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BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT,

Petitioner,

vs.

CHIQUITA CANYON, LLC a Delaware
Corporation,
[Facility ID No. 119219]

Respondent.

Case No. 6177-4

**DECLARATION OF PATRICK
SULLIVAN, BCES, CPP, REPA**

Health and Safety Code § 41700, and
District Rules 402, 431.1, 3002, 203, 1150

Hearing Date: April 16 and 17, 2025

Hearing Time: 9:30 A.M.

Place: Hearing Board
South Coast Air Quality
Management District,
21865 Copley Drive
Diamond Bar, CA 91765

I, Patrick Sullivan, declare as follows:

1. I am of sufficient age and am competent to testify in this proceeding. I make this declaration based upon personal knowledge and am competent to testify to the facts set forth herein.

Background and Experience

2. As discussed in detail in my prior declarations in Case No. 6177-4, I serve as an air quality and landfill gas specialist and Senior Vice President with SCS Engineers, Inc. ("SCS"). I have 35 years of experience in the area of environmental consulting, specializing in solid waste management. My company, SCS, has been contracted by Chiquita Canyon, LLC ("Chiquita") to operate and maintain the landfill gas collection and control system at the Chiquita Canyon Landfill (the "Landfill"). I have been working on Chiquita's landfill gas collection and control system and related compliance activities for over twenty years.

3. I serve on the Reaction Committee as the subject matter expert for the landfill gas collection and control system and air quality compliance.

4. This declaration is made for the status and modification hearing being held on April 16 and 17, 2025 on the Stipulated Order for Abatement in Case No. 6177-4 with the South Coast Air

Quality Management District (“South Coast AQMD”), most recently modified on November 13, 2024 (“Modified Stipulated Order”).

Compliance with the November Modified Stipulated Order

5. The Modified Stipulated Order contains 92 conditions, many with multiple subparts, requiring Chiquita to take a wide range of actions designed to slow and stop the landfill reaction, and mitigate any impacts.

6. The chart attached hereto as **Attachment 1** lists conditions that I have been involved with at Chiquita, their requirements, and the current status of compliance.

7. In accordance with **Condition 83**, on March 31, 2025, SCS submitted a report on Chiquita’s behalf on specific landfill operational events and potential air emission impacts to the surrounding community. The report concluded that there did not appear to be any correlation between leachate spills and potential air impacts, and that there were minimal or no potential air impacts associated with landfill excavation events. However, there did appear to be a correlation between downtime or decreased operation of the landfill gas collection and control equipment and potential air emission impacts. The report recommends extending the study by an additional six months and adjusting the scope of the further study to focus on larger leachate seep events and downtime or decreased operation of the landfill gas collection and control equipment. A true and correct copy of the report is attached hereto as **Exhibit A**.

8. On March 3, 2025, the Reaction Committee submitted a determination on the need for Chiquita to bring a second portable thermal oxidizer (“TOX”) unit back onsite pursuant to **Condition 22**. A true and correct copy of the determination is attached hereto as **Exhibit B**. In February 2024, the Reaction Committee concluded that the prior Envent TOX was no longer needed because the Landfill had sufficient landfill gas control capacity from the addition of Flare 3 and the Zeeco TOX could process the reaction area gas. The Committee believed that the flare station could act as backup capacity for the Zeeco TOX and process the reaction area gas when the Zeeco TOX was offline. However, since then, Chiquita has installed an extensive network of piping on the leachate tanks to remove leachate vapors from the tanks. These leachate vapors are now processed at the flare station. When the Zeeco

TOX is offline, the flare station has to process both the leachate vapors and the reaction area gas, which both have low methane content. This has caused operational challenges for the flare station. This means that the flare station is no longer able to act as a reliable backup for the Zeeco TOX. For this reason, the Reaction Committee recommended that a second TOX unit be brought back onsite to act as backup for the Zeeco TOX.

9. In accordance with this March 3 recommendation, Chiquita sought out and brought onsite a new TOX unit. This new TOX unit is now installed and in operation.

10. As required by **Condition 12(i)**, the Reaction Committee conducted another flux chamber study on November 19-21, 2024, and submitted a report summarizing the study and comparing the results of this study to the prior flux chamber studies on January 15, 2025. A true and correct copy of the report is attached hereto as **Exhibit C**. The table below summarizes the results of the site-wide emission rates for compounds tested in the November 2024 flux chamber study in comparison with the prior two studies, conducted in August 2023 and March 2024.

