



South Coast
Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

E-MAILED: NOVEMBER 6, 2009

November 6, 2009

Mr. Sung Key Ma, Planner IV
Riverside County Waste Management Department
14310 Fredrick Street
Moreno Valley, CA 92553

Draft Mitigated Negative Declaration (Draft MND) for the Proposed Robert A. Nelson Transfer Station/Materials Recovery Facility Solid Waste Facility Permit Revision Environmental Assessment No. RAN 2009-03

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD would also like to thank the lead agency for the additional time to submit comments. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Mitigated Negative Declaration.

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,

A handwritten signature in black ink that reads "Susan Nakamura".

Susan Nakamura
Planning Manager
Planning, Rule Development & Area Sources

Attachment

SN:EE:JL:GM

SBC091009-05
Control Number

Operational Air Quality Analysis

- 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 emissions 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) at 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 from the CIWMB's Modesto study to estimate the VOC emissions from the project's operation because they seemed directly applicable to greenwaste composting emissions analyses. However, based on a review conducted by the SJVAPCD, the greenwaste composting VOC emission factor used in the Modesto study was re-calculated to be an average of 1.54 pounds per ton of greenwaste. The SCAQMD staff believes it is more appropriate to use, at minimum, the re-calculated emission factor of 1.54 pounds per ton of greenwaste for the full lifecycle (i.e., 57-day cycle) emissions calculation.

A VOC emission factor of 0.6 pounds per ton of greenwaste was also used to calculate total composting VOC emissions during the 21-day soil amendment period for the proposed project. The SCAQMD staff believes that some adjustment should also be made to this emission factor to reflect the shorter 21-day production cycle for soil amendment. The 0.6 pound of VOC per ton of greenwaste emission factor is about 69 percent of the 0.868 pound per ton for the longer, lifecycle composting. For the 21-day cycle, a more appropriate emission factor would be 1.06 pounds per ton of greenwaste.

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; and 2) 1.06 pounds per ton of greenwaste for a 21-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 operational significance 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. The SCAQMD staff recommends that the emissions from the composting operations shall be controlled by covered and aerated collection system 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>).