
Central Valley Regional Water Quality Control Board

16 March 2017

Eric Oddo
Western Placer Waste Management Authority
3033 Fiddymont Road
Roseville, CA 95747

NOTICE OF APPLICABILITY

**WATER QUALITY ORDER 2015-0121-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING OPERATIONS
WESTERN PLACER WASTE MANAGEMENT AUTHORITY
WESTERN PLACER WASTE MANAGEMENT AUTHORITY COMPOSTING FACILITY
PLACER COUNTY**

On 4 August 2016, Western Placer Waste Management Authority (hereafter Discharger) submitted a Notice of Intent (NOI) Technical Report, and filing fee for the Western Placer Waste Management Authority 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

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-R5S006** as a **Tier II** composting operation. The Discharger must comply with all Tier II requirements of the General Order.

The filing fee for the Western Placer Waste Management Authority Facility is based on Threat to Water Quality and Complexity rating of **3B**. The submitted \$4,699 filing fee also 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 in this NOA, must be implemented.
- Installation of a pan lysimeter in the south compost pond by **30 November 2018**.
 - A work plan for installation of the pan lysimeter must be submitted for approval by **1 March 2018**.
 - A certification report documenting installation of a pan lysimeter must be submitted by **30 January 2019**.
- By **31 December 2018**, submit a copy of the updated Preferred Site Layout from the currently underway Master Planning efforts.
- By **1 March 2019**, submit a work plan to either: 1) expand and/or retrofit the north pond to include installation of an appropriate liner and a pan lysimeter, or 2) remove the north pond from service by clean closing the former facility.
 - By **30 November 2019**, implement work plan following Water Board review and approval
- 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.
- The Annual Monitoring and Maintenance Report, technical reports, and all monitoring reports must be uploaded into the State Water Board's GeoTracker database.
- 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 2017**, and then annually by 1 April each following year.

All monitoring and technical reports and other correspondence must be converted to searchable Portable Document Format (PDF) and submitted electronically to the State Water Board's GeoTracker database (see General Order, Report Submittals). Once you receive an upload confirmation from GeoTracker that your report has been received, please send a courtesy email and confirmation number to centralvalleysacramento@waterboards.ca.gov and to the staff person indicated on the following page.

The following information should be included in the body of the email or any documentation submitted to this office:

Attention:	Paul Sanders, Compliance and Enforcement Unit Paul.Sanders@waterboards.ca.gov (916) 464-4817
Discharger Name:	Western Placer Waste Management Authority
Facility Name:	Western Placer Waste Management Facility
County:	Placer County
CIWQS Place ID:	827097

Now that the NOA has been issued, the Board's Compliance and Enforcement Section will provide management of this composting site. Paul Sanders is your new point of contact for any questions about the General Order and NOA, and you may contact him at the contact email and phone number provided above. If you find it necessary to make a change to your permitted operations, Paul Sanders will direct you to the appropriate Permitting staff.


For 
PAMELA C. CREEDON
Executive Officer


Enclosures: Staff Memorandum

cc: Nadine Langley, State Water Resources Control Board, Sacramento
Howard Hold, Central Valley Regional Water Quality Control Board, Rancho Cordova
Keith Schmidt, Western Placer Waste Management Authority, Auburn
Paul Holloway, Placer County Environmental Health Department, Auburn

Central Valley Regional Water Quality Control Board

STAFF MEMORANDUM

TO: Marty Hartzell, PG, CHG 
Senior Engineering Geologist

FROM: Benjamin Lehmann 
Scientific Aid

DATE: 9 March 2017

SUBJECT: **APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2015-0121-DWQ, WESTERN PLACER WASTE MANAGEMENT AUTHORITY, MATERIALS RECOVERY FACILITY, PLACER COUNTY**

REPORT OF WASTE DISCHARGE

On 4 August 2016, Western Placer Waste Management Authority (hereafter, Discharger or WPWMA) submitted a Report of Waste Discharge (ROWD) consisting of a Notice of Intent (NOI), a Technical Report, and Filing Fees for the Western Placer Waste Management Authority Composting Facility (Facility). A revised compliance schedule was submitted on 12 January 2017. The ROWD was 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 Facility occupies 25.4 acres located in the eastern half of Section 6, Township 11 North, Range 6 East, Mount Diablo Base and Meridian. The Assessor Parcel number is 017-063-001. The Facility is located within the permitted Western Regional Sanitary Landfill boundary in Placer County.