Compound	Units	Event		
		1 (8/23)	2 (3/24)	3 (11/24)
Methane	tons/yr	3,357	11,456	4,512
Carbon dioxide	tons/yr	41,312	327,049	216,177
Total VOC	tons/yr	207	853	61
Ethanol	tons/yr	18.3	NQ	0.42
Acetone	tons/yr	17.6	51	1.30
Tetrahydrofuran	tons/yr	13.6	107	0.06
Benzene	tons/yr	9.33	104	0.27
Methanol	tons/yr	9.09	NQ	0.51
Methyl ethyl ketone (MEK)	tons/yr	9.06	51.2	0.24
Propylene	tons/yr	6.62	29.8	0.69
Isopropyl alcohol (IPA)	tons/yr	3.72	15.2	0.18
Isopropyl toluene	tons/yr	3.25	13.7	0.25
Toluene	tons/yr	2.00	18.6	0.22
Ethylbenzene	tons/yr	1.14	10.1	0.16
Total Xylenes	tons/yr	1.52	9.79	0.30
Hydrogen sulfide	tons/yr	0.13	3.81	0.72
Dimethyl sulfide	tons/yr	15.2	57.9	0.93
Note: NQ = Not Quantified				

This table shows a trending decrease in emissions from August 2023 to November 2024, and especially from March to November 2024, for almost every compound measured. This downward trend is likely attributable to Chiquita's improvements in gas recovery and cover systems, including the installation of

the geosynthetic cover, which was completed on December 27, 2024. Notably, the lab results from the latest flux study event in November 2024 were close to or below the detection limits for most of the compounds tested, meaning that those compounds have been reduced to minimal levels in many locations.

11. The areas of the reaction area covered by the geosynthetic cover release significantly less emissions than uncovered areas. This results in potential overestimates of surface emissions when data from these covered and uncovered areas are combined to estimate emissions from the reaction area as a whole. To better account for the impact of the geosynthetic cover on surface emissions across the Landfill and to remedy this issue, the next flux chamber study will analyze emissions from the covered areas of the reaction area separately from the uncovered areas. A revised protocol for this study reflecting this change was submitted to South Coast AQMD on December 30, 2024. The next study was conducted during the week of March 17, 2025, and the report documenting the results of this study and comparing this study to past studies will be submitted to South Coast AQMD in May.

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1 I declare under penalty of perjury under the laws of the State of California that the foregoing is true and
2 correct to my personal knowledge.

3 Executed on this 9th day of April 2025, in Carmichael, California.

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A handwritten signature in black ink, reading "Patrick J. Sullivan". The signature is written in a cursive, flowing style. The first name "Patrick" is followed by a middle initial "J." and the last name "Sullivan".

Patrick Sullivan
Senior Vice President
SCS Engineers

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**ATTACHMENT 1 TO DECLARATION
OF PATRICK SULLIVAN, BCES, CPP,
REPA**

Health and Safety Code § 41700, and
District Rules 402, 431.1, 3002, 203, 1150

Hearing Date: April 16 and 17, 2025

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STIPULATED ORDER COMPLIANCE CHART

Condition No.	Summary of Requirement(s)	Status
3	Expedite the replacement of granular activated carbon media in the Landfill Gas Treatment System.	Compliance ongoing.
3	Ensure adequate stock of all odor control products and supplies are maintained on site.	Compliance ongoing.
3(a)	Monitor and record landfill gas temperature at least daily at the inlet of the Landfill Gas Treatment System.	Compliance ongoing.
4	Maximize landfill gas combustion and prioritize and maximize the use and operation of Flares 3 and 4	Compliance ongoing since November 15, 2023 when Flare 3 was put into operation.

