

SOUTH COAST AQMD
CLERK OF THE BOARD

PETITION FOR VARIANCE
BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2023 FEB -7 AM 8:10

M.O.
FY
2/15/23
RV
5/3/23

PETITIONER: Chiquita Canyon LLC

CASE NO: 6177-3

FACILITY ID: 119219

FACILITY ADDRESS: 29201 Henry Mayo Dr., Castaic, CA 91384

[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: Castaic, CA, 91384

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

☐ INTERIM ☐ SHORT ☒ REGULAR ☒ EMERGENCY ☒ EX PARTE EMERGENCY

2. CONTACT: Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

Steve Cassulo

District Manager

29202 Henry Mayo Dr.,

Castaic, CA Zip 91384

(661) 371-9214 Ext.

Fax ()

E-mail Steven.Cassulo@WasteConnections.com

() Ext.

Fax ()

E-mail

3. RECLAIM Permit ☐ Yes ☒ No Title V Permit ☒ Yes ☐ No

Persons with disabilities may request this document in an alternative format by contacting the Clerk of the Board at 909-396-2500 or by e-mail at clerkofboard@aqmd.gov.

If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

The Chiquita Canyon Landfill (CCL) needs an immediate variance from Title V permit, Facility Wide Conditions, Condition No. 3; Rule 431.1; CCL's Rule 431.1 Alternative Monitoring Plan (Application No. 352929); Permit to Operate (PTO) G23473 (A/N 491442) Condition Nos. 16 and 17; Rule 1303(a)(1) – BACT; Rule 1303(b)(1) and (b)(2) – Modeling and Offset; Rule 1401; and PTO G55163 (A/N 603249) Condition No. 11; Rule 431.1

A lab analysis of landfill gas (LFG) samples from CCL, reported on February 1, 2023, showed total sulfur levels of 143 parts per million by volume (ppmv) with dimethyl sulfide contributing 117 ppmv. This sudden and unexpected increase in dimethyl sulfide concentrations is the underlying cause of non-compliance covered by this variance application. CCL has a permitted treatment system, which removes hydrogen sulfide and other sulfur compounds, but the conventional hydrogen sulfide media used within that system does not capture dimethyl sulfide. As a result of the increased dimethyl sulfide concentrations, the LFG to Energy Facility (LFGTE) at the CCL, which is owned and operated by Ameresco Chiquita Canyon Energy LLC (Ameresco), ceased operations in order to limit exceedances of permitted sulfur levels under its own Title V permit and PTO. The sudden and unexpected increase in dimethyl sulfide concentrations has also caused CCL to exceed its permit limits for total sulfur and Sulfur Oxide (SOx).

If CCL is not granted a variance from total sulfur and SOx permitted limits, CCL will also have to limit the operation of Flare No. 1 and Flare No. 2 to meet permitted SOx levels. As long the total sulfur concentrations remain elevated, CCL may not be able to meet the total sulfur concentration limit until successful treatment for dimethyl sulfide can be deployed. The landfill cannot prevent LFG from being generated within the landfill; therefore, LFG must continue to be collected and destroyed in order to prevent odor and surface emissions, LFG emissions, and subsurface migration, which CCL considers higher priorities and compliance obligations than the sulfur/SOx limits. With the Ameresco plant offline, the remaining control devices, Flare No. 1 and Flare No. 2, need to operate at full capacity to achieve the necessary control of LFG to meet permit and rule requirements. CCL is currently in the process of researching treatment and media options for dimethyl sulfide for pilot studies, as well as considering a thermal oxidizer or a mobile flare to supplement control while the LFGTE facility is not operating.

The research, design, permitting (if required), and implementation of appropriate treatment options/medias and/or a thermal oxidizer or a mobile flare will take time, and the variance is being sought to allow the current flares (Flare No. 1 and Flare No. 2) to operate while combusting LFG in excess of allowable total sulfur concentrations as well as in excess of SOx emission limits in the flare permits. Further, CCL is seeking a variance from the SCAQMD to allow the pilot testing of different treatment options to solve the problem of elevated dimethyl sulfide concentrations in the LFG.

5. Briefly describe the type of business and processes at your facility.

The CCL is an active, municipal solid waste (MSW) landfill with a LFG collection and control (GCCS) system. The GCCS consists of vertical and horizontal gas collection wells and associated piping and collection headers, associated blowers, LFG treatment system, condensate/leachate collection system, a John Zink Model ZTOF Flare No. 1, and a John Zink ultra-low emission (ZULE) Flare No. 2. The landfill site is permitted under its Title V permit (Facility ID No. 119219).

The LFGTE facility accepts LFG but is owned and operated by Ameresco, which is not under common control with the CCL. The Ameresco facility operates under its own Title V permit, and may be filing a separate but related variance application.

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
Landfill gas flare system	491442/ G23473	NA	NA
Landfill gas treatment system	603249/ G55163	NA	NA
Rule 431.1 Alternative Monitoring Plan	352929	NA	NA

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

The equipment and activity involved in this application for variance is the GCCS including Flare No. 1 and Flare No. 2. Continued operation of the gas collection system and the two flares are necessary to control LFG surface emissions, migration, and odors. LFG will continue to be generated from the landfill and LFG control systems are defined in California H&S Code Section 42352(a)(2) as essential public services. The LFG control devices are necessary for the combustion of collected LFG in order to prevent odors and emissions and to maintain compliance.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes ☒ No ☐

If yes, how often: Various, see below Date of last maintenance and/or inspection Various, see below

Describe the maintenance and/or inspection that was performed.

CCL performs daily inspections and a more complete inspection weekly on the two flares.