The facility is located on gently rolling terrain at the base of the Sierra Nevada foothills. Subsurface lithology beneath the facility includes unconsolidated to strongly indurated clays, silts, and sands, with lenses of gravel. The sedimentary deposits extend to a depth of approximately 200 feet below ground surface and are a part of the Victor and Fair Oaks Formations. Land uses within one mile of the facility are primarily agricultural and industrial. The adjacent areas to the east and south of the composting facility are owned by the WPWMA and are used as a sanitary landfill. The closest residence is located on WPWMA property approximately 1,200 feet west from the property line.

The closest surface water is Orchard Creek which is approximately 4,200 feet north from the perimeter of composting operations, which is greater than the General Order requirement of 100 feet. According to the Discharger's NOI, the nearest irrigation well is 680 feet from the facility and the nearest domestic well is 2,300 feet from the facility, which is greater than the General Order setback requirement of 100 feet. There is also an onsite irrigation well that is used when additional water is needed for composting operations. Depth to groundwater ranges

between 70-110 feet, and the groundwater gradient is calculated to be approximately 0.002 feet per foot. Groundwater flow direction is primarily to the southwest, with an estimated average velocity of 12 feet per year.

Data from the Sacramento Executive Airport weather station was used to estimate the average annual precipitation at 17.24 inches, and to calculate the magnitude of the design storm (25-year 24-hour wet season event) at 3.97 inches (based on National Oceanic and Atmospheric Research Administration value). Based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, Community-Panel Number 0400F, the facility is not located within 100-year flood plain. Wind direction is variable, prevailing predominantly from the east and southeast with speeds averaging about 4.5 mph.

COMPOSTING OPERATIONS

According to the Technical Report, WPWMA complies with allowable feedstock and setback requirements. The facility currently utilizes open windrow composting with a throughput of 4,850 cubic yards per week of green waste feedstock from residential, commercial sources, and green waste recovered from the mixed waste sorting processes within the Materials Recovery Facility or MRF. Feedstock is offloaded onto a concrete receiving pad, processed, and arranged into windrows in the active composting areas where it resides for eight to twelve weeks. During active composting, the windrows are turned several times (one to three times per week) and water is added as necessary to maintain 50-55% moisture. Pathogen reduction is achieved by keeping the active compost under aerobic conditions at a temperature of 55°C or higher for 15 days or longer. Cured compost is screened, blended with amendments, and stored until it is transported from the facility. Amendments that are used at the facility include worm castings, compost tea, sand, soil, and gypsum.

The facility is divided into two areas, the north and south compost areas, see Attachment A. The north compost pad has a seven-inch thick concrete pad and consists of a 2.5 acre working area, a 4.4 acre Construction and Demolition (C&D) area, a green and wood waste tipping pad and processing area, and 5.3 acres of windrows. The south compost pad has an eight-inch thick concrete pad and consists of a 3.6 acre curing and screening area and 4.6 acres of windrows. The minimum General Order permeability requirement for compost pads is 1×10^{-5} cm/s. The north and south compost pads meet the minimum General Order requirements.

Composting operations include two compost wastewater ponds, see Attachment A. All compost wastewater from the north concrete compost pad, north compost windrows, and the C&D, green, and wood waste tipping pad and processing area is directed to the north compost pond. The south compost pond collects all the drainage from the south compost windrows and the south curing and screening concrete compost pad. The north and south compost ponds store the compost wastewater where it either evaporates or is pumped for reuse as composting process water. The south compost pond was reconstructed in 2013 to expand capacity to 19.9 acre-feet, and is lined with a 60-mil HDPE geomembrane liner above a minimum of one foot of compacted clay. This design meets the minimum General Order hydraulic conductivity requirement for detention ponds of 1×10^{-6} cm/s or less; however, as discussed below, the pond does not have a pan lysimeter.