Condition No.	Summary of Requirement(s)	Status
	over Flares 1 and 2, and Flare 2 over Flare 1.	
5	Sample, analyze, and record the landfill gas sulfur compounds combusted in any landfill gas control equipment operating on site daily and weekly based on analytical method.	Compliance ongoing; see Section W of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website (https://chiquitacanyon.com/odor-mitigation/).
5	Sample, analyze, and record monthly the landfill gas sulfur compounds and speciated organic compounds found in the raw, pre-treatment and pre-control, landfill gas collected from the Reaction Area.	Compliance ongoing; see Section W of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
6	Maintain an adequate stock of appropriately ranged colorimetric tubes.	Compliance ongoing.
7	Maintain records of landfill gas flow combusted, landfill gas flow not flared, and sulfur sampling analysis, results, and readings.	Compliance ongoing; see Section B of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
8	Submit monthly written reports containing information on landfill gas and leachate temperature, composition, and flow/quantity; leachate seepage; surface emissions monitoring; treatment of landfill gas and leachate; the landfill gas collection and control system; the leachate collection and management system; leachate disposal;	Compliance ongoing; most recently submitted on August 21, 2024, September 20, 2024, October 21, 2024, November 20, 2024, December 20, 2024, January 21, 2025, February 20, 2025 and March 20, 2025. True and correct copies of these reports are attached hereto as Exhibits D through K and posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
	landfill and geosynthetic cover; and excavation.	
9	Collect integrated landfill surface samples for analysis across the Reaction Area at least three times per month and across the remainder of the landfill at least four times per quarter.	Compliance ongoing; see Section C of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
10	Conduct instantaneous landfill surface monitoring across the Reaction Area at least three times per month and across the remainder of the landfill at least four times per quarter.	Compliance ongoing; see Section C of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
11	Continue operating the flares and landfill gas treatment system even if the emitted landfill gas exceeds Chiquita's limits on total reduced sulfur and sulfur oxides.	Compliance ongoing.
11	Submit deviation reporting associated with sulfur exceedances.	Compliance ongoing.
12(g)(i)	Submit expert report on known and possible methods for effective treatment of dimethyl sulfide ("DMS") and preventative mechanisms for DMS formation in landfill gas.	Completed; submitted on April 30, 2024 and posted on Chiquita's Odor Mitigation website.
12(g)(iii)	Submit expert report on the feasibility and availability of a continuous community emission monitoring system for DMS.	Completed; submitted report on December 1, 2023; Reaction Committee submitted recommendation on December 31, 2023. Both the report and the recommendation are posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
12(i)	Submit a report documenting the findings of the initial flux chamber study conducted pursuant to the direction of the Los Angeles County Department of Public Health (“DPH”).	Completed; submitted on October 31, 2023 and posted on Chiquita’s Odor Mitigation website.
12(i)	Prepare testing protocols, provide notices of test dates, conduct studies, and submit reports for an additional and ongoing (once every four months) flux chamber studies for methane, non-methane organic compounds (“NMOC”), toxic air contaminants (“TAC”), total reduced sulfur (“TRS”), and speciated sulfur compounds.	Compliance ongoing; protocols most recently submitted on December 29, 2023 and December 30, 2024; reports most recently submitted on June 3, 2024 and January 15, 2025. A true and correct copy of the January 2025 report is attached hereto as Exhibit C and posted on Chiquita’s Odor Mitigation website.
14	Monitor each landfill gas collection system well at least monthly for at least temperature pursuant to 40 CFR Part 63 Subpart AAAA and address wells with a temperature reading of at least 170 degrees Fahrenheit or greater.	Compliance ongoing.
14(a)	Ensure the operation of the landfill gas collection system equipment does not result in the release of raw landfill gas or condensate into the atmosphere.	Compliance ongoing.
14(b)	Report any breakdown or malfunction of the landfill gas collection system resulting in the emission of	Compliance ongoing.

Condition No.	Summary of Requirement(s)	Status
	raw landfill gas and undertake immediate remedial measures.	
15(k)	Operate gas extraction wells with less than 3 percent oxygen where feasible, and follow landfill best management practices to keep the oxygen below 5 percent in interior wells.	Once additional/adequate gas extraction capacity is installed.
16	Submit a permit modification application for the Landfill Gas Collection System to increase the number of permitted wells in the wellfield.	Completed; submitted by October 6, 2023.
19	Submit a permit modification application to the Landfill Gas Condensate and Leachate Collection/Storage System to increase the landfill's liquid storage capacity.	Completed; submitted on October 4, 2023.
20	Increase landfill gas control capacity and install and begin operating Flare 3.	Compliance ongoing; Flare 3 was installed and in operation by November 15, 2023; notification submitted by November 17, 2023.
21	Submit a permit application for the new construction of Flare 4 to increase the landfill gas control capacity.	Completed; submitted on October 30, 2023.
22	Continue to use one or multiple portable thermal oxidizers that operate under a permit or temporary permit to operate until the Reaction Committee concludes they are no longer needed.	Compliance ongoing; notification re Envent TOX submitted on February 15, 2024; determination re additional TOX submitted on March 3, 2025. A true and correct copy of the March 2025 determination is attached hereto as Exhibit B and posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
23	Continue to use one or both of Flares 1 and 2 when the Reaction Committee determines that such use is necessary due to insufficient flaring capacity or other such necessity-based situations, until Flare 5 is permitted and operational.	Compliance ongoing.
33	Follow DPH's direction to expand and enhance Chiquita's community air monitoring program and submit reports submitted to DPH under this program to South Coast AQMD.	Compliance ongoing; reports are posted on Chiquita's Odor Mitigation website.
34	Provide South Coast AQMD with access to all real-time continuous monitoring data and post certain weekly concentration data on Chiquita's website; make weekly data collected available upon request; in the event of downtime, provide indicators on Chiquita's website.	Compliance ongoing; see Chiquita's Community Air Monitoring Program website (https://chiquitacanyon.com/reports/community-air-monitoring-program/).
35	Provide all Standard Operating Procedures ("SOP") and any other Quality Control and Quality Assurance ("QA/QC") documents describing the operation and maintenance of all instruments used at the air monitoring stations.	Completed; submitted by January 19, 2024; see updates, calibration log, and maintenance activities in Section S of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
35(a)	Provide South Coast AQMD with the same access that	Compliance ongoing.