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation																				
Facility Wide Conditions Condition No. 3; Rule 431.1 Rule 431.1 Alternative Monitoring Plan, Application No. 352929	<p>"The operator shall not use landfill gas containing sulfur compounds in excess of 150 ppmv calculated as hydrogen sulfide averaged daily."</p> <p>1) The colorimetric tubes (TUBES) for analyzing H2S as TS shall be used in accordance with manufacturer's instructions. Testing with TUBES shall be conducted by personnel properly trained in its operation. The TUBES shall be used within their shelf life.</p> <p>2) Based on the concentration of Total Sulfur (TS) in the landfill gas (as measured by a TUBE), tiered sampling and reporting requirements as outlined in the following table shall be implemented."</p> <table><tr><th>ACTION LEVEL</th><th>PROPOSED MONITORING</th><th>AQMD MODIFIED TIERS</th><th>SAMPLING REQUIREMENT</th></tr><tr><td>Tier I</td><td>TS ≤ 100 ppm</td><td>TS < 80 ppm</td><td>- Quarterly using Method 307-91 - Monthly using TUBE</td></tr><tr><td>Tier II</td><td>100 ppm ≤ TS < 120 ppm</td><td>80 ppm ≤ TS < 120 ppm</td><td>- Monthly using Method 307-91 - Weekly using TUBE</td></tr><tr><td>Tier III</td><td>120 < TS ≤ 135 ppm</td><td>120 ≤ TS ≤ 135 ppm</td><td>- Weekly using Method 307-91 - Daily using TUBE</td></tr><tr><td>Tier IV</td><td>135 < TS ≤ 150 ppm</td><td>TS ≥ 135 ppm</td><td>- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91</td></tr></table> <p>The site is currently operating under action level Tier IV and using Method 307-91 samples daily. The site will likely exceed the 150 ppmv total sulfur compound level because of the increasing trend in dimethyl sulfide concentrations causing the total sulfur levels to be higher until proper treatment/media is installed and utilized.</p>	ACTION LEVEL	PROPOSED MONITORING	AQMD MODIFIED TIERS	SAMPLING REQUIREMENT	Tier I	TS ≤ 100 ppm	TS < 80 ppm	- Quarterly using Method 307-91 - Monthly using TUBE	Tier II	100 ppm ≤ TS < 120 ppm	80 ppm ≤ TS < 120 ppm	- Monthly using Method 307-91 - Weekly using TUBE	Tier III	120 < TS ≤ 135 ppm	120 ≤ TS ≤ 135 ppm	- Weekly using Method 307-91 - Daily using TUBE	Tier IV	135 < TS ≤ 150 ppm	TS ≥ 135 ppm	- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91
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Permit to Operate G23473, A/N 491442 Condition No. 16 and 17; Rule 1303(a)(1) - BACT, 1303(b)(1) and (b)(2) – Modeling and Offset, 1401	<p>"Emissions from Flare No. 1 shall not exceed the following:</p> <p>SOx as SO2: 2.5 lb/hr</p> <p>Emissions from Flare No. 2 shall not exceed the following:</p> <p>SOx as SO2: 2.5 lb/hr"</p> <p>The site has and will exceed the SOx emission limit of 2.5 lb/hr for Flare No. 1 and Flare No. 2 at various times because of the increased sulfur concentrations and the actual flow of each flare, which will increase as long as the LFGTE is offline. The high dimethyl sulfide concentrations are causing the total sulfur levels to be higher; therefore, the SOx emissions are exceeding the permit limit.</p>																				
Permit to Operate G55163, A/N 603249 Condition No. 11; Rule 431.1	<p>"The landfill gas combusted in air pollution control equipment shall contain no more than 150 ppmv total sulfur compounds, calculated as H2S, averaged daily. The owner or operator of this equipment shall demonstrate compliance with this limit by regular sampling and laboratory analysis of gas samples collected at the outlet of the LFGTS and prior to air pollution control equipment per the approved Rule 431.1 Alternative Monitoring Plan A/N 35292."</p> <p>The site will likely exceed the 150 ppmv total sulfur compound level because of the high and increasing dimethyl sulfide concentrations causing the total sulfur levels to be higher until proper treatment/media is installed and utilized that can capture dimethyl sulfide.</p>																				

10. Are the equipment or activities subject to this request currently under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes ☐ No ☒

If yes, you must attach a copy of each notice.

13. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months? Yes ☐ No ☒

If yes, you should be prepared to present details at the hearing.

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

The CCL has a permitted treatment system which treats hydrogen sulfide and some additional sulfur compounds, but conventional hydrogen sulfide media used by the system does not capture dimethyl sulfide. Dimethyl sulfide is typically a minor constituent of LFG if it is present at all. As such, when dimethyl sulfide levels increased in CCL's LFG, compliance could not be maintained with the permitted total sulfur concentration limits and SOx emission limits for the flares or for the Ameresco LFGTE plant. Therefore, the LFGTE Ameresco facility ceased operations in order to limit exceedances of permitted sulfur levels within its Title V permit and PTO. However, CCL is required to continue to collect LFG to comply with rule and permit conditions and must use its flare to destructively combust the collected gas.

If CCL is not granted a variance from its total sulfur concentration and SOx emission limits, CCL will also have to limit the operation of Flare No. 1 and Flare No. 2 to meet permitted SOx limits, which would likely cause non-compliance with odor, surface emissions, and LFG migration requirements. Compliance with the total sulfur concentration limit will not be possible even if flare operation is curtailed because the compliance cannot be achieved until adequate control for dimethyl sulfide is attained. Since the landfill cannot prevent LFG from being generated and CCL must collect and control this LFG, compliance with the sulfur and SOX limits is beyond its reasonable control. In order to prevent odors, LFG migration, and surface emissions, which are considered a high priority and compliance obligation by CCL, CCL is seeking a variance to operate the remaining control devices (Flare No. 1 and Flare No. 2). CCL is also currently in the process of researching treatment options/media for dimethyl sulfide for pilot studies, as well as considering a thermal oxidizer or a mobile flare to supplement control while the LFGTE facility is not operating.

The research, design, permitting (if required), and implementation of appropriate treatment options/media and/or a thermal oxidizer or a mobile flare will take time, and the variance is being sought to allow the current flares (Flare No. 1 and Flare No. 2) to operate while combusting LFG in excess of allowable total sulfur

concentrations as well as in excess of SOx emission limits in the flare permits.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

The CCL's lab analysis reported on February 1, 2023 indicated total sulfur levels of 143 ppmv, with dimethyl sulfide contributing 117 ppmv, a sudden increase from historical levels. There have been high total sulfur concentrations in the past, but this was a result of high hydrogen sulfide levels, which were remediated by the installation of a permitted sulfur treatment system. This sudden and unexpected increase in dimethyl sulfide concentrations has changed the composition of the gas, making it more difficult to treat to remove sulfur from the LFG. The CCL has a permitted treatment system, which removes hydrogen sulfide and other sulfur compounds, but conventional hydrogen sulfide media used by the system does not capture dimethyl sulfide.