The north compost pond has a capacity of 8.7 acre-feet and is lined with compacted native clay; however, it also lacks a pan lysimeter. According to the water balance submitted as an appendix to the 4 August 2016 Technical Report, the north compost pond has insufficient capacity to meet the requirements of the General Order to contain all runoff from a 25 year, 24 hour storm

event. Improvements to the north compost pond are required in order to meet the minimum General Order design and hydraulic conductivity requirements. Currently the Discharger pumps excess wastewater from the compost ponds to the sanitary sewer collection system in order to maintain storage capacity for future anticipated precipitation. This agreement is documented under Wastewater Discharge Permit Number 887795, issued 1 January 1995, by the City of Roseville.

The north and south compost ponds do not have pan lysimeter monitoring devices as required by the General Order for Tier II composting facilities. The Discharger has proposed to install a pan lysimeter in the south compost pond in the next year. The Discharger stated in the technical report that the lysimeter will be designed and constructed by the end of the 2018 construction season.

Expansion of the north compost pond is restricted due to its proximity to the surrounding recycling infrastructure. WPWMA will need to either identify a separate expansion area to maintain composting capacity or convert to another method of composting that consumes less space. Both of these options will require review per the California Environmental Quality Act. WPWMA is conducting a facility wide master planning effort to identify optimal composting techniques, capacity requirements, use of current facilities, and locations of new onsite facilities and determine if current operations will continue, or if an alternative system will be implemented. WPWMA plans to complete its facility wide Preferred Site Layout by November 2018. After completion of the Preferred Site Layout, the Discharger will either retrofit the north pond with an appropriate liner system and a pan lysimeter, or remove the north pond from service.

The Discharger must submit a technical report with design information 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. The design information must include water balance calculations for detention ponds, design of wastewater conveyance features, liner materials and thicknesses, and rationale for liner system design. The technical report must ensure testing and quality assurance of liner materials and compacted soils in accordance with commonly accepted engineering practices, American Society for Testing and Materials test methods, and/or other appropriate material standards and shall be prepared by a California registered engineer or geologist. The Discharger must submit a post-construction 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 Monitoring and Reporting Program or MRP. The post-construction report shall also be prepared by a California registered professional.

TIMELINE FOR COMPLIANCE

The table below shows the proposed improvement plan schedule which incorporates on-going operations of the facility, seasonal weather, fluctuations in the market demand of finished product, and company resources. WPWMA must comply with the proposed timeline.

Task	Completion Dates
Submit work plan for installation of the pan lysimeter.	1 March 2018
Install a pan lysimeter in the south compost pond.	30 November 2018
Submit certification report documenting installation of pan lysimeter.	30 January 2019

Task	Completion Dates
Submit a copy of the Preferred Site Layout.	31 December 2018
Submit a work plan to retrofit the north pond with an appropriate liner and pan lysimeter or remove north pond from service. Implement work plan following Water Board review and approval.	1 March 2019 30 November 2019

MONITORING AND REPORTING

WPWMA will regularly inspect and maintain all containment, control, monitoring structures, and monitoring systems pursuant to the submitted ROWD and the Attachment B of 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.

WPWMA will conduct a monitoring program as prescribed in the Attachment B of the General Order Monitoring and Reporting requirements. Applicable sections include:

- A.1. (Facility Inspections);
- A.2. (Detention Pond Monitoring);
- A.4. (Groundwater Protection Monitoring);
- A.5. (General Sampling Requirements);
- B (Reporting Requirements); and
- C (Record-Keeping 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