Condition No.	Summary of Requirement(s)	Status
	Chiquita has to on-site and off-site monitoring equipment.	
35(b)	Implement quality control measures as specified by South Coast AQMD to ensure the accuracy of the monitoring network within 30 days of notification.	Compliance ongoing.
36, 36(a)	Install and maintain instrumentation within the nearby community capable of measuring hourly concentrations of certain pollutants above a given threshold; develop a monitoring plan and provide installation updates to South Coast AQMD; and make data available on Chiquita's website.	Compliance ongoing; installation completed by May 1, 2024; monitoring plan completed on April 29, 2024; see Chiquita's Community Air Monitoring Program website.
36(b)	Until the MicroGCs are installed, increase the number of 24-hour time integrated canister samples for volatile organic compounds at the offsite stations to three times per week.	Completed.
36(c)	Make the MicroGCs installed pursuant to Condition 36 capable of measuring hourly concentrations of acrolein.	In progress.
41	Submit an application for a Rule 1150 Landfill Excavation Plan.	Completed; submitted on January 30, 2024.

Condition No.	Summary of Requirement(s)	Status
42	Pending approval of Rule 1150 Landfill Excavation Plan, comply with the enumerated list of requirements for all Rule 1150(a)(5) excavation.	Compliance ongoing.
44	Obtain, install, and maintain an on-site landfill meteorological station to measure wind speed and direction. Record and preserve all available readings for 3 years and make available to the South Coast AQMD upon request.	Compliance ongoing; installation completed by October 31, 2023.
52	Reserve 60 minutes biweekly to host a virtual meeting between South Coast AQMD technical staff and Chiquita / Chiquita's technical consultants.	Compliance ongoing.
54	Collect, convey, and store any condensate collected after the sulfur treatment carbon absorbers separately from landfill leachate.	Compliance ongoing.
55	Immediately cease injection of landfill gas condensate into the landfill gas control flares, unless the condensate injection is initially performed for the purposes of a source test required under this condition.	Compliance ongoing.
56	Conduct sampling and analysis of vapors in the headspace of leachate tanks located in the Top Deck	Completed; sampling conducted by April 4, 2024; report submitted on April 18, 2024; revised on April 24, 2024. The reports are posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
	Tank Farm (Tank Farm #9) and submit a report on the parameters and results.	
57	Submit a permit modification application to increase the landfill's liquid storage capacity.	Completed; submitted by April 22, 2024.
58	Submit a permit application for the operation of the thermal oxidizer.	Completed; submitted by June 21, 2024.
59	Submit a permit application for treating hazardous liquid waste.	Completed; submitted by June 21, 2024.
60	Submit a permit modification application to include the tie-in of vapor vent lines to the Landfill Gas Collection System.	Completed; submitted by April 22, 2024.
61, 62	Submit permit modification applications to include the combustion of vapor vented from the hazardous liquid tanks.	Completed; submitted by May 21, 2024.
69	Conduct quarterly inspections and monitoring of the landfill's piping and any associated piping components. Maintain records of this monitoring activity.	Compliance ongoing; most recently completed by January 19, 2025.
69	By July 31, 2025, submit a recommendation to modify the frequency of such.	Following four completed quarterly inspections.
70	Submit an expert report on the landfill's current and projected landfill gas	Completed; submitted on June 28, 2024 and posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
	generation through the end of calendar year 2029.	
70(a)	Submit a permit application for the new construction of Flare 5, and modifications of Flares 1 through 4, to the extent necessary.	Completed; submitted by October 31, 2024.
71	Submit a permit application for the installation and operation of any above ground surface landfill gas collection system, or underground landfill gas collection system.	Completed; submitted by May 21, 2024.
72(a)	At least quarterly, sample and analyze the vapor flow in the piping used to vent the liquid storage tanks and route the vapors to the landfill gas control system.	Compliance ongoing; see Section V of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
72(b)	Submit a source test protocol for this testing.	Completed; submitted by May 17, 2024; revised on July 12, 2024.
72(b)	Conduct testing within 45 days of receiving approval of the source test protocol.	Completed; testing completed by October 17, 2024; subsequent testing completed in March 2025.
72(b)	Submit the final results in a source test report format within 30 days of testing.	Completed; submitted by November 15, 2024. A true and correct copy of the report is attached hereto as Exhibit L and posted on Chiquita's Odor Mitigation website.
72(c)	Within 30 days of submission of the source test report, submit a recommendation from the Reaction Committee on additional vapor flow testing.	Completed; submitted by December 13, 2024. A true and correct copy of the report is attached hereto as Exhibit M and posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
72(e)	Install flow meters within the HDPE piping headers for associated leachate tank farms and submit daily flow rate.	Compliance ongoing; installed by July 19, 2024; see Section V of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
73	Submit an inventory of all internal combustion engine equipment rated greater than 50 horsepower, a permit application for all such equipment not already permitted as of June 30, 2024, and permits for such equipment brought onsite on an ongoing basis.	Compliance ongoing; submitted inventory on May 21, 2024 and posted on Chiquita's Odor Mitigation website; submitted initial permit application on June 30, 2024.
74	Expedite the procurement of the equipment needed to construct Flare 4 and provide updates.	Compliance ongoing; see Section X of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.
76	Install sample ports on all equipment on site that requires sampling and collect samples from the sampling ports thereafter.	Compliance ongoing; initially installed by December 2, 2024.
79	Submit any submittal requiring South Coast AQMD review and approval with expedited processing/review requested.	Compliance ongoing.
80, 80(a)	Whenever South Coast AQMD permitted Various Location equipment or CARB Statewide Portable Equipment Registration ("PERP") permitted equipment is brought onsite, operated, or removed from	Compliance ongoing; see Section Y of Condition 8 reports, which are posted on Chiquita's Odor Mitigation website.