CCL became aware of the potential issue with dimethyl sulfide on February 1, 2023 after the lab analysis was reported, which showed an excess of total sulfur levels as well as calculated SOx emissions from the flares.

16. List date(s) and action(s) you have taken since that time to achieve compliance.

The site took direct action to find alternative sulfur treatment and have already arranged for several different replacement and/or supplemental treatment media to be pilot tested in the next several weeks. When the Ameresco LFGTE went offline, CCL immediately transferred the additional LFG to the Flares No. 1 and No. 2 to achieve adequate control of LFG for odor control, prevention of subsurface migration, and prevention of excess surface emissions. CCL is currently in the process of researching additional treatment options and medias for dimethyl sulfide for pilot studies, as well as considering a thermal oxidizer or a mobile flare to supplement control while the LFGTE facility is not operating.

17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: If CCL curtailed flare operations, there will be potential surface emission and odor issues, which may result in complaints, community harm, and consequently Notices of Violation (NOVs) with monetary penalties related to surface emissions, odor, and LFG migration. There would also be potential NOVs issued for each exceedance of emission limits from Flare No. 1 and Flare No. 2 and associated penalties, if the facility elected to operate the flares at full capacity. The Ameresco LFGTE facility has already been rendered non-operational. Thus, under either scenario, the facility would be out of compliance and CCL believes that controlling odorous, volatile organic, methane, and other emissions of LFG is more important.

Number of employees laid off (if any): _____

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

LFG is continuously generated due to microbial degradation of refuse. The landfill cannot prevent LFG from being generated within the landfill. In order to prevent the issues noted above, which are considered CCL priorities and compliance obligations, the remaining control devices Flare No. 1 and Flare No. 2 need to be operated at full capacity. The Ameresco LFGTE facility has already been rendered non-operational. If the variance is not granted, the facility would be in a state of non-compliance with District rules and regulations, increasing the likelihood and magnitude of potential enforcement action and fines for each day Flare No. 1 and Flare No. 2 operates for odor control, and prevention of subsurface migration and surface emissions. This would result in financial harm from potential penalties as well as additional stigma damages.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

CCL cannot curtail or terminate operations as LFG will be generated regardless of continuing landfill operations and must be controlled. The remaining two (2) control devices (Flare No. 1 and Flare No. 2) are required to operate for odor control and the prevention of subsurface migration and surface emissions.

19. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

Pollutant	(A)	(B)	(C)*
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
Sulfur Oxides (SOx)	225.20	--	225.20

* Column A minus Column B = Column C

Excess Opacity: NA %

20. Show calculations used to estimate quantities in No. 19, or explain why there will be no excess emissions.

See attached calculations. In order to find the worst case-scenario, we assume the maximum flow rate of 4,000 standard cubic feet per minute (scfm) per flare and a total sulfur rate of 180 ppmv, an increase of the current permitted total sulfur limit of 150 ppmv by 20%. Excess emissions is calculated as the worst-case scenario emissions above the permit limit of 2.5 lb/hr for each flare. Please note, actual excess emissions and days of excess emissions will be based on the actual flow of each flare and the concentration of the total sulfur from lab analysis. The existing treatment system is removing hydrogen sulfide adequately; however, because it is not working on dimethyl sulfide, which is the cause of the exceedance, we have not assumed any mitigation.

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

In order to reduce excess emissions, CCL will find and implement alternate treatment options as soon as possible. However, the CCL's two (2) flares will need to operate to control odors, and prevent subsurface migration and surface emissions, which are considered higher priorities and compliance obligations by CCL.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

The facility will continue to monitor the two (2) flares' flows and conduct daily lab analysis for sulfur compounds. The same calculations as demonstrated in question No. 20 above will be performed to determine the amount of excess emissions. The calculations and the amount of excess emissions will be made available to the District.

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

In order to reduce excess emissions, the LFGTE Ameresco facility has shut down and is no longer operating. The site team is investigating additional treatment options/media for dimethyl sulfide because the current hydrogen sulfide treatment system is not effective for dimethyl sulfide. Depending on the type of treatment system and/or installation of a thermal oxidizer/mobile flare, the cost can be up to \$100,000 to \$500,000 of capital expenses, as well as additional operating costs, which are to be determined. The schedule is undetermined at this time, until we do some initial research and complete pilot studies.

24. State the date you are requesting the variance to begin: Date of filing; and the date by which you expect to achieve final compliance: Once the treatment system is installed and operational and as soon as dimethyl sulfide concentrations decrease to a level where all the control devices, including Ameresco, can operate under sulfur emission limits.

If the regular variance is to extend beyond one year, you must include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3).

List Increments of Progress here:

Not applicable

25. List the names of any District personnel with whom facility representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply.

_____, Ext. _____
_____, Ext. _____

If the petition was completed by someone other than the petitioner, please provide their name and title below.

Name	Company	Title
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The undersigned, under penalty of perjury, states that the above petition, including attachments and the items therein set forth, is true and correct.

Executed on February 3, 2023, at Castaic, California

Steve Cassulo
Signature

Steve Cassulo
Print Name

Title: District Manager

26. **SMALL BUSINESS and TABLE III SCHEDULE A FEES:** To be eligible for reduced fees for small businesses, individuals, or entities meeting small business gross receipts criterion [see District Rule 303(h)], you must complete the following:

Declaration Re Reduced Fee Eligibility

1. The petitioner is
a) ☐ an individual, or
b) ☐ an officer, partner or owner of the petitioner herein, or a duly authorized agent of the petitioner authorized to make the representations set forth herein.

If you selected 1a, above, skip item 2.

2. The petitioner is
a) ☐ a business that meets the following definition of Small Business as set forth in District Rule 102:
SMALL BUSINESS means a business which is independently owned and operated and meets the following criteria, or if affiliated with another concern, the combined activities of both concerns shall meet these criteria:
(a) the number of employees is 10 or less; **AND**
(b) the total gross annual receipts are \$500,000 or less **or**
(iii) the facility is a not-for-profit training center.

-OR-

- b) ☐ an entity with total gross annual receipts of \$500,000 or less.

