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## Central Valley Regional Water Quality Control Board

7 March 2017

Kevin Barnes  
City of Bakersfield  
4101 Truxtun Ave.  
Bakersfield, CA 93309

### NOTICE OF APPLICABILITY

**WATER QUALITY ORDER 2015-0121-DWQ  
GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING OPERATIONS  
CITY OF BAKERSFIELD  
MOUNT VERNON RECYCLING AND COMPOSTING FACILITY  
KERN COUNTY**

On 4 August 2016, City of Bakersfield (hereafter Discharger) submitted a Notice of Intent (NOI) Technical Report, and filing fee for the Mount Vernon Recycling and Composting Facility (Facility), to obtain coverage under Water Quality Order 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations (hereafter General Order), for composting operations at the above-referenced site. The complete General Order can be accessed at: [http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2015/wqo2015\\_0121\\_dwq.pdf](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 your 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-R5F002** as a **Tier II** composting operation. The Discharger must comply with all Tier II requirements of the General Order.

The filing fee for the Mount Vernon Recycling and 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:

- The Water and Wastewater Management Plan as submitted in the Technical Report and approved by staff must be implemented. Construction of retention ponds and perimeter ditches must be completed by **30 September 2018**.
- The Facility must be brought to full compliance with the General Order no later than **30 April 2022**, which is within six years from submittal of NOI. The timeline for compliance is proposed in the submitted Technical Report and specified in the attached Staff Memorandum.
- Technical reports must be submitted 90 days prior to each construction activity, while post-construction reports must be submitted 60 days after the completion of each construction activity.
- A revised NOI is required 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 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 2018**, and then annually by 1 April each year.

Now that the NOA has been issued, the Board's Title 27 Unit will provide management of this composting site. Mercedes Merino is your new point of contact for any questions about the General Order and NOA, and you may contact her at (559) 445-5978 or via email ([Mercedes.Merino@waterboards.ca.gov](mailto:Mercedes.Merino@waterboards.ca.gov)). If you find it necessary to make a change to your permitted operations, please contact Mercedes Merino.

All monitoring reports are to be submitted to the Compliance and Enforcement Section. 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: [centralvalleysacramento@waterboards.ca.gov](mailto:centralvalleysacramento@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, Attention: ECM Mailroom.

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:	Mercedes Merino, Title 27 Unit
Discharger Name:	City of Bakersfield
Facility Name:	Mount Vernon Avenue Recycling and Composting Facility
County:	Kern County
CIWQS Place ID:	243568

If you have any questions regarding this letter or the attached Staff Memorandum, please contact Mercedes Merino at (559) 445-5978 or via email ([Mercedes.Merino@waterboards.ca.gov](mailto:Mercedes.Merino@waterboards.ca.gov)).

Sincerely,

*Original signed by Clay L. Rodgers for:*

PAMELA C. CREEDON  
Executive Officer

Enclosures: Staff Memorandum

cc: Mr. Peter Jan, California Department of Resources Recycling and Recovery,  
Sacramento, CA  
Mr. Jeffrey Marshall, Kern County Environmental Health Services Department,  
Bakersfield, CA

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**Central Valley Regional Water Quality Control Board**

**STAFF MEMORANDUM**

**TO:** Daniel L. Carlson  
Senior Engineering Geologist

Lonnie M. Wass  
Supervising Water Resource Control Engineer

Clay L. Rodgers  
Assistant Executive Officer

**FROM:** Mercedes Merino  
Engineering Geologist

**DATE:** 7 March 2017

**SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2015-0121-DWQ, CITY OF BAKERSFIELD – MOUNT VERNON RECYCLING AND COMPOSTING FACILITY, KERN COUNTY**

**REPORT OF WASTE DISCHARGE**

On 4 August 2016, the City of Bakersfield (the Discharger) submitted a Notice of Intent (NOI) and a Technical Report for the Mount Vernon Recycling and Composting Facility (Site). The Technical Report, NOI, and Filing Fee of \$4,699 were submitted to obtain coverage under Water Quality Order 2015-0121-DWQ, General Waste Discharge Requirements for Composting Operations (hereafter General Order) for composting operations at the above-referenced site.

**SITE DESCRIPTION**

The Site is located on a portion of a 155.8 property at 2601 South Mount Vernon Avenue in Bakersfield, Kern County. The facility comprised of Assessor's Parcel Number 5173-210-04. Currently 84.3 acres of the property are being used for composting.

The composting operation began in 1992. The facility primarily accepts residential green waste, and commercial establishments' green and food waste.

