



(Letter Sent Via Email)

February 13, 2020

Lijin Sun, J.D., Program Supervisor, CEQA IGR
South Coast Air Quality Management District
Planning, Rule Development & Area Sources
21865 Copley Drive
Diamond Bar, CA 91765-4178

Subject: OC Waste & Recycling Responses to SCAQMD Comments on MND for Proposed Capistrano Greenery Composting Operation at the Prima Deshecha Landfill (SCH No. 2020019030)

Dear Lijin Sun:

The County of Orange, OC Waste & Recycling department (OCWR) has the following responses to SCAQMD's comment letter dated February 6, 2020 regarding the Mitigated Negative Declaration (MND) for the proposed Capistrano Greenery Composting Operation at the Prima Deshecha Landfill.

Response 1:

CEQA Baseline. The Draft MND Appendix C Air Quality and Greenhouse Gas Emissions Analysis, page 29 states, "Prima Deshecha Landfill currently accepts 100 TPD of green waste and would accept a maximum of 200 TPD of green waste with the proposed composting facility. However, the existing condition considers 200 TPD of green waste composted as ADC, geosynthetic tarp framing and erosion control, because no matter which landfill in Orange County accepts the green waste, the same amount of air pollutants is generated. Therefore, compared to existing conditions, the proposed project would result in no change to the green waste compost emissions and only net increases in off-road and mobile-source emissions because of the operation of the composting facility." Due to recent State-mandated organic waste recycling mandates, at least 50 percent of the green waste generated by the incorporated cities in Orange County must now be composted by 2020 and 75 percent by 2025. Since OC Waste & Recycling will only be able to accept a small portion of this green waste volume at proposed composting operations at OC Waste & Recycling's Olinda Alpha, FRB and Prima Deshecha Landfills, a significant percentage of this total daily green waste volume, currently estimated at over 2,000 TPD, will be leaving Orange County and will be transported to more distant composting operations and landfills located in the South Coast Air Basin. The green waste generates the same amount of air pollutants from decomposition regardless of where the green waste is transported to, but by having composting operations that are located more closely to the cities where the green waste is generated in Orange County, this will result in an air pollutants emissions reduction overall for the South Coast Air Basin because of shorter truck trips and lower mobile source emissions. The approximate 200 TPD of green waste that will be

received at the Capistrano Greenery composting operation is generated within the local cities that utilize the Prima Deshecha Landfill (i.e., San Juan Capistrano, San Clemente, Dana Point, Mission Viejo, Laguna Niguel and Aliso Viejo), thereby resulting in a net air pollutants emissions reduction for the South Coast Air Basin, when compared to using more distant composting operations and landfills located outside of Orange County that would result in much longer trips and higher mobile source emissions.

Response 2:

VOC Emissions from Green Waste Composting. Solid waste materials that are currently decomposing inside the Prima Deshecha Landfill is an existing condition that is not part of the proposed project. The proposed project is for open windrow composting only, that would occur on top of the landfill and soil stockpile. In addition, VOC emissions associated with the decomposition of green waste within the landfill is not comparable to VOC emissions from open windrow composting, since the green waste inside the landfill is mixed with many other waste types. In addition, VOC emissions generated inside the landfill are captured by the landfill gas collection system. In order to establish a relative baseline, LSA assumed that VOC emissions associated with the current use of processed green material as alternative daily cover (ADC) at the landfill would be comparable to VOC emissions generated by open windrow composting, since both are aerobic processes that use green waste.

Response 3:

Compliance with South Coast AQMD Permitting and Compliance Requirements – Calculate Emissions from Compost Operation Curing Phase. The air quality analysis included as Appendix C to the MND did account for the curing phase of the proposed composting operation. The emission factors that were used were from (<http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidecalcgreenwaste.pdf?sfvrsn=6>):

- VOC: 4.25 (active) + 0.42 (curing) = 4.67
- NH₃: 0.46 (active) + 0.20 (curing) = 0.66

The SCAQMD Rule 1133.3 (<http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1133-3.pdf>, page 6) reports active phase emissions (4.25 for VOC and 0.46 for NH₃)."

Response 4:

Additional South Coast AQMD Permitting and Compliance Requirements. In response to this comment, Jeff Arbour, Environmental Services Manager for OC Waste & Recycling spoke to several staff members at SCAQMD to determine which SCAQMD Rules and Regulations, in addition to Rules 402, 403 and 1133.3, would govern the proposed open windrow green waste composting operation. Mr. Arbour was informed by SCAQMD staff that per SCAQMD Rule 301, a permit will be required for the motor and dust emissions from the track mounted screener. Mr. Arbour will continue to work with SCAQMD staff during the permitting phase of the project to ensure that OC Waste & Recycling complies with all required SCAQMD Rules, Regulations and Permits that will be required for the proposed composting operation.