3. Therefore, I believe the petitioner qualifies for reduced fees for purpose of filing fees and excess emission fee calculations, in accordance with Rule 303(h).

I declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, at _____, California

Signature _____

Print Name _____

Title _____

ATTACHMENT A

ITEM 1

Type of Variance Requested:

- (a) **SHORT:** If compliance with District rule(s) can be achieved in **90 days or less**, request a short variance. *(Hearing will be held approximately 21 days from date of filing--10-day posted notice required.)*
- (b) **REGULAR:** If compliance with District rule(s) will take **more than 90 days**, request a regular variance. If the variance request will extend beyond one year, you **must** include a specific detailed schedule of increments of progress [see Page 8, No. 24] under which you will achieve final compliance. *(Hearing will be held approximately 45 days from date of filing--30-day published notice required.)*
- (c) **EMERGENCY:** If non-compliance is the result of an unforeseen emergency, such as a sudden equipment breakdown, power failure, or accidental fire, you may request an emergency variance. You may request an *ex parte* emergency variance in addition to an emergency variance. **An emergency variance cannot be granted for more than 30 days.** *(Hearing will be held within 2 working days from the date of filing, whenever possible, excluding Mondays, weekends, and holidays.) If you request an emergency variance, you must answer No. 4 on page 1.*
- (d) **EX PARTE EMERGENCY:** If variance coverage is required on a weekend or when the Board is not in session, and you cannot wait until an emergency variance hearing can be held, you may request an *ex parte* emergency variance. An *ex parte* emergency variance will be granted or denied solely on the information contained in the petition and the District's response to the petition. Under most circumstances, an *ex parte* emergency variance will remain in effect only until a hearing can be held. **If you request an *ex parte* variance, you must answer No. 4 on page 1.**
- (e) **INTERIM:** If you require immediate relief (other than for emergencies) to cover the time until a short or regular variance hearing can be held, request an interim variance. If you request an interim variance, you must also request a short or a regular variance on the same petition. *(Hearing will be held approximately 2 working days from date of filing, whenever possible, excluding Mondays, weekends and holidays.) If you request an interim variance, you must answer No. 4 on page 1.*

ITEM 4

GOOD CAUSE: The Hearing Board is required to provide public notice of variance hearings, as the public has a right to attend and testify at such hearings. In order for the Hearing Board to hold an Interim, *Ex Parte* Emergency or Emergency Variance hearing without the required public notice, a petitioner must present facts which will support a determination by the Board that "good cause" exists to hear a variance without notifying the public about the variance and providing the public with an opportunity to present evidence concerning the variance.

ITEM 6

Example #1:

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
Tenter frame		D32	
Chrome-plating tank	M99999		
Bake oven	123456		
Create special effects (fog)	N/A	N/A	N/A
Mfg., sale, distribution, use of non-compliant coating	N/A	N/A	12/10/95

ITEM 9

a) If you are requesting relief from Rule 401 and the excess opacity during the variance period will reach or exceed 40%, you should also request relief from California Health and Safety Code Section 41701.

b) If you are requesting relief from a permit condition(s), you should also request relief from the rule requiring compliance with conditions of the permit: 202(a), (b) or (c) - Temporary Permit to Operate; 203(b) - Permit to Operate; 2004(f)(1) - RECLAIM Permit; 3002(c) - Title V Permit.

Example #2:

Rule	Explanation
404(a)	tenter frame is vented to damaged air pollution control equipment
2004 (f)(1) [Condition No. 28-2 of Facility P/O No. 099999]	source test cannot be conducted as required until new ESP is installed
1113(c)(2)	petitioner manufactures and sells clear wood finishes with VOCs in excess of 350 grams per liter
401(a) & California H&S Code Section 41701	Opacity will exceed 45%.

ITEM 24**Example #3:****Sample Schedule of Increments of Progress**

- Permit application(s) will be submitted to the District by [date].
- Contracts for the purchase of emission control systems will be awarded by [date].
- On-site construction will be completed by [date].