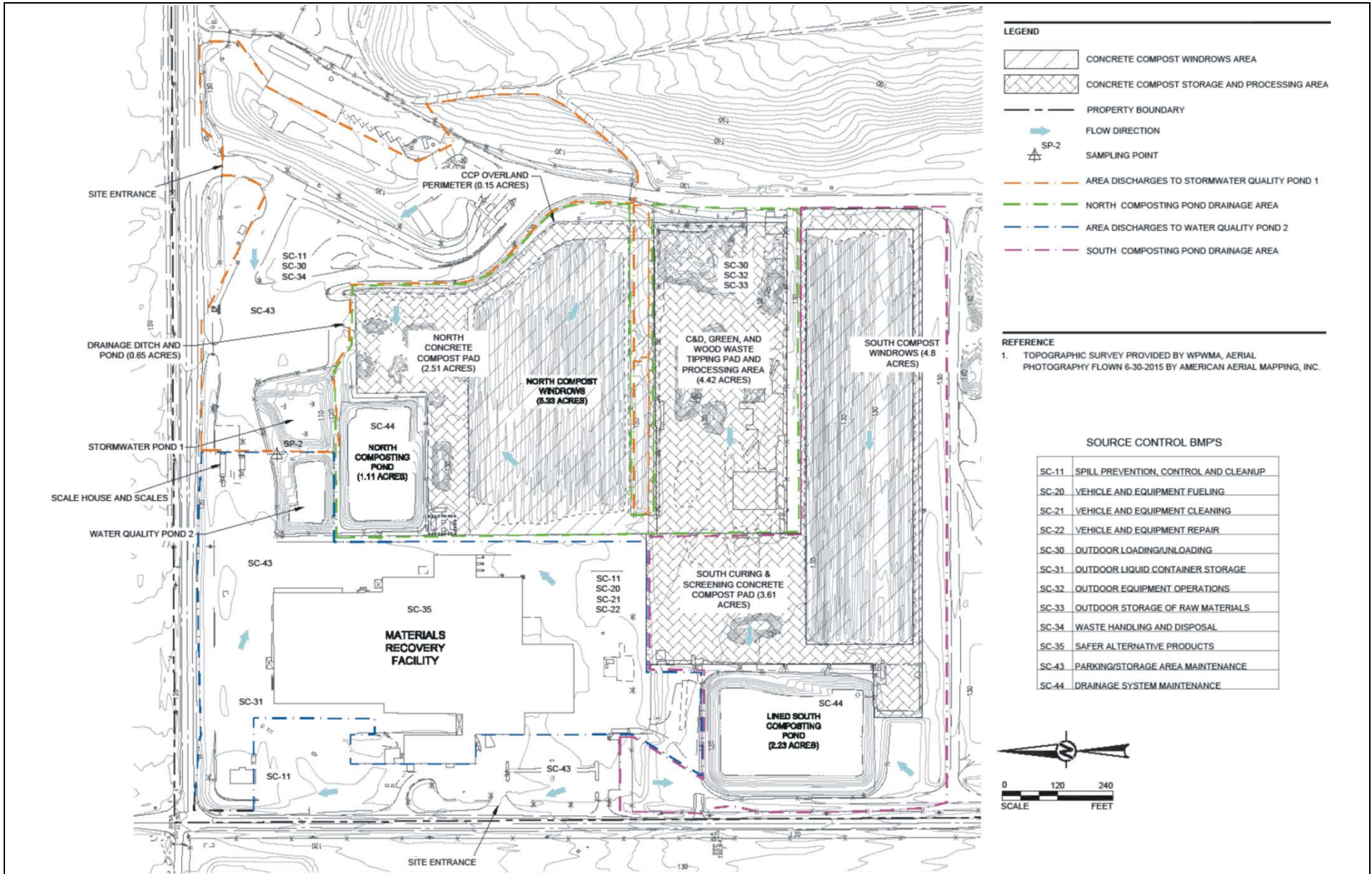
At least 90 days prior to ceasing composting operations, WPWMA shall submit a Site Closure Plan to the RWQCB for approval. The Site Closure Plan shall include site restoration work necessary to protect public health, safety, and the environment.

DISCUSSION

WPWMA’s Technical Report reveals that compost wastewater contained in the unlined north pond is currently not in compliance with the requirements of the General Order and improvements to this pond are required to meet the hydraulic conductivity requirement of the General Order. Compost wastewater in an unlined detention pond has the potential to impact water quality at or near the site. Additional improvements to the detention ponds are to include installation of pan lysimeter monitoring devices.

RECOMMENDATION

Based on staff review of the WPWMA’s NOI, Technical Report, and supporting documents, WPWMA 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.



Drawing Reference:
 Western Placer Waste Management Authority
 Western Placer Waste Management Authority Composting Facility
 Technical Report
 Site Plan, Figure 4

SITE PLAN MAP
 Western Placer Waste Management Authority
 Western Placer Waste Management Authority Composting Facility
 Placer County