



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Public Workshops for Climate Protection & Organics Rule Development Efforts

Rule 13-2: Organic Material Handling Rule 13-3: Composting Operations



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November 2018



Outline

- Organic Material Diversion Mandate
- Background on organic material processing and composting operations
- Current regulatory framework addressing these operations
- Update on preliminary rule development efforts
- Next Steps for organics recovery sector rules



Organics Diversion Mandates

- Senate Bills 32, 605, and 1383 require State agencies to reduce statewide disposal of organic waste by:
 - 50% of 2014 levels by 2020
 - 75% of 2014 levels by 2025
- Composting in California - white paper
 - Co-produced by California Air Resources Board (CARB), California Air Pollution Control Officers Association (CAPCOA), and CalRecycle
 - Estimates 100% increase in organic material processing capacity for facilities in the Air District
 - 12–15 new facilities processing an additional 700-900 thousand tons of feedstock per year



Organic Materials Handling and Composting Operations

Composting

- A managed biological process
- Aerobic conditions (in the presence of oxygen)
- Microorganisms convert organic matter into a soil amendment known as “Compost”
- Less than ideal conditions can yield:
 - Volatile Organic Compounds (VOCs) and other odor causing compounds.
 - Methane from anoxic conditions (in the absence of oxygen)



Organic Materials Handling and Composting Operations (cont.)

Impacts

- All facilities have the potential of odors and methane emissions
- Well-run facilities are less likely to have issues
- Location is part of the equation
- The Air District receives a large volume of odor complaints related to solid waste processing facilities and most are from a small number processing organic waste



Organic Materials Handling and Composting Operations (cont.)

Jurisdiction

- Composting operations are exempt from the Air District public nuisance provisions
 - Air District can't cite for odor complaints at compost facilities— hand off to lead enforcement agencies
 - Develop rules to control VOCs via best practices – reduce odors



Regulatory Framework

Current Air District applicable rules

- Rule 2-1, Composting Operations processing more than 500 tons per year and Transfer Stations processing more than 50 tons a day require a permit
- Rules 2-2, New Source Review (NSR) and 2-5, NSR of Toxic Air Contaminants depending on emissions
- Rules 6-1 for particulates, and 8-2 for VOCs



Regulatory Framework (cont.)

Rules in other Air Pollution Control Districts (APCD)

- South Coast - a suite of composting rules and a rule for odors from transfer stations and material recovery operations
- San Joaquin Valley - a rule governing the handling of animal manure, biosolids and poultry litter along with a rule for organic material composting
- San Diego APCD, and Ventura APCD are in the process of developing rules for composting operations



Rules 13-2 & 13-3 Regulatory Concepts

Stockpile Management

- Residency limits for storage piles, periodic complete removal prior to addition of new material
- Height restrictions, moisture content, bulking agents for food residuals/manure/biosolids
- Ventilation and odor control requirements for buildings



Rules 13-2 & 13-3 Regulatory Concepts (cont.)

Active Composting

- Finished compost covers or biofiltration
- Control requirements dependent on feedstock
- Metrics for determining end of active phase

Monitoring and Recordkeeping

- Types, quantity, residence times of feedstock
- Operational metrics (temperature, moisture, solvita index)

Test Methods and Definitions



Preliminary Rule Development

Methane Strategy Expert Panels

- November 2017 - Composting and Anaerobic Digestion
- June 2018 - Composting Training and Operators Perspective

Organic Recovery Sector Regional Convening

- June 2018 - Discussion on the development of the Bay Area's organic materials recovery sector

Site visits

- Composting operations in Alameda, Contra Costa, Napa, Santa Clara and Solano
- Organic material handling operations in Alameda and Santa Clara



Next Steps

- Additional Methane Strategy Expert Panels
- Draft rule workshops for 13-2, and 13-3 will be held in the first quarter of 2019
- Public Hearing for Board of Directors consideration in the third quarter of 2019
- Addition rule development efforts in mid to late 2019



Questions

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