



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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September 20, 2023

IN REPLY PLEASE

REFER TO FILE: **EP-5**

Mr. Steve Cassulo
District Manager
Chiquita Canyon, LLC
29201 Henry Mayo Drive
Castaic, CA 91384

**CHIQUITA CANYON LANDFILL
CONDITIONAL USE PERMIT NO. 2004-00042-(5)
PUBLIC WORKS' COMMENTS ON CHIQUITA CANYON LANDFILL'S AUGUST 18,
2023, REPORT ON CONDITION 69**

Dear Mr. Cassulo:

Public Works reviewed Chiquita Canyon Landfill's August 18, 2023, response (Enclosure 1) to Public Works' August 3, 2023, comments on Chiquita Canyon Landfill's initial Condition 69 Report and we have the following comments:

- The report included a preliminary root cause analysis submitted by the Chiquita Canyon Landfill (CCL) to South Coast Air Quality Management District (SCAQMD) to determine the underlying cause of total sulfur concentration exceedances. This enclosure mentioned a breakdown of the lab analysis of landfill gas (LFG) samples from CCL, which was submitted by SCS Engineers, CCL's consultant, to SCAQMD on February 9, 2023. Please provide a copy of the February 9, 2023, breakdown report, for our reference.
- The enclosed preliminary root cause analysis includes an LFG Treatment System Outlet table showing the concentrations of Hydrogen Sulfide and Dimethyl Sulfide (DMS) in the LFG after treatment. Please provide additional information on the frequency of sample testing that was done and the individual sample results for the wells where the Hydrogen Sulfide and DMS were sampled and tested.
- The enclosed preliminary root cause analysis also includes range maps for flow, methane quality, and methane-to-carbon dioxide ratios from October 2022 to January 2023. Please provide a written explanation interpreting the results shown

on the range maps. Please also show and label the disposal cell boundaries associated with the location of the sample wells, ports, and probes.

- The enclosed preliminary root cause analysis includes the operating permit for the portable thermal oxidizer (TOX). While the permit indicates the emission limits, it does not mention the reduced sulfur compound emissions. It will be helpful for the source testing of the TOX to also test for the reduced sulfur compound emissions, such as hydrogen sulfide and DMS, in order to determine if the TOX is effectively removing the DMS or if the pre-flare carbon adsorption system can be modified to effectively remove DMS.
- The report states that, under a variance by the SCAQMD, CCL tested a LFG treatment option that was meant to remove DMS from LFG but was not successful in removing DMS. The report also states that CCL will be reapplying for a modification to the landfill gas (LFG) treatment system as well as a second new permit which would allow CCL to conduct slipstream pilot tests to evaluate alternative sulfur removal options and DMS treatment systems. Please provide detailed information on these treatment options, including how this newly proposed modification to the LFG treatment system is different from the first treatment option tested that was not successful in removing DMS, and how these treatment options intend to remove or treat DMS.
- The report indicates that a building permit required for the flare construction which CCL applied for in September 2022 was issued on August 14, 2023. Please note that Public Works has cleared the foundation plans, but is currently waiting for approvals from SCAQMD and Environmental Protection Agency (EPA) prior to issuing the building permit.
- The report indicates the reaction results in the production of excess liquids, and that removing these liquids would both remove the heat from the reaction to help slow it down and limit the impact of liquid on the LFG collection. Please provide a monthly progress report, with verifiable data along with a baseline, demonstrating that the landfill is making positive progress on its liquids management capability that would help to prevent impact on its LFG collection system and prevent the spreading of the chemical reaction. Please submit the monthly reports by the end of each month.
- The report estimates that the reaction area is contributing an additional 15% LFG generation. Please elaborate on how the 15% LFG generation was estimated, including all assumptions made. It is important to understand how this estimate

was made in order to assess the Landfill's ability to collect the current and future landfill gas generation. In addition, please provide a monthly report on the actual LFG generation flow vs actual flaring capacity. Please submit reports by the end of each month.

- The report details that the Landfill currently generates approximately 15,400 standard cubic feet per minute (scfm) of LFG and that the Landfill currently only has a flaring capacity of 9,600 scfm from the two existing flares (2 x 4,000 scfm each) and one portable thermal oxidizer (1,600 scfm). While we understand the Landfill is currently pursuing a permit for two new 6,000 scfm flares, the landfill is still deficient in its current flaring capacity. As such, please elaborate on the Landfill's interim effort to bridge the gap in its flaring capacity while waiting for these flare permits.
- The report indicates that CCL is implementing new measures, such as designing and installing a geosynthetic cover over approximately thirty (30) acres of the Landfill, including the reaction area, to limit the migration of LFG from the site. Similar to Public Works' previous approval of a similar geosynthetic cover in December 2020, please provide additional information detailing the following items regarding the geosynthetic cover:
 - Type of Material used.
 - Material placement, duration, location, storage, other non-geosynthetic material that may be used, and peel-back protocols.
 - Performance tracking for resistance to tears, punctures, fires, vectors, scavenging animals, windblow litter, and odor control.
- CCL should provide a monthly progress report detailing how the landfill implemented the information provided in its August 18, 2023, letters, and how it addressed and implemented requirements from various regulatory agencies, including the Departments of Public Health, Public Works, Regional Planning, and South Coast Air Quality Management District. Please also include in your monthly report the following items:
 - An up-to-date map showing the size of the reaction area reflecting the containment (or spreading) status of the impacted area
 - An up-to-date topographic map showing the size of the localized settlement in the impacted area

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- Up-to-date raw well data for the entire landfill, including all gas wells within the impacted area and those that are outside of the impacted area (similar to the information that you provided to Public Works on August 25, 2023).
- A data-driven analysis showing progress made to mitigate the current root cause of DMS at the impacted area, especially for the following:
 - Lowering of FLG wellhead temperature
 - Higher gas quality (high CH₄: CO₂ ratio)
 - Reduction in localized settlement
 - Lowering of pressurized liquids
 - Lowering of DMS concentration
- Lastly, to assess the health concerns of the community impacted by this odor incident, the Department of Public Health requests that Chiquita Canyon Landfill, provide expanded community air monitoring and sampling data upon receipt of the laboratory analysis report, including any data being collected and assessed by CTEH as part of this odor incident immediately upon availability of the requested raw data.

Please submit a written response to the above-listed items within 15 calendar days from the date of this letter and the monthly report on every 30th of the month.

If you have any questions, please contact me at (626) 458-3500 or ethomp@dpw.lacounty.gov or Mr. David Nguyen at (626) 458-5189 or dnguyen@dpw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works



Genevieve Osmena for Emiko Thompson
Assistant Deputy Director
Environmental Programs Division

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Enc.

cc: Department of Regional Planning (Alex Garcia, Edgar De La Torre,
Ai-Viet Huynh)
Local Enforcement Agencies (Dorcas Hanson Lugo, Karen Gork)
South Coast Air Quality Management District (Jason Aspell, Terrence Mann, Victor
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Department of Public Health (Liza Frias, Nichole Quick, Charlene
Contreras, Raul Sobero)
Los Angeles Regional Water Quality Control Board (Wen Yang,
Douglas Cross)
Each Member of the Los Angeles County Solid Waste
Management Committee Integrated Waste Management Task
Force