South Coast
Air Quality Management District
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Draft Mitigated Negative Declaration (Draft MND) for the Proposed Edom Hill Transfer Station Solid Waste Facility Permit Revision Project Environmental Assessment No. EHTS 2009-02

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Mitigated Negative Declaration (Final MND).

Please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Susan Nakamura
Planning Manager
Planning, Rule Development & Area Sources

Attachment

SN:EE:CT:JK:JHL:GM

RVC091125-04
Control Number

Operational Air Quality Analysis – Greenwaste Composting Emissions

- The SCAQMD staff has reviewed the air quality emission calculations and estimates for the greenwaste composting emissions and has concluded that the VOC emission factor used in the analysis is too low.

  The lead agency initially compared emission factors from different VOC emission research studies: (1) the SCAQMD's study at the Inland Empire Composting site in 2001 during the Rule 1133 rulemaking process that derived an average emission factor of approximately 3.84 pounds of VOC per ton of greenwaste composted; (2) the California Integrated Waste Management Board (CIWMB) field test at a facility in Modesto in 2006 indicating an average VOC emission factor of between 0.8–0.9 pounds per ton of greenwaste; (3) the NorCal facility site test resulting in an average emission factor of 8.6 pounds per ton of greenwaste; and (4) an investigative study by the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) that re-evaluated the aforementioned study results and presented its own emission study results from an undisclosed facility indicating an average emission factor of 14.06 pounds of VOC per ton of greenwaste. The lead agency used the VOC emission factor of 0.868 pounds of VOC per ton of greenwaste from the CIWMB's Modesto study to estimate the VOC emissions from the project's full lifecycle (60–90 days) composting operation, because they seemed scientific, legitimate and directly applicable to greenwaste composting emissions analyses.

  However, based on a review conducted by the SJVAPCD, the greenwaste composting VOC emissions factor used in the Modesto study was re-calculated to be an emission factor of 1.54 pounds per ton of greenwaste for the full lifecycle (i.e., 57-day cycle) emissions calculation. The SCAQMD staff believes it is more appropriate to use, at a minimum, the re-calculated VOC emission factor of 1.54 pounds per ton of greenwaste for the full lifecycle emissions calculation. Some adjustment should also be made to VOC emission factors to reflect the shorter production cycles (i.e., 21-day and 45-day) for soil amendments, since shorter production cycles result in emissions approximately 80 to 90 percent of the full lifecycle valves.

  SCAQMD staff therefore recommends the following emission factors be used to estimate project VOC emissions in the Final MND: 1) 1.54 pounds per ton of greenwaste for a 100 percent lifecycle composting period; 2) 1.232 pounds per ton of greenwaste (i.e., 80% of 1.54) for a 21-day soil amendment cycle; and 3) 1.386 pounds per ton of greenwaste (i.e., 90% of 1.54) for a 45-day soil amendment cycle.

  The SCAQMD staff recommends that the lead agency revise the emission estimates in the Final MND using these recommended emission factors and compare the revised estimates with the SCAQMD recommended daily operated significant threshold for VOC of 55 pounds per day. If significant, the lead agency should then investigate feasible mitigation measures to reduce the VOC impacts to a level of less than significant. An additional mitigation measure that the SCAQMD staff recommends is for the emissions

from the composting operations be controlled by a covered and aerated collection system that is vented to a device, such as a biofilter. Additional mitigation measures can be found at the CIWMB website: (http://www.ciwmb.ca.gov/Organics/Processors/Systems/default.htm).