Please let me know if you would like to discuss any of the responses above. I can be reached at (714) 834-4107 or by email at john.arnau@ocwr.ocgov.com.

Sincerely,

A handwritten signature in black ink, appearing to read "John J. Arnau". The signature is written in a cursive, flowing style.

John J. Arnau
CEQA Manager



South Coast Air Quality Management District

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(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS:

john.arnau@ocwr.ocgov.com

John Arnau, CEQA Manager

Orange County Waste & Recycling

601 N. Ross Street, 5th Floor

Santa Ana, CA 92701

February 6, 2019

Mitigated Negative Declaration (MND) for the Proposed Capistrano Greenery Composting Operation at the Prima Deshecha Landfill (SCH No.: 2020019030)

South Coast Air Quality Management District (South Coast AQMD) staff 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 MND.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to construct and operate an open windrow composting facility on 18.6 acres within the Prima Deshecha Landfill to assist cities in Orange County (County) as well as County unincorporated areas in meeting the Senate Bill 1383's requirements for the diversion and recycling of organic waste materials (Proposed Project). The Prima Deshecha Landfill is a Class III landfill that only accepts municipal solid waste for disposal from commercial haulers and vehicles operating under commercial status and no hazardous or liquid waste can be accepted¹. The Proposed Project is currently receiving 100 tons per day (tpd) of processed green material, which is used as alternative daily cover (ADC) at the Landfill and is not currently used for open windrow composting.

Construction of the Proposed Project is expected to take two months². Once operational in 2020³, a net new 100 tpd of processed green material, agricultural material, and up to 20 percent manure will be accepted for a total of 200 tpd. No food waste will be accepted at the Proposed Project⁴. The processed green material will be diverted to the Proposed Project for composting for 306 days a year with a maximum daily tonnage of 200 tpd⁵. Processed green material will be placed in a designated unloading area that can accommodate storage of approximately 77,000 cubic yards of incoming materials⁶. Any contaminated or highly odorous loads will be immediately transported to the active landfill for disposal⁷. On-site water trucks will be used to add moisture during composting⁸. The composting process consists of 12 weeks of active composting followed by eight weeks of curing, resulting in a total of 20 weeks or five months⁹. Finished compost will be stockpiled on-site prior to being loaded out for delivery to end users¹⁰.

South Coast AQMD's Summary of the Air Quality Analysis

In the Air Quality Analysis Section, the Lead Agency quantified the Proposed Project's construction and operational emissions based on the maximum daily tonnage of 200 tpd of processed green material and

¹ MND. Page 5.

² MND. Section 2.3: Air Quality. Page 22.

³ Appendix C: *Air Quality and Greenhouse Gas Emissions Impact Analysis*. CalEEMod Annual Run, Section 1.2 Other Project Characteristics. PDF Page 44.

⁴ MND. Page 30.

⁵ *Ibid.*

⁶ *Ibid.* Page 8.

⁷ *Ibid.* Page 7.

⁸ *Ibid.* Page 8.

⁹ *Ibid.* Page 9.

¹⁰ *Ibid.*

compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project's regional and localized construction air quality impacts would be less than significant¹¹. The Lead Agency also found that the Proposed Project's operational air quality impacts would be less than significant, with a net new 3 pounds per day (lbs/day) of VOC emissions¹². The Lead Agency included in the MND discussions on applicable South Coast AQMD rules, including Rule 402 – Nuisance, Rule 403 – Fugitive Dust, and Rule 1133.3 – Emissions Reductions from Greenwaste Composting Operations¹³.

Summary of South Coast AQMD Staff's Comments

Based on a review of the MND and Appendix C: *Air Quality-Greenhouse Gas Emissions Impact Analysis*, South Coast AQMD staff has four comments on the air quality impact analysis. A summary of these comments is provided as follows with additional details provided in the attachment.

1. CEQA Baseline: The Lead Agency used a hypothetical baseline to quantify the Proposed Project's existing operational emissions in the MND. This likely underestimated the Proposed Project's net new operational emissions. South Coast AQMD staff recommends the Lead Agency provide additional information on how the existing operational emissions were calculated in the Final MND.
2. Operational Air Quality Impact Analysis: The Lead Agency used VOC emissions from the existing green waste decomposition to calculate the Proposed Project's net new operational VOC emissions. VOC emissions from the existing decomposition are collected and destroyed by the existing landfill gas collection and destruction equipment. On the other hand, the proposed open-air windrow composting operation will be emitting VOC fugitively. Therefore, it is not appropriate to calculate the Proposed Project's net new VOC emissions from the existing green waste decomposition. Together with the inconsistencies in the operational scenario, the Lead Agency likely underestimated the Proposed Project's net new operational emissions in the MND. South Coast AQMD staff recommends that the Lead Agency revise the operational air quality impact analysis in the Final MND.
3. Compliance with South Coast AQMD Rule 1133.3: The Lead Agency discussed South Coast AQMD Rule 1133.3 in the MND. South Coast AQMD staff recommends additional information on Rule 1133.3 requirements be provided in the Final MND to reduce fugitive emissions of VOC and ammonia.
4. Additional South Coast AQMD Permitting and Compliance Requirements: In addition to South Coast AQMD Rules 402, 403, and 1133.3, the Proposed Project will be subject to additional permitting requirements that should be discussed in the Final MND.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project.