English	"If you require a language interpreter in order to participate in the hearing, contact the Clerk of the Board at least five (5) calendar days before your hearing at 909-396-2500 or by e-mail at clerkofboard@aqmd.gov . Specify the case name and number, hearing date, and the language for which you are requesting an interpreter."
Farsi	"اگر برای شرکت در جلسه استماع به مترجم نیاز دارید، حد اقل پنج (5) روز تقویمی قبل از جلسه استماع، با منشی هیئت توسط شماره تلفن 909-396-2500 یا بوسیله نامه الکترونیکی با نشانی clerkofboard@aqmd.gov تماس بگیرید. نام پرونده و شماره آن، تاریخ جلسه استماع و زبانی را که برای آن مترجم درخواست کرده اید، مشخص کنید"
Arabic	"إذا كنت في حاجة لمترجم من أجل المشاركة في جلسة الاستماع، اتصل بكاتب المحكمة قبل موعد جلسة الاستماع بخمسة (5) أيام على حدد اسم ورقم القضية و تاريخ الاستماع clerkofboard@aqmd.gov هاتف 909-396-2500 أو بالبريد الإلكتروني على واللغة التي تريد في مترجم لها."
Armenian	"Մեզ կարողանալու մասնակցելու համար, եթե խաղաղապետի կարիքն ունենաք, նախքան մեր ունկնդրությունը, ամենաքիչը հինգ (5) օրացույցային օրից առաջ կապվեք համաձայնագրի բարձրագույնի հետ, 909-396-2500 հեռախոսահամարով կամ էլեկտրոնային նամակով clerkofboard@aqmd.gov ։ Նշեք գործի անունը և համարը, ունկնդրության թվականը, և լեզուն, որի համար խաղաղապետի էք ցանկանում"
Vietnamese	"Nếu quý vị cần Thông Dịch Viên cho buổi điều trần, xin vui lòng điện-thoại cho Thư Ký Hội Đồng tại số 909-396-2500 trễ nhất là năm [5] ngày, không tính hai ngày Thứ Bảy và Chủ Nhật, trước buổi điều trần hoặc gửi điện thư đến clerkofboard@aqmd.gov . Nhớ ghi rõ tên và số hồ sơ, ngày điều trần, và ngôn ngữ quý vị cần có người để thông dịch."
Chinese	如果你要求翻譯來協助你參加聽證會，請在你的聽證會前至少提前五天（5個日曆日）打電話到909-396-2500或發電子郵件到 clerkofboard@aqmd.gov 與局裏的辦事人員聯絡。並且明確說明你的案子的名稱和號碼，聽證日期，以及你要求的翻譯的語種。
Japanese	公聴会（ヒアリング）に参加するために通訳が必要な場合、少なくとも5日前までに事務局（Clerk of the Board）にご連絡ください。電話でのご連絡は 909-396-2500、e-メールでのご連絡は clerkofboard@aqmd.gov 。までお願いします。その際、案件名 (case name) と案件番号 (case number)、ヒアリングの日付、通訳が必要な言語を特定して下さい。
Korean	"만약 귀하나 귀하의 증인들이 심리에 참여하기 위해 통역사가 필요하시면, 심리일 5일 전까지 기관부서의 서기에게 909-396-2500으로 연락하시거나, clerkofboard@aqmd.gov 로 연락 하십시오. 통역이 필요하신 사건의 이름, 심리날짜, 그리고 언어를 정확하게 말씀해 주십시오."
Spanish	Si usted requiere un intérprete para poder participar en la audiencia, favor de comunicarse con el Secretario de la Junta cuando menos cinco (5) días hábiles antes de su audiencia al teléfono (909) 396-2500 ó por correo electrónico al clerkofboard@aqmd.gov . Especifique el nombre y el número de su causa, la fecha de la audiencia y el idioma del cual está solicitando el intérprete.
Tagalog	"Kung kailangan ninyo nang interpreter sa Pilipino para makasali kayo sa pagdinig sa kaso, tumawag lang po kayo sa Clerk of the Board sa numero 909-396-2500 or kung hindi mag-email kayo sa email clerkofboard@aqmd.gov . Kailangan na tumawag kayo sa loob nang limang araw (5 days) bago ang inyong hearing date at ibigay and inyong pangalan at case number, araw nang inyong pagdinig sa kaso at inyong gusto na may lenguahe na interpreter".
Thai	หากคุณต้องการล่ามในการขึ้นศาล ให้ติดต่อเจ้าหน้าที่ล่วงหน้าอย่างน้อย 5 วันก่อนวันขึ้นศาล โดยติดต่อที่เบอร์โทร 909-396-2500 หรือโดย e-mail ที่ clerkofboard@aqmd.gov ให้บอกชื่อและหมายเลขของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการล่าม

Calculations

Chiquita Canyon Landfill Emissions Calculation

Maximum Potential Emissions				
	Max Flow Rate (scfm)	Total Sulfur (ppmv)	Sulfur Emissions (lb/hr)	Sulfur Emissions (lb/day)
Flare No. 1	4,000	180	7.19	172.60
Flare No. 2	4,000	180	7.19	172.60
Total			14.38	345.20
Permitted Emissions				
	Flow Rate (scfm)	Total Sulfur (ppmv)	Sulfur Emissions (lb/hr)	Sulfur Emissions (lb/day)
Flare No. 1	--	--	2.50	60.00
Flare No. 2	--	--	2.50	60.00
Total			5.00	120.00
Excess Emissions				
	Flow Rate (scfm)	Total Sulfur (ppmv)	Sulfur Emissions (lb/hr)	Sulfur Emissions (lb/day)
Flare No. 1	--	--	4.69	112.60
Flare No. 2	--	--	4.69	112.60
Total			9.38	225.20

*The maximum potential emissions assumes worst case scenario of maximum flow rate and continued increasing trend of sulfur

Lab Analysis



AtmAA Inc.

23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277

specialized air assessment laboratory
atmaa.com

February 1, 2023

LTR/2080/23

Cornelius L. Fong
SCS Engineers
3900 Kilroy Airport Way
Suite 100
Long Beach, CA 90806

Re: Chiquita Canyon

Dear Corn,

Please find enclosed the laboratory analysis report, quality assurance summary, and the chain of custody form for one Tedlar bag sample received January 31, 2023.

The Tedlar bag sample was analyzed for SCAQMD 307.91 total sulfur components as requested on the chain of custody form.

Sincerely,

AtmAA, Inc.

Brian W. Fung
Laboratory Director



AtmAA Inc.

23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277

specialized air assessment laboratory
atmaa.com

LABORATORY ANALYSIS REPORT

Hydrogen Sulfide and Reduced Sulfur Compounds
Analysis in Tedlar Bag Samples by SCAQMD Method 307.91

Report Date: February 1, 2023
Client: SCS Engineers
Project Location: Chiquita Canyon Landfill
Project No.: 07214017.91 Task 1
Date Received: January 31, 2023
Date Analyzed: January 31, 2023

ANALYSIS DESCRIPTION


Total sulfur analysis measured by gas chromatography with sulfur chemiluminescence detector (SCD), SCAQMD 307.91.

AtmAA Lab No.: 20313-4
Sample I.D.: FL-150

Components	(Concentration in ppmv)
Hydrogen sulfide	0.21
Carbonyl sulfide	1.05
Methyl mercaptan	1.27
Ethyl mercaptan	<0.20
Dimethyl sulfide	117
Carbon disulfide	0.30
i-Propyl mercaptan	<0.20
t-Butyl mercaptan	<0.20
n-Propyl mercaptan	2.28
s-Butyl mercaptan	1.52
i-Butyl mercaptan	<0.20
Dimethyl disulfide	4.65
Tetrahydrothiophene	0.74
Unidentified sulfurs	8.92

(Concentration in ppmv, as H₂S)

Total Sulfur 143


Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Chiquita Canyon Landfill
Date Received: January 31, 2023
Date Analyzed: January 31, 2023

