

California Bioresources Alliance 2018 Symposium

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Composting in the San Joaquin Valley

- 25 facilities permitted within SJV
- Annual compost facility throughputs range from 20,000 tpy to 730,000 tpy
- Primary compost materials include green waste, dairy manure, sewage sludge, and biosolids
- Air District regulates Criteria Pollutants (NO_x, SO_x, PM and VOC) and emissions of air toxic contaminants
- Facilities must receive an Air Permit prior to operating

Organic Materials Composting Expansion

- SB 1383 mandates that CalRecycle develop a regulation to reduce disposal of organic materials in landfills compared to a 2014 baseline year
 - By 50% by 2020 and by 75% by 2025
- 75 to 100 new/expanded compost facilities
- 12.5 million tpy increased capacity
- CalRecycle/CARB/CAPCOA white paper, *Addressing Air Quality Permitting and Regulatory Issues for Expanding Infrastructure*:
<https://www.calrecycle.ca.gov/docs/cr/Organics/Events/ADCFoodWaste/FoodWaste.pdf>
- 2 workshops in August 2018

Air Permitting Process

- Authority to Construct Permit needed prior to operating
- New Source Review Rule (District Rule 2201)
 - Best Available Control Technology (BACT)
 - Public Notice
 - Offsets
 - Health Risk Assessment
 - Major Source (Title V Federal requirements)
- Two prohibitory rules
 - Rule 4565, Biosolids, Animal Manure, and Poultry Litter Operations
 - Composting Facility Mitigation Measures: Menu approach, 20,000 tpy / 100,000 tpy
 - Rule 4566, Organic Material Composting Operations
 - Composting Facility Mitigation Measures: Menu approach, 200,000 tpy / 750,000 tpy

Land Use Issues to be Considered

- California Environmental Quality Act (CEQA)/Land use approval
 - Existing facility versus new facility
 - Air quality impacts from transportation emissions related to hauling compost feedstock; mitigation required
 - Nuisances (odors, dust, etc.)
 - Length of time to receive land use approval (timing issue related to SB 1383)
- Air quality impact from receiving and composting waste from outside of the Valley

Permitting Issues to be Considered

- Emission factors originally established for green waste, biosolid, and manure.
 - Required to establish an emission factor for food waste composting
- Nuisances associated with the food waste receiving and processing
- Offsets/ERCs: 10 tpy-VOC, 15 tpy-PM10:
 - Approx. 60,000 tpy composted green waste = Offsets
- Installation of Best Available Control Technology (BACT)
 - Enclosed system vented to a scrubber/carbon adsorption/biofilter system
 - Negative Aerated Static Piles (ASPs) and vented to a thermal incineration system/carbon adsorption system/biofilter system
 - Positive ASPs with a cover (engineered cover, finished compost, or equivalent)
 - Covered piles using finished compost or equivalent
 - District Rule 4565/4566 mitigation measures

Contact Information SJVAPCD

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