



South Coast Air Quality Management District

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SENT VIA USPS AND E-MAIL:

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**Draft Environmental Impact Report (DEIR) for the Proposed Chiquita Canyon Landfill
Master Plan Revision - Project No. R2004-00559-(5); Conditional Use Permit No.
200400042; Environmental Assessment No. 200400039; and SCH No. 2005081071)**

The South Coast Air Quality Management District (SCAQMD) 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 Environmental Impact Report (Final EIR).

The proposed project includes different construction and operational elements at the existing Chiquita Canyon Class III Landfill located in unincorporated Los Angeles County near the City of Santa Clarita. Development will include a new entrance off of State Route 126; a lateral extension/expansion of the existing footprint by 143 acres (from 257 to 400 acres) and an increase in height by 133 feet (to a maximum elevation of 1,573 feet); development of a Household Hazardous Waste Facility (HHWF); continuation of a mixed-organics composting operation; and the relocation of an existing Southern California Edison (SCE) transmission line. The landfill will be open 24 hours per day but would close from 5:00 PM on Saturday to 4:00 AM on Monday. The HHWF will be open seven days per week 24-hours per day for processing, operations and maintenance, but is open seven days per week between 6:00 AM to 8:00 PM for delivery of material by the general public. The mixed-organics composting facility is currently permitted to receive up to 560 tons per day and will operate seven days per week, 24-hours daily. The total number of employees working at the facility each day would increase from 25 to 50 people total including administrative staff. The number of equipment operating at the site would also increase by 15 to 20 pieces per day from the existing number. Peak daily inbound and outbound traffic from transfer vehicles, collection trucks, other commercial hauler vehicles and the general public is estimated to increase by 594 vehicles. The construction of landfill cells will occur approximately every 18 months to five years over the life of the project beginning in 2016. The proposed project would also increase daily and weekly disposal tonnage from 6,000 to 12,000 tons per day and 30,000 to 60,000 tons per week with a 21-year life beginning in 2016 ending in 2037.

The SCAQMD staff has concerns about the assumptions used in the air quality analysis. These concerns include not documenting or analyzing wind patterns that affect offsite transport of

landfill odors that could result in potential complaints from nearby sensitive receptors, i.e., residents living near the project site. Next, the DEIR does not analyze how geotechnical activity could affect the landfill gas collection and control systems that could lead to odors and emissions escaping into the atmosphere. In addition, there are concerns about the air quality analysis including the control efficiency assumptions used to estimate operational emissions from the landfill gas collection system and long-term air quality impacts from surface emissions and flaring. Further, there are recommendations to re-analyze project impacts described in the attachment for daily CEQA impacts, modeling, and risk in order that nearby sensitive receptors are not adversely effected by potentially significant project impacts. Finally, recommendations are made by SCAQMD staff to mitigate potentially significant project impacts per CEQA Guidelines §15126.4. Further details are listed in the attachment.

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available 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) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,



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Control Number

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Chapter 11 – Air Quality

1. In 11.3.2 - Climate and Meteorology, and in 11.6.3, Impact AQ – 10, and 3.2.9 - Cumulative Impacts, the DEIR does not document or analyze wind patterns at the Chiquita Canyon Landfill (CCL), including wind direction, flow patterns, wind speed, time changes, funneling effects, seasonal changes, alternative conditions (e.g. Santa Ana) etc. This analysis is important for analyzing the potential for the offsite transport of odors and resulting odor complaints from nearby receptors. In Appendix H - Air Quality, the report states that, “sensitive receptors are generally located upwind of the landfill.” The terms “upwind” and “downwind” will depend on the time of day or night. If the current receptors are upwind at any time, the future receptors in the Landmark Village and Homestead Village areas will be downwind, and vice versa.

Interplaying with the sources of odors from the landfill, are the wind patterns, both regionally and locally. Generally, during the day, as the land heats up from the sun, the winds are from the ocean heading generally northward. At night as the land cools down, the winds are from the north, toward the ocean. Cool air in the mountain areas flows down the canyons in the nighttime. These general patterns (alternative patterns can be created by e.g. Santa Ana conditions) can have specific effects on landfill odor and their impact on complainants. For instance, at Sunshine Canyon Landfill (SCL) which is close to Chiquita Canyon, trash odors from the working face impact the community to the south of SCL mostly only in the early morning hours. Nighttime odors are almost exclusively from landfill gas.