Land uses within one mile from the perimeter of the operation include residential dwellings over 4,000 feet away, a community center over 5,000 feet away, a school district maintenance yard over 5,000 feet away, an industrial pipe and metal supply over 4,000 feet away, an adjacent waste water treatment plant, and an adjacent farm. According to land use maps prepared by the Department of Water Resources, the primary crops grown within five miles of the facility include grain and hay crops, pasture crops such as alfalfa, field crops such as cotton, vineyards, almonds, and native vegetation.

The climate in the area is arid, with hot, dry summers and mild winters. Data from the Meadows Field National Weather Service Station were used to estimate the average annual precipitation at 6.45 inches, and to calculate the magnitude of the design storm (24-hour 25-year wet season event) at 2.01 inches (based on National Oceanic and Atmospheric Research Administration Atlas for Bakersfield, California). Based on the Federal Emergency Management Agency's (FEMA) Floodplain Map No. 06029C2325E issued 26 September 2008, the facility is not located within a 100-year flood plain.

Based on Kern Sanitation Authority (KSA) conventional monitoring wells, depth to groundwater in 2007 ranged from about 106 to 162 feet below ground surface (bgs), and the groundwater flow gradient is generally to the east/southeast. The area around the Site contains several groundwater monitoring wells developed for the Bakersfield Wastewater Treatment Plant #2. Groundwater monitoring well (MW-8) is located within the boundary of the Site.

The closest surface water is the East Brach of the Kern Island Canal; an irrigation canal located approximately 0.65 miles west of the perimeter of the property line at its closest point, which is greater than 100 feet away from the perimeter of composting operations, as required by the General Order. There is one water supply well located on the property. The water supply well is located approximately 1,920 feet from the composting operations. As presented above, the groundwater flow gradient is to the east/southeast, and this well is located at a distance greater than the 100 feet setback requirement by the General Order.

The measured hydraulic conductivity of the native soils underlying the composting unit range between  $1.2 \times 10^{-6}$  and  $6 \times 10^{-9}$  cm/sec. On-site soils are able to meet the General Order requirements of lower than  $1 \times 10^{-5}$  cm/s for compost pad permeability provided proper compaction and moisture content is maintained.

## **COMPOSTING OPERATIONS**

According to the Technical Report, Mount Vernon Recycling and Composting Facility complies with allowable feedstock and setback requirements identified in the General Order. The facility currently utilizes conventional open windrow composting. The current throughput is about 250,000 tons per year, with permitted capacity of 547,865 tons per year of green waste and food waste feedstock from residential and commercial sources (Solid Waste Facility Permit 15-AA-0311 issued by the Kern County Local Enforcement Agency and CalRecycle). Most incoming feedstock arrives to the facility in a processed condition which consists of size-reduced, screened, and sorted to remove undesirable material. Material that has undergone processing prior to arrival at the facility is placed directly into compost windrows. Unprocessed delivered material is size reduced by a portable grinder prior to being placed in windrows. Windrows are monitored, watered, and turned at least five times during the 15 day or longer pathogen reduction period. Once the desired level of decomposition is reached, the material is moved to the curing areas for six weeks, or may be left in place until shipment. No additives are currently used in the composting process. However, the facility is permitted to use gypsum as an additive.

The Discharger plans to switch to capped aerated static pile (ASP) composting technology in the future. This system can accept up to 30 tons per day of feedstock, in which green waste is blended with up to 12 tons per day of food waste. Incoming food waste and green waste are mixed in a 40/60 ratio and placed over perforated pipes placed on grade. The ASP windrow is covered with compost covers to control emissions and is kept moist as needed. The material is

aerated for a total of 51 days during decomposition, before being moved to the curing areas. During aeration, the material is turned three times in 15 to 21 day intervals.

Residuals removed from the compost feedstock and final product screening are hauled to Bakersfield Metropolitan (BENA) Sanitary Landfill, which is located 12 miles away.

Currently, runoff from the green waste facility is routed to the southeast corner of the facility where is then pumped to the City of Bakersfield's 72-inch sewer main. The Discharger plans to discharge directly into a sewer system. The Discharger plans to install two pump stations with intermediate cement lined channels that will convey drainage waters to the southeast corner of the site and dispose the runoff into the City of Bakersfield's sewer system.

### **TIMELINE FOR COMPLIANCE**

Full compliance with Order 2015-0121-DWQ must be completed by **4 August 2022**, which is six years from submittal of the NOI.