Components	Sample ID	Repeat Analysis		Mean	%
		Run #1	Run #2	Conc.	RPD
		(Concentration in ppmv)			
Hydrogen sulfide	FL-150	0.21	0.21	0.21	0.00
Carbonyl sulfide	FL-150	1.06	1.04	1.05	1.9
Methyl mercaptan	FL-150	1.26	1.28	1.27	1.6
Ethyl mercaptan	FL-150	<0.20	<0.20	---	---
Dimethyl sulfide	FL-150	116	118	117	1.7
Carbon disulfide	FL-150	0.30	0.30	0.30	0.00
i-Propyl mercaptan	FL-150	<0.20	<0.20	---	---
t-Butyl mercaptan	FL-150	<0.20	<0.20	---	---
n-Propyl mercaptan	FL-150	2.28	2.28	2.28	0.00
s-Butyl mercaptan	FL-150	1.52	1.52	1.52	0.00
i-Butyl mercaptan	FL-150	<0.20	<0.20	---	---
Dimethyl disulfide	FL-150	4.66	4.63	4.65	0.65
Tetrahydrothiophene	FL-150	0.74	0.74	0.74	0.00
Unidentified sulfurs	FL-150	8.71	9.14	8.92	4.8

One Tedlar bag sample, laboratory number 20313-4, was analyzed for total sulfur compounds. Agreement between repeat analyses is a measure of precision and is shown above in the column "% RPD". The average % RPD for 10 repeat measurements from one Tedlar bag sample is 1.1%.



[illegible]

Facility Wide Conditions



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

FACILITY WIDE CONDITION(S)

Condition(s):

1. Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
 - A. As dark or darker in shade as that designated no. 1 on the Ringelmann chart, as published by the United States Bureau of Mines; or
 - B. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.
[Rule 401]
2. The operator shall not purchase any diesel fuel for stationary source application in the South Coast AQMD, unless the fuel is low sulfur diesel for which the sulfur content shall not exceed 15 ppm by weight as supplied by the supplier.
[Rule 431.2]
3. The operator shall not use landfill gas containing sulfur compounds in excess of 150 ppmv calculated as hydrogen sulfide averaged daily.
[Rule 431.1]
4. The owner/operator of a MSW landfill shall comply with the following:
 - A. Install and operate a wind speed and direction monitoring system with a continuous recorder. For wind speed, use a 3 cup assembly with a range of 0 to 50 miles an hour, with a threshold of 0.75 mile per hour or less. For wind direction, use a vane with a range of 0 to 540 degrees azimuth, with a threshold of plus-minus 2 degrees. An approved alternative may be used in lieu of the above.
 - B. Monitor and collect monthly, or as per the approved 1150.1 alternative, samples for analysis of TOC and TAC from the subsurface refuse boundary sampling probes.
 - C. Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 5% by volume in the subsurface refuse boundary sampling probes.
 - D. Collect monthly, or as per the approved 1150.1 alternative, integrated samples for analysis of TOC and TAC from the landfill surface.
 - E. Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 50 ppmv as determined by integrated samples taken on numbered 50,000 square foot landfill grids or as per the approved 1150.1 alternative.
 - F. Monitor quarterly, or as per the approved 1150.1 alternative, the landfill surface for TOC, or as approved, from the surface of the landfill.



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- G. Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 500 ppmv above background as determined by instantaneous monitoring at any location on the landfill, except at the outlet of any control device.
 - H. Collect monthly, or as per the approved 1150.1 alternative, landfill gas samples for analysis of TOC and TAC from the main gas collection header line entering the gas treatment and/or gas control system.
 - I. Collect monthly, or as per the approved 1150.1 alternative, ambient air samples for analysis of TOC and TAC from the landfill property boundary.
 - J. Collect monthly, or as per the approved 1150.1 alternative, ambient air samples for analysis of TOC and TAC from the landfill property boundary.
 - K. Operate the gas collection and control system at all times for landfills with active collection systems.
 - L. Operate all wellheads so the gauge pressure is under a constant vacuum, except during well head raising and/or repair and temporary shutdown due to a catastrophic event.
[Rule 1150.1]
5. The owner/operator of a MSW landfill shall comply with the following:
- A. Operate the collection system such that the gas is collected from each area, cell or group of cells of the landfill in which the initial solid waste has been in place for a period of:
 - 1. Five (5) years or more if active; or
 - 2. Two (2) years or more if closed or at final grade.
 - B. Operate the collection system with negative pressure at each well-head except under the following conditions:
 - 1. During a fire or increased well temperature, the owner/operator shall record the instances when positive pressure occurs in efforts to prevent a fire. This report shall be submitted with the annual reports as provided in §60.757(f)(1).
 - 2. Whenever a geomembrane or synthetic cover is in place, the owner/operator shall develop acceptable pressure limits in the design plan.
 - 3. When a well is decommissioned, a well may experience a static positive pressure after shut down to accommodate for declining flows.
 - C. Operate each interior wellhead in the collection system, except the exempt wells listed under condition no. 5(D), with a landfill gas temperature less than 55 degrees Celsius and with either a nitrogen level less than 20% or an oxygen level less than 5% as determined by methods described in §60.753(c).
 - D. The following wells are allowed to operate with greater than 5% oxygen, and not to exceed corresponding % oxygen limit, for the purpose of controlling LFG migration and groundwater contamination. However, each well is subject to monthly close monitoring and record keeping for other operating parameters, such as % methane, vacuum, % oxygen, temperature, and CO (ppmv). The owner or operator shall take immediate actions to prevent any exceedances and subsurface fire.



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Wells located in Canyon B:

Well ID:	maximum % oxygen limit
B-7 & B-9	10
B-8	15

Wells located in Canyon B near groundwater well DW-3:

Well ID:	maximum % oxygen limit
B-10, B-11 & B-13	10

Wells located in Canyon C:

Well ID:	maximum % oxygen limit
CV-22	15

Wells located in Canyon D:

Well ID:	maximum % oxygen limit
D-6	10

Wells located in Canyon D near groundwater well DW-20:

Well ID:	maximum % oxygen limit
D-7, D-8, D-9, D-10 & D-11	10 10

Wells located in Primary Canyon:

Well ID:	maximum % oxygen limit
P-1, P-2, P-12	10
P-22, P-23, & P-79	10
P-78	15

Wells located in Primary Canyon near groundwater wells DW-1 & DW-16:

Well ID:	maximum % oxygen limit
P-3, P-4, P-5, P-13, P-14, P-24 & P-56	10 10

- E. The following wells are allowed to operate at a higher temperature, up to 145 degrees Fahrenheit. However, wells listed below are subject to monthly monitoring and record keeping (40 CFR 60.753) for other operating parameters, such as % methane, vacuum, % oxygen, CO (not to exceed 100 ppmv), and no charred debris in the gas collection system. The owner or operator shall take immediate actions to prevent any exceedances and subsurface fire.