¹¹ MND. Section 2.3 Air Quality. Pages 22 through 24.

¹² Appendix C: *Air Quality -Greenhouse Gas Emissions Impact Analysis*. Table L. Pages 28 through 29.

¹³ MND. Project Description. Page 8; Section 2.3 *Air Quality*. Pages 29 through 30.

John Arnau

February 6, 2019

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Assistant Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment
LS:AM/AS
ORC200110-02
Control Number

ATTACHMENT

1. CEQA Baseline

In Appendix C to the MND, the Lead Agency quantified the Proposed Project's net new operational emissions based on the maximum daily tonnage of 200 tpd for accepting processed green material, agricultural material, and manure. This maximum daily tonnage is a hypothetical condition because the Landfill is currently accepting 100 tpd of processed green material¹⁴. The capacity to accept 200 tpd of materials has not occurred at the time the MND was prepared and would occur after the Proposed Project is approved and becomes operational. Using a hypothetical condition as a CEQA baseline likely underestimated the Proposed Project's existing operational emissions, which were used to calculate the Proposed Project's net new operational emissions. Therefore, South Coast AQMD staff recommends that the Lead Agency recalculate the Proposed Project's existing operational emissions using the existing baseline that reflects what is occurring on-site at the Landfill, and not what might hypothetically occur, compare those emissions to the Proposed Project's new operational emissions, and use the net new operational emissions to determine the level of significance of the Proposed Project's air quality impacts in the Final MND. Alternatively, if the Lead Agency finds that using the maximum daily tonnage of 200 tpd as the existing condition baseline adequately provides the most accurate and understandable picture of the environmental setting for the Proposed Project, the Lead Agency should provide additional information in the Final MND as substantial evidence to support that using 100 tpd of process green material to quantify the Proposed Project's net new operational emissions would either be misleading or without informative value to decision-makers and the public (CEQA Guidelines Section 15125).

2. Operational Air Quality Impact Analysis*VOC Emissions from Green Waste Composting*

In Appendix C to the MND, the Lead Agency stated that operational “[e]missions from existing conditions and [the] proposed open windrow composting were calculated based on South Coast AQMD’s *Guidelines for Calculating Emissions form Greenwaste Composting and Co-Composting Operations* [...]”. The Lead Agency found that “[c]omposting and ADC use of green waste would be expected to have similar emissions rates, as shown in Table L¹⁵”. Table L shows that the proposed open windrow composting process will result in the same amount of VOC emissions at 934 lbs/day as the existing green waste decomposition and that the Proposed Project’s net new VOC emissions will be 3.6 lbs/day from mobile and off-road sources¹⁶. As a result, the Lead Agency found that operation of the Proposed Project would not exceed South Coast AQMD’s air quality CEQA operational significance threshold for VOC emissions at 55 lbs/day.

Processed green waste is currently used as ADC in the Prima Deshecha Landfill. As such, VOC emissions from the existing green waste decomposition may be collected and destructed by the existing landfill gas collection and destruction equipment¹⁷. On the other hand, the Proposed Project will be an open-air windrow composting operation, where VOC emissions will be emitted fugitively instead of being collected in the existing landfill gas collection system. South Coast AQMD staff found that the MND did not include information on how emissions from the existing green waste decomposition in Table L were calculated. Similar to Comment No. 1, since existing emissions were used as emission credits to calculate the Proposed Project’s net new operational emissions, the Lead Agency should provide additional information on how existing emissions are collected and destroyed by the existing landfill gas collection and destruction equipment, and additional information on how existing emissions, particularly from VOC in Table L, were calculated in the Final MND as substantial evidence to support

¹⁴ *Ibid.*

¹⁵ *Ibid.* Page 30.

¹⁶ *Ibid.*

¹⁷ *Ibid.* Pages 30 through 31.

the finding that the Proposed Project's operational air quality impacts based on net new operational emissions will be less than significant.