Condition No.	Summary of Requirement(s)	Status
	the site, notify South Coast AQMD in the corresponding Condition 8 monthly report; maintain a daily log of permitted equipment and submit in the monthly Condition 8 report.	
81	Provide notification to the community whenever any landfill gas collection and control equipment has planned or unplanned downtime anticipated to last 30 minutes or more.	Compliance ongoing; see Chiquita's Alerts website (https://chiquitacanyon.com/alerts/).
81(c)	Develop a system allowing members of the public to sign-up for notifications of such outages or downtime via email or text message and deploy within 3 days of notification.	Completed; developed by November 18, 2024; deployed by December 10, 2024.
82	Provide an initial notification and a follow-up report to South Coast AQMD whenever any landfill gas collection or control equipment has planned and/or unplanned downtime anticipated to last or lasting 30 minutes or more.	Compliance ongoing; posted on Chiquita's Odor Mitigation website.
83	Submit an expert report on specific landfill operational events and their potential emission impacts to the community.	Completed; submitted on March 31, 2025. A true and correct copy of the report is attached hereto as Exhibit A and posted on Chiquita's Odor Mitigation website.
87	Chiquita is prohibited from conducting planned landfill	Compliance ongoing.

Condition No.	Summary of Requirement(s)	Status
	gas combustion/control equipment downtime for 3 or more landfill gas control units at any one time, unless approved in writing by South Coast AQMD or where Chiquita is conducting certain specified installation or maintenance work.	
88	Install equipment and implement operational procedures to prevent unplanned landfill gas combustion/control equipment downtime.	Compliance ongoing.
88(a)	Expedite and complete the connection of permanent grid power to the flare station by December 31, 2024.	Completed.
88(b)	Once the flare station is connected to permanent grid power, maintain the existing flare station generators.	Compliance ongoing.
88(b)	Install backup power at the Zeeco TOX by December 5, 2024.	Completed.
88(b)	Once the flare station is connected to permanent grid power and backup power connection safety disconnect is installed at the Zeeco TOX, minimize combustion/control equipment downtime as a result of power failure and	Compliance ongoing.

Condition No.	Summary of Requirement(s)	Status
	follow required start-up procedures.	