Landfill odors that impact complainants mostly are either trash odors from the working face or landfill gas odors from gas escaping from the landfill surface. (Odors occasionally can come from leaking or mishandled leachate, or from greenwaste or compost if used or produced at the landfill.) Trash odors from the working face are usually detected in the daytime when the daily cover is peeled back, trash in the landfill exposed, and new trash is brought in and placed at the working face. Usually, trash odors from the working face mask landfill gas odors from gas escaping from the landfill surface. Gas escaping from the landfill surface may occur at anytime, and if the collection and control system is inadequate / undersized to collect and control landfill gas, then escaping landfill gas from the landfill surface will occur continuously. Nighttime landfill odors are usually landfill gas odors because disposal activities there have ceased and the working face has been covered for the night.

From January 1, 2014, through September 8, 2014, SCAQMD has received 146 complaints alleging odors from CCL as the source. Approximately 58 percent of those complaints were phoned in during SCAQMD off-hours or at night. Approximately half of the total 146 complaints received were resolved by phone and/or investigated the next SCAQMD business day. Of those complaints that were timely responded to and investigated by SCAQMD field inspection staff, no odors were actually verified with the complainant(s) at their location. However, it should be noted that SCAQMD field staff have detected landfill associated odors elsewhere in the adjacent community during approximately 20% of the complaint investigations.

Due to the nature of wind patterns in the area and the significant number of odor complaints received, a more detailed discussion and evaluation of the wind patterns and their affect on odor impacts from the proposed project on nearby residences is necessary and should be included in the Final EIR.

2. The DEIR's Geotechnical Investigation, Master Plan Revision, states that the "site may be developed as planned, provided our recommendations are incorporated in the design of the project", and that "requirements of the Los Angeles County Building Code are followed." The SCAQMD staff is concerned that the discussion lacks any analysis on ways that geotechnical activity, including above and underground landslides and other instability, can affect the landfill gas collection and control systems. Following the recommendations of the authors and Los Angeles County are important for ensuring the operation of the landfill collection and control systems and thereby preventing emissions, including odors, escaping to the atmosphere. The Lead Agency should include a discussion of how geotechnical activity could potentially impact air quality, including impacts on the landfill collection and control systems of the proposed project.
3. In 11.5.1.1, a statement is made that the landfill gas collection system achieves 85% efficiency (based on a Golder & Associates study cited in Appendix H). The Lead Agency did not include this study in the DEIR so the SCAQMD staff could not verify its accuracy or substantiate its findings. Due to the fact that the collection system efficiency has significant consequences on surface air quality emission impacts, and that the default collection efficiency factor based on state and federal regulatory guidance is 75%, The Lead Agency should revise this collection efficiency percentage from 85% to 75% in the Final EIR and recalculate all affected results.

According to the DEIR Section 11.6.3.2, the operational emission impacts are stated to be less than significant. This impact determination should be revisited if the quantified operational emission from surface landfill gas, due to the revised collection efficiency, changes the result such that the operational emissions exceed the significance thresholds.

Section 11.6.3.2 of the DEIR also states "Even though operational emissions from NO_x are above the mass daily emission threshold for 2032, this emission scenario represents maximum potential daily emissions, which were estimated using conservative assumptions and are not anticipated to occur every day of the year. Due to the flares' location in the middle of the site, a buffer would exist between the emission source and potential offsite receptors." This statement is confusing and does not adequately explain why operational regional NO_x emissions for 2032 (Table 11-9c) would not be expected to occur every day of the year given the continuous gas generation and operation of the landfill gas collection and control system and the nearly every day (312 days per year) land-filling activities. The SCAQMD staff recommends removing or revising this statement to better explain why the location of the flare to that of potential off-site receptors has any impact on regional emissions.

4. The Lead Agency estimates that additional waste trucks (272 more transfer vehicles and 300 more route collection trucks)¹ will be needed to support the proposed increase in permitted maximum daily waste disposal from 6,000 to 12,000 tons per day (also 30,000 to 60,000 tons per week). Although increased emissions from the increase in waste truck trips are included in the air quality analyses for localized and health impacts, those increased emissions were not included in the maximum daily regional operational emission estimate totals in the DEIR.² The Lead Agency states that these operational emissions are included in the existing conditions and therefore not calculated in the DEIR³ citing guidance from the SCAQMD CEQA Air Quality Handbook (SCAQMD Handbook). Although the reference in the SCAQMD Handbook is not clear to SCAQMD staff, the lead agency seems to have based its determination on a displaced truck trip argument or relocated/redirected emissions that is not supported by the SCAQMD staff CEQA Guidance.⁴ The Lead Agency's argument presumes that the increase in truck trips due to the proposed project would have occurred somewhere else in the region is incorrect and is not supported by the SCAQMD staff CEQA Guidance or the CEQA statute. The Lead Agency should quantify the emissions from the increase in off-site waste truck trips due to the proposed project and include them in the determination of significance for Impact AQ-5.