Well ID:

CV-90, H-39, CV-57D, CV-84D, CV-84S and CV-85D.

Well ID: (A/N 578102)

CV-76, CV-100, CV-103, CV-104, CV-105, CV-50D, CV-50S, CV-51D, CV-51S, CV-52D, CV-52S, CV-53D, CV-53S, CV-54D, CV-54S, CV-55R, CV-56D, CV-74R, CV-79R, CV-107-56, CV-109-55, CV-57R, H-52A, CV-1418, CV-1419, CV-1424, CV-1425, CV-1426, CV-1532, CV-1533 and CV 108-52.



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- F. Operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill as determined in accordance with monitoring procedures specified in §60.753 and 60.754.
- G. Operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with §60.752(b)(2)(iii).
- H. Operate the collection and control system in compliance with test methods and procedures of §60.754.
- I. Operate the collection and control system in compliance with compliance provisions of §60.755.
- J. Operate the collection and control system in compliance with monitoring procedures of §60.756.
- K. Operate the collection and control system in compliance with reporting requirements of §60.757.
- L. Operate the collection and control system in compliance with record keeping requirements of §60.758.
[Gaseous emissions: 40 CFR 60 Subpart WWW]

Flare System Permit to Operate



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

PERMIT TO OPERATE

Permit No. G23473
A/N 491442

Equipment Description:

Landfill gas flare system consisting of:

1. Three blowers (stand-by), Lamson, Model No. 853, each 2000 cfm, with a 60 HP motor venting landfill gas from collection wells and trenches.
2. Condensate knock-out/filter, 5'-0" Dia. x 10'-6" H., serving both flares.
3. Flare, no. 1, John Zink, Model ZTOF, 11'-4" Dia. x 50'-0" H., rated at 4000 scfm capacity, 120 mmBTU per hour with a flame arrestor, UV scanner, four automatic combustion air dampers and flare alarm system.
4. Automated ignition system with propane gas pilot assembly, ignition transformer, and two 5-gallon capacity propane tanks.
5. Condensate injection system with two pumps, compressor, injectors, valves and controls.
6. Two multi-stage centrifugal blowers, each Gardner Denver/Lamson 150 HP motor, 4000 scfm, venting landfill gas from collection wells and trenches.
7. Enclosed flare, no. 2, John Zink, Zink ultra-low emission (ZULE), 12'-0" Dia. x 50'-0" H., maximum heat input of 120 mmBTU per hour of landfill gas, with a combustion air blower, combustion air/LFG mixing chamber, a flame arrestor, UV scanner, electric igniter, propane gas pilot, louvers, automatic landfill gas flow and flare temperature control system, and an automatic flare shutdown and alarm system.
8. Condensate injection system with associated pump(s), compressor(s), injectors, valves and controls.

Conditions:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
[Rule 204]
2. This equipment shall be properly maintained and kept in good operating condition at all times.
[Rule 204]
3. This equipment shall be operated and maintained by personnel properly trained in its operation.
[Rule 204]
4. Each flare shall be equipped with a temperature indicator and recorder which measures and records the exhaust gas temperature in each flare stack. The temperature indicator and recorder shall operate whenever the flare is in operation. The temperature shall be measured at a location above the flame zone, at least 0.6 second downstream of the burner, and not less than three (3) feet below the top of each stack.
[Rule 1303(a)(1)-BACT, 3004(a)(4)]



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5. Whenever the flare(s) is (are) in operation, a temperature of not less than 1400 degrees Fahrenheit, 15 minute average, as measured by the temperature indicator and recorder shall be maintained except during periods of startup and shutdown. Startup is defined as the period from flare ignition to the time when 1400 degrees Fahrenheit is achieved, not to exceed 30 minutes. Shutdown is the period from when the gas valve begins to be shut and completely shuts off, not to exceed 30 minutes.
[Rule 1303(a)(1)-BACT]
6. A flow indicator and recording device shall be maintained in the landfill gas supply line to each flare to measure and record the quantity of landfill gas (in scfm) being burned in each flare.
[Rule 1303(b)(2)-Offset, 3004(a)(4)]
7. All recording devices shall be synchronized with respect to time of the day.
[Rule 204]
8. The total volume of landfill gas burned in each flare shall not exceed 4,000 standard cubic feet per minute (scfm).
[Rule 1303(b)(1) and (b)(2)-Modeling and Offset, 1401]
9. The maximum heat input rate to each flare shall not exceed 120 mmBTU per hour. A log shall be kept indicating the total heating value of landfill gas burned in each flare based on the recorded flow rate (scfm) and the latest weekly BTU content (BTU/scf) reading.
[Rule 1303(b)(1) and (b)(2)-Modeling and Offset, 1401]
10. The automatic shutdown safety system shall be tested monthly for proper operation of each flare and the results recorded.
[Rule 1303(a)(1)-BACT]
11. Condensate injection total flow rate and heat input rate (BTU/hr), for all of the nozzles, shall be recorded and records shall be maintained on file. Calculated injection rate for each nozzle shall not exceed 0.077 gpm/BTU/hr.
[Rule 204]
12. The operator shall conduct annual performance source test for each of the flares (within 12 months of the prior source test), at maximum heat input rate, in accordance with South Coast AQMD approved source test protocol. Written notification of the scheduled test date shall be provided to the South Coast AQMD at least seven (7) days prior to the date so that the testing may be observed by South Coast AQMD personnel. The testing shall be conducted when the equipment is in full operation, and shall include, but not limited to, a test of the inlet to the flare and the flare exhaust for:
 - A. Methane
 - B. Total non-methane organic compounds (TNMOC)
 - C. Carcinogenic and toxic air contaminants (inlet and exhaust) including, but not limited to, compounds listed under Rule 1150.1, Table-1 (Core Group)
 - D. NO_x, as NO₂ (exhaust only)
 - E. SO_x, as SO₂ (exhaust only)
 - F. CO (exhaust only)
 - G. PM₁₀ reported as total PM (exhaust only)
 - H. Oxygen
 - I. Moisture content
 - J. Temperature



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

K. Flow rate

[Rule 1303(b)(1) and (b)(2)—Modeling and Offset, 1401, 3004(a)(4)]

13. The source test report, for each flare shall include;

A. Emissions of CO, NO_x, TNMOCs, PM₁₀ (total PM) and SO_x, in units of lbs/hr and ppmv (except PM₁₀), overall methane and TNMOC destruction efficiency (wt. %) and TNMOC emissions (ppmv), on a dry basis, as hexane at 3% oxygen.

