for all materials received, processed and stored on site at any given time. All wastewater generated when stormwater contacts composting materials flows via sheet flow and discharges into the stormwater management area. There is no

stormwater detention basin onsite, only a stormwater management area. A lined stormwater basin needs to be installed in accordance with Item 2 on page 21 of the Composting General Order by 4 August 2022.

Based on data from the CIMIS Station located 11 miles east of the Facility, the average annual precipitation is 8.73 inches. The average rainfall varies from a minimum of 2.51 inches (1989) to a maximum of 21.30 inches (2017). The average mean evaporation from bare soil is 53.08 inches per year. The magnitude of the 24-hour 25-year design storm was estimated to be 2.58 inches based on the data provided from the National Oceanic and Atmospheric Research Administration. According to the Federal Emergency Management Agency's (FEMA) Floodplain Map Panel 06047C0900G, the Facility is located in a flood zone without base flood elevations. The Facility is protected by the adjacent East-Side Bypass Canal that is bermed to contain the 100-year flood waters of the San Joaquin River.

Land use within one mile of the site is rural agriculture. The Technical Report states that the nearest water supply is an agricultural well approximately 1,400 feet east of the Facility and there is also a CASGEM/GAMA irrigation well approximately 1,600 feet west of the Facility. The closest surface water body is the East-Side Bypass Canal, which is approximately 100 feet west of the Facility and separated by an approximately ten-foot high containment berm. Groundwater flow is generally towards the west. The Technical Report did not include highest anticipated groundwater elevation. D.A.T.T. proposes to collect this information upon the installation of the groundwater monitoring system.

According to the USDA Natural Resources Conservation Service, surface geologic material is FrA-Fresno loam, which is underlain by unconsolidated flat-lying alluvial deposits similar to flood basin deposits, older alluvium, and shallow clay beds (above the Corcoran Clay).

COMPOSTING OPERATIONS

According to the Technical Report, the Facility complies with allowable feedstock requirements identified in the General Order. D.A.T.T. composts manure obtained from Foster Farms Manure Storage Facility. Depending on the time of year and the supply of manure, the amount of compost material will change. The composting process consists of placing the chicken manure into windrows. Water is then added and the windrows are periodically turned until they reach a temperature of 135 degrees or higher. The temperature is held at 135-155 degrees for 15 days. In that 15-day period, the windrows continue to be turned. The compost is left to cure for an additional 40 days before it is put into stockpiles and covered for customers. Composting operations do not occur over the wet season.

Compost windrows are constructed on the southern portion of the Facility (approximately 8.7 acres). The receiving area (approx. 4.3 acres) is located north of the compost windrows and the area used for stockpiling the final product (approx. 2.4 acres) is located west of the receiving area. The existing stormwater management area (approx. 5 acres) is located along the northern portion of the Facility. There is no stormwater detention basin.

The hydraulic conductivity values of the native soils range from 1×10^{-4} to 1×10^{-6} cm/s. However, the actual hydraulic conductivity of the working surfaces has not yet been determined. According to the Technical Report, the Facility is in a regional groundwater discharge zone characterized by shallow groundwater and upward flow directions, which may be locally influenced by nearby pumping from deep wells that would generate downward gradients. However, low permeability clay layers in the subsurface likely provide barriers to vertical flow.

TIMELINE FOR COMPLIANCE

Full compliance with the General Order must be completed **by 4 August 2022** for existing facility operations. Any expansion of the Facility must meet the requirements of the General Order prior to commencement of composting operations in any new area. D.A.T.T. proposes the following:

Improvement	Completion Date
Submit groundwater monitoring work plan OR a work plan to meet hydraulic conductivity requirements.	31 December 2019
Submit engineering plans and technical specifications for the installation of a stormwater detention basin.	31 December 2021
Completion of stormwater detention basin.	4 August 2022
Grading improvements.	4 August 2022
Implementation of a groundwater monitoring program OR compliance with the hydraulic conductivity requirements.	4 August 2022

D.A.T.T. must submit a post-construction certification report 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 the MRP.

MONITORING AND REPORTING

D.A.T.T. will regularly inspect and maintain all containment, control, monitoring structure, and monitoring systems pursuant to the submitted Technical Report and Attachment B of the General Order Monitoring and Reporting requirements. The frequency of inspections should be sufficient to prevent discharges of feedstocks, compost (active, curing, or final product), or wastewater from creating, threatening to create, or contributing to conditions of contamination, pollution, or nuisance.

D.A.T.T. is required to conduct a monitoring program as prescribed in the applicable portions of Attachment B of General Order Monitoring and Reporting requirements. Sections that apply are A.1., A.2., A.4., A.5., and B. 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 states that a closure plan would be submitted at least 90 days prior to ceasing composting operations. However, there is no discussion on how the site will be restored in compliance with the site closure requirements.

DISCUSSION

The Facility was inspected on 4 June 2019. Current composting operations are on native surfaces. There is currently no on-site stormwater basin. D.A.T.T. intends to meet the requirements of the General Order.

RECOMMENDATIONS

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

D.A.T.T. must comply with the following items:

1. **By 31 December 2019**, provide a groundwater monitoring work plan with proposed well locations, details of activities to be performed, and a proposed time schedule for completion. However, if D.A.T.T. chooses not to move forward with installing a groundwater monitoring system, the Facility must meet the hydraulic conductivity specifications for working surfaces and drainage ditches by **4 August 2022** and a work plan for compliance with the hydraulic conductivity requirements must be submitted **by 31 December 2019**.
2. **By 31 December 2020**, submit a revised Water and Wastewater Management Plan. This plan needs to include calculations for the proposed stormwater detention basin, a description of how water and wastewater will be managed, and a water balance demonstrating compliance with the applicable sections of the Design, Construction and Operation Requirements of the General Order.
3. **By 31 December 2021**, submit engineering plans and technical specifications for the installation of a stormwater detention basin, which meets the capacity, liner system, and pan lysimeter requirements of the General Order.
4. **By 4 August 2022**, construction of the stormwater detention basin must be completed.
5. **By 4 August 2022**, the existing facility needs to be graded so that all surface runoff drains to the drainage conveyance system/stormwater detention basin.
6. If you choose to move forward with installing a groundwater monitoring system in lieu of meeting the hydraulic conductivity requirements, calculations of statistically significant background threshold concentrations for nitrate ($\text{NO}_3\text{-N}$) and electrical conductivity (EC) in groundwater need to be submitted **by 4 August 2022**.
7. Submit a post-construction certification report 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 the MRP.
8. 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 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.
9. Any expansion of facility operation must meet the requirements of the General Order prior to commencement of composting operations in any new area.