Appendix H - Air Quality

5. Appendix H.1 and H.2 of the DEIR report the landfill surface and flare emissions. The SCAQMD staff was unable to verify and reproduce the results. Future flare emissions were estimated using a previous source test on existing flares at the project site. However, the source test used was conducted with the flares operating at approximately 50% of its capacity (Appendix H). As a result, the estimated flare emissions may be significantly underestimated. One way to address this issue is to base the flare emissions on pounds per standard cubic feet (lbs/scf) of landfill gas instead of using the direct emission rate in lbs/hr directly from the source test results.

In addition to the flare source test emission result issue discussed above, the flare modeling input parameters for diameter, temperature, and velocity (as per stated on page 2 of 3 of Appendix H2) are not consistent with the information SCAQMD staff has on file for the proposed new flares. According to page 2 of 3 Appendix H2 the input parameters used were: exhaust temperature of 1,720 F; stack diameter of 11.3 feet; and exhaust velocity of 12.5 fps. However, as stated earlier in the DEIR, proposed new flares are identical to the existing flares. Based on SCAQMD records and source test results for the existing flares, the input parameters used should be more consistent with the following flare parameters: exhaust temperature of 1,596.4 F; stack diameter of 12 feet; and exhaust velocity of 15.6 fps.

Because, the dispersion modeling results and summary of impacts indicate no exceedances of criteria pollutant (except PM10/2.5) and risk thresholds (see Sections 11.6.3.2, 11.9.2, and

¹ Table 2-4 (Summary of Net Change in Peak Potential Daily Inbound and Outbound Traffic with Proposed Project), Page 2-20.

² Footnote in Tables 11-9a, 11-9b, and 11-9c - 2016, 2021 and 2032 Proposed Project Operation Emissions.

³ Section 11.0 Air Quality Section, Page 11-23, Pages 11-23 to 11-24,

⁴ SCAQMD CEQA Air Quality Handbook (Handbook), Page 9-8

11.9.3), it is recommended that all assumptions and calculations be reviewed and revised as needed. The revised emissions should be re-analyzed for daily CEQA impacts, modeling, and risk.

6. In Appendix H.1.5, the DEIR references the Bay Area Air Quality Management District (BAAQMD) Air Quality Guidelines (2012) as the mechanism for qualitatively evaluating the significance of possible odor impacts on nearby sensitive receptors. In evaluating the BAAQMD's Step 1 - Disclosure of Odor Parameters, the DEIR does not adequately address the:
 - frequency of odor events generated by the odor source (e.g. operating hours, seasonality). Essentially, a landfill generates odors all the days trash is delivered to the working face, and potentially every day and night if the gas collection and control system is not optimally functioning. Also not discussed is that the landfill permitted tonnage will double and, the acreage will increase almost 150 acres and the surface of the landfill will rise, all of which can cause odor emissions to increase or have more impact;
 - distance and landscape between the odor source and receptors. The distances and topography, wind currents, etc. as they will affect odor emission and affect the Landmark and Homestead Village developments is not discussed; and
 - predominant wind directions and speed and upwind downwind location of receptors.
7. While CCL has not been cited for any nuisance violations since 2006, the project proposes to double the permitted tonnage, increase the surface area of the landfill by 150 acres, and raise the level/elevation of the landfill. Significant development of residences and presumably some schools are anticipated to be built to the south of the facility, such that southward air drainage from cool air at night and from northerly daytime wind patterns could carry trash and landfill gas odors into these new communities and schools. With this scenario in mind, SCAQMD recommends that the Lead Agency establish increments of progress in terms of throughput tonnage such that each increment is granted only if CCL demonstrates that air quality impacts principally in the form of odor impacts are not a burden to the community. The SCAQMD staff notes that this approach was successfully applied to a project involving the Athens Services Transfer Station in the City of Industry.