B. The test shall be performed by a testing laboratory certified to meet the criteria in South Coast AQMD Rule 304(k) (conflict of interest).

C. Sampling facilities shall comply with South Coast AQMD "Guidelines for Construction of Sampling and Testing Facilities" pursuant to Rule 217.

[Rule 204, 217, 1150.1, 40 CFR 60 Subpart WWW]

14. The maximum flare skin temperature at any location shall not exceed 250 degrees Fahrenheit.

[Rule 217]

15. All landfill gas collected shall be directed to a processing facility, which can adequately process the volume of LFG collected, or to the combustion equipment that has been issued a valid Permit to Construct or Operate by the South Coast AQMD.

[Rule 1150.1, 1303(a)(1)-BACT, 40 CFR 60 subpart WWW]

16. Emissions from flare no. 1 shall not exceed the following:

Pollutant	lbs. /hr
-----------	----------

CO	5.6
----	-----

NO _x as NO ₂	3.9
------------------------------------	-----

PM ₁₀	1.4
------------------	-----

ROG	0.92
-----	------

SO _x as SO ₂	2.5
------------------------------------	-----

[Rule 1303(a)(1)-BACT, 1303(b)(1) and (b)(2)—Modeling and Offset, 1401]

17. Emissions from flare no. 2 shall not exceed the following:

Pollutant	lbs. /hr
-----------	----------

CO	7.2
----	-----

NO _x as NO ₂	2.4
------------------------------------	-----

PM ₁₀	1.4
------------------	-----

ROG	1.33
-----	------

SO _x as SO ₂	2.5
------------------------------------	-----

[Rule 1303(a)(1)-BACT, 1303(b)(1) and (b)(2)—Modeling and Offset, 1401]



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18. The operator shall operate and maintain this equipment according to the following requirements:

The exhaust temperature shall be maintained at a minimum of 1,400 degrees Fahrenheit (for F-1 & F-2) whenever the equipment it serves is in operation.

Continuous exhaust temperature monitoring and recording system shall be pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy of within $\pm 1\%$ of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications using an applicable South Coast AQMD or EPA approved method.

For the purpose of this condition, a deviation shall be defined as when a temperature of less than 1,400 degrees Fahrenheit (for F-1 & F-2) occurs during normal operation except during startups or shutdowns, not to exceed 30 minutes. The exhaust temperature shall be averaged over a 15-minute period,

And hourly average shall be computed from such data points. The operator shall review the records of temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs.

Semi-annual reporting specified in Condition No. 23 in Section K, whenever a deviation occurs in which the temperature of the flare falls below 1,400 degrees Fahrenheit, the operator shall take necessary corrective actions as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective actions taken shall be included in the semi-annual reporting.

All deviations shall be reported to the South Coast AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit.

The operator shall submit an application with a quality improvement plan (QIP) in accordance with 40 CFR Part 64.8 to the South Coast AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the South Coast AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall keep adequate records in a format that is acceptable to the South Coast AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.
[40 CFR Part 64]

19. Operation of this equipment shall not result in the release of raw landfill gas into the atmosphere. Any breakdown or malfunction of this equipment resulting in the emission of raw landfill gas shall be reported to the South Coast AQMD within twenty four hours after occurrence and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions into the atmosphere.
[Rule 430]



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

20. The applicant shall conduct a gas leak detection program with a combustible detector calibrated for methane by inspecting the blowers and all equipment downstream of the blowers. This inspection program shall be conducted once a week. All leaks detected above 500 ppm shall be reported to the South Coast AQMD within 24 hours of detection and repaired within 3 working days of detection. A log showing the results of each inspection shall be maintained and shall be available to South Coast AQMD personnel upon request.
[Rule 1303(a)(1)-BACT, 402]
21. All records shall be kept and maintained for at least five years and shall be made available to South Coast AQMD personnel upon request.
[Rule 3004(a)(4)]

Emissions and Requirements:

22. This equipment is subject to the applicable requirements of the following rules and regulations:
- CO: 2000 ppmv, Rule 407
 - CO: 0.06 lb/mmBTU heat input – BACT/LAER, flare no. 2
 - NOx: 0.06 lb/mmBTU heat input- BACT/LAER, flare no. 1
 - NOx: 0.025 lb/mmBTU heat input- BACT/LAER, flare no. 2
 - PM: Rule 404, see Appendix B for emissions limits
 - PM: 0.1 gr/scf, Rule 409
 - Methane: 99 wt. % destruction efficiency, Rule 1150.1
 - NMOC: 98 wt. % destruction efficiency or < 20 ppmv, hexane, 3% O2 dry, Rule 1150.1, 40 CFR 60 Subpart WWW

Treatment System Permit to Operate



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

PERMIT TO CONSTRUCT/OPERATE

Permit No. G55163
A/N 603249

Equipment Description:

Landfill Gas Treatment System (LFGTS), 16,000 scfm design capacity, consisting of:

1. Raw landfill gas (LFG) supply line from existing gas collection header.
2. Up to six, carbon adsorber vessels, in parallel, each containing at least 27,000 pounds of granular activated carbon media with a LFG bypass line.
3. Condensate sump with pneumatic pumps and associated piping.

Conditions:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
[Rule 204]
2. This equipment shall be properly maintained and kept in good operating condition at all times.
[Rule 204]
3. This equipment shall be operated by personnel properly trained in its operation.
[Rule 204]
4. The owner or operator of this equipment shall provide to South Coast AQMD, at least 30 days prior to the initial equipment installation, a system design and process flow diagram, controls, locations of and type of process instrumentation including temperature and pressure gauges, and equipment specifications (including but not limited to make, model, capacity, motor size, quantity and type of adsorbent media).
[Rule 204]
5. At least 24 hours prior to startup of the initial equipment installation, the owner or operator shall notify the South Coast AQMD of completion of construction of the initial equipment installed