### **MONITORING AND REPORTING**

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

Mount Vernon Recycling and Composting Facility will conduct a monitoring program as prescribed in the Attachment B of General Order Monitoring and Reporting requirements. Sections that apply are A.1., 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**

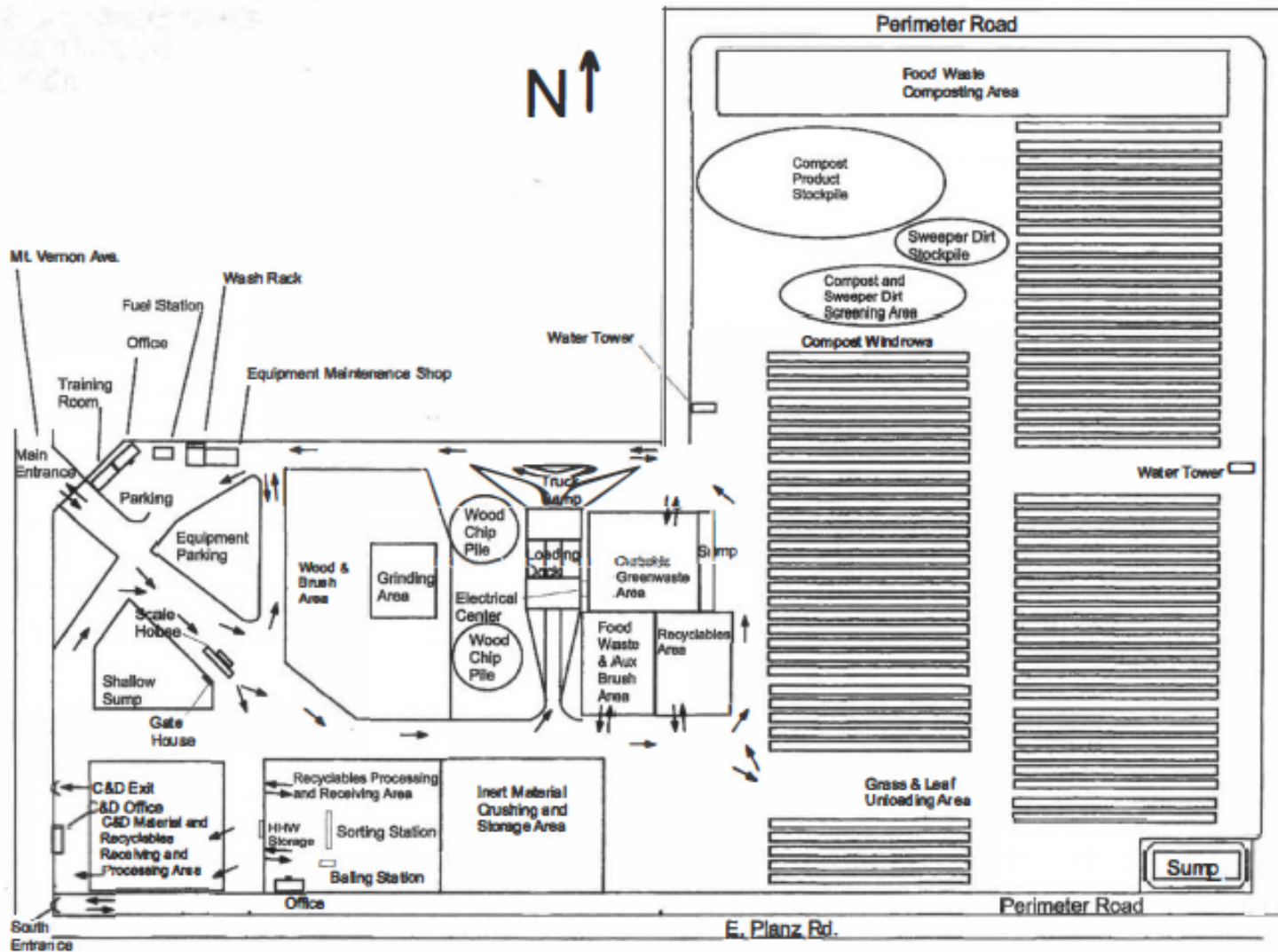
At least 90 days prior to ceasing composting operations, Mount Vernon Recycling and Composting Facility shall submit a Site Closure Plan to the RWQCB for approval. The site restoration shall include work necessary to protect public health, safety, and the environment.

### **DISCUSSION**

Mount Vernon Recycling and Composting Facility's Technical Report reveals that composting operations meet the requirements of the General Order. The Discharger has proposed to switch to capped aerated static pile composting technology.

### **RECOMMENDATION**

Based on staff review of the Technical Report and supporting documents, Mount Vernon Recycling and Composting Facility meets the minimum 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.



MOUNT VERNON RECYCLING AND COMPOSTING FACILITY  
2601 SOUTH MOUNT VERNON AVENUE  
BAKERSFIELD, CA 93307

ATTACHMENT A