Localized and Health Risk Affect Modeling Analyses

8. The DEIR and Appendix H do not contain enough information for SCAQMD staff to determine how the emissions were calculated for each source modeled in AERMOD (for both LST and HRA). The Lead Agency needs to provide more detailed information in the Final EIR, such as sample calculations showing how the project's impacts were estimated, and sample calculations showing how the emissions from CalEEMOD and/or EMFAC were used to determine the emission rates of the sources modeled. Without these details, it is not possible to review the Air Quality impacts stated in the DEIR for accuracy.

9. The dispersion model and risk summary results listed in Section 11 (Tables 11-7a, 11-7b, 11-8a, 11-8b, and 11-10a to 11-10c) do not match the AERMOD output files provided electronically to SCAQMD. For example, the operational PM10 annual impacts are listed in Table 11-10b as 0.5 mg/m^3 , while the AERMOD output shows the project maximum as 2.76 mg/m^3 . For comparison, SCAQMD's significance threshold for operations is 1.0 mg/m^3 . The Lead Agency needs to ensure that the modeled impacts shown in the Final EIR match the AERMOD output file concentrations and if any additional factors are applied, they need to be explained in detail and sample calculations should be provided.
10. The proposed project is scheduled to begin construction in 2014 and the DEIR states that cell construction would occur every 18 months to 5 years, based on need. Appendix H, Section H.1.1 of the DEIR states that 2021 was identified as the year which would have the highest emissions from both construction and operation. However, in the DEIR, the project's emissions from either construction or operation were analyzed separately and compared individually to the SCAQMD's respective construction and operation thresholds. Since this project involves a long-term construction period and the construction and operational phases will overlap, the SCAQMD staff therefore recommends that the lead agency determine the worst-case construction and operational daily air quality impact scenario; total the construction and operational emission estimates together; and then compare those totals with the SCAQMD operational daily significance thresholds in the Final EIR. The reasoning is that the proposed 18-year construction period (from 2014 till 2032) is a long period of time making the project 'construction' emissions more similar to an operational profile. Therefore, the use of the more conservative operational daily significance thresholds approach would be more conservative than separating the emissions and comparing the short- and long-term estimates to the respective SCAQMD recommended daily significance thresholds.
11. Similarly, the health risk assessment (HRA) for the project should also analyze emissions from both construction and operation together, since they are anticipated to occur concurrently for the duration of project. The DEIR used a 9-year exposure duration for construction. However, given that the construction period is actually 16 years long, the 9-year exposure duration is not conservative. The Final EIR should analyze the health risks from both construction and operation of the project together and use an exposure duration that lasts for either 70 years or for the life of the project.
12. Some of the receptors were placed within the volume source exclusion zone and their results would be invalid. It is recommended that the LST analysis be updated so that no receptors are placed within the volume source exclusion zone either by modeling the roadway as an area source or the volume sources be reduced in size.

SCAQMD Rule 1193 – Clean On-Road Refuse Collection Vehicles

13. The DEIR Section 11.4.3.2 fails to mention compliance with SCAQMD Rule 1193 - Clean On-Road Residential and Commercial Refuse Collection Vehicles. SCAQMD Rule 1193 applies to public and private solid waste collection fleet operators that operating fleets with 15 or more solid waste collection vehicles. The rule requires public fleets, and private fleet

operators who provide solid waste collection services to governmental agencies, to use alternative-fuel refuse collection and transfer vehicles when procuring or leasing these vehicles in the South Coast Air Quality Management District. The Lead Agency should discuss the applicability and compliance status of the waste trucks used in the proposed project.

Operation Mitigation Measures

14. Should the Lead Agency's revised analysis determine that the proposed project will generate significant operational air quality impacts for NO_x from on-road mobile sources, beyond the emissions from the on-site flare operations, the SCAQMD staff recommends the following measures in addition to the measures listed on page 11-20 of the DEIR to further reduce significant air quality impacts:
- The Lead Agency needs to consider additional mitigation to reduce the impacts from trucks that utilize the facility that are not subject to SCAQMD Rule 1193. One potential mitigation measures could include requiring a certain percentage of heavy duty diesel waste trucks that regularly use the facility to be 2010 and newer diesel trucks and if the Lead Agency determines that 2010 model year or newer diesel trucks cannot be obtained the Lead Agency shall use trucks that meet EPA 2007 model year NO_x emissions requirements.
 - Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1 (recommend sweepers using reclaimed water);
 - Design the site such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside of the facility; and
 - Have truck routes clearly marked with trailblazer signs so trucks will stay on truck routes established by the lead agency and not enter residential areas.