Inconsistencies

South Coast AQMD staff found the operational scenario in the MND is inconsistent with that in Appendix C. The inconsistencies have likely underestimated the Proposed Project's operational emissions. For example, in the MND, the Lead Agency stated that the Proposed Project would allow for a throughput of 204 tpd of processed green material to be composted¹⁸. However, in Appendix C, the Lead Agency quantified the Proposed Project's operational emissions based on a throughput of 200 tpd of progressed green material¹⁹. Additionally, in the MND, the Lead Agency stated that the Proposed Project would require 122,000 gallons of water per day during operation²⁰; whereas, in Appendix C and the CalEEMod output files, the Lead Agency quantified the Proposed Project's operational emissions based on 80,000 gallons of water per day²¹. South Coast AQMD staff recommends that the Lead Agency correct the inconsistencies in the Final MND and recalculate the Proposed Project's net new operational emissions based on one operational scenario consistent throughout the Final MND and technical appendices.

3. Compliance with South Coast AQMD Rule 1133.3

Since the Proposed Project includes green waste composting operations, the Proposed Project is subject to the requirements of South Coast AQMD Rule 1133.3²² to reduce fugitive emissions of VOC and ammonia, specifically as follows:

- Under Subparagraph (d)(2)(A), the Lead Agency should cover each active phase compost pile with a six-inch layer of (screened or unscreened) finished compost within 24 hours of initial pile formation and shall not turn the pile for the first seven days
- Under Subparagraph (d)(2)(B), the Lead Agency should water each active phase compost pile for the first 15 days after initial pile formation, within six hours before turning that the pile shall be wet at a depth of at least three inches. In Clause (i) under Subparagraph (d)(2)(B), being wet is determined by a squeeze ball test
- Under Subparagraph (d)(2)(B), if the pile needs to be turned within the first seven days for managing temperature or pathogen reduction pursuant to Title 14 Division 7, Chapter 3.1, Section 17868.3 of the California Code of Regulations, the operator does not need to re-apply the finished compost cover and shall apply water for the first fifteen days of the active phase
- It is important to note that the emission factors in Rule 1133.3 are used to calculate emissions from the active composting phase. Emissions from the curing phase of green waste composting operation should be included in the total emission calculations. For more information on the uncontrolled and controlled emission factors for the active phase and subsequent curing phase of green waste composting operations can be found here: <https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidecalcgreenwaste.pdf>.

4. Additional South Coast AQMD Permitting and Compliance Requirements

In addition to South Coast AQMD Rules 402, 403, and 1133.3, the Proposed Project will be subject to the requirements of the following South Coast AQMD Rules and Regulations, which should be discussed

¹⁸ MND. Page 4.

¹⁹ Appendix C: *Air Quality -Greenhouse Gas Emissions Impact Analysis*. "Existing Condition/ Open Windrow Composting" PDF page 42.

²⁰ MND. Section 1.6 Project Description. Page 10.

²¹ Appendix C: *Air Quality -Greenhouse Gas Emissions Impact Analysis*. Page 5; CalEEMod Capistrano Greenery – Summer Run "1.3 User entered Comments & Non-Default Data" PDF page 67.

²² South Coast AQMD. Rule 1133.3 – Emissions Reductions from Greenwaste Composting Operations. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1133-3.pdf>.

in the Final MND to demonstrate that the Proposed Project will comply with them. Information on each of the rules and regulation is available on the South Coast AQMD's website at: <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book>.

- Rule 201 – Permit to Construct
- Rule 203 – Permit to Operate
- Rule 401 – Visible Emissions
- Rule 1133 – Composting and Related Operations
- Rule 1150 – Excavation of Landfill Sites (for example, excavation work associated with preparation and/or construction of the Proposed Project may need a Rule 1150 Landfill Excavation Management Plan)
- Rule 1150.1 – (for example, a Compliance Plan Modification application would be required if modification to Rule 1150.1 monitoring and other requirements are expected due to the composting operations on the surface of the existing landfill)
- Regulation 13 – New Source Review
- Rule 1401 – New Source Review of Toxic Air Contaminants
- Regulation 30 – Title V Permits

The Proposed Project will be required to submit complete and timely permit applications to South Coast AQMD for the following equipment:

- Applications for Permit to Construct and Permit to Operate will be required for screeners used to screen finished compost.
- Applications for Permit to Construct and Permit to Operate will be required for engines powering the screeners, if the engines are rated above 50 brake horsepower (bhp) and are not used for locomotion of the screener.
- Applications for Permit to Construct and Permit to Operate will be required for engines powering the pumps at the pump station, if the engines are rated above 50 bhp.

South Coast AQMD's Engineering and Permitting staff should be consulted in advance to determine whether or not any additional permitting and compliance will need to be filed and approved by South Coast AQMD prior to start of the construction or operation of the Proposed Project. Any assumptions used in the Air Quality Analysis in the Final MND will be used as the basis for permit conditions and limits for the Proposed Project. Should there be any questions on permits, please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage at: <http://www.aqmd.gov/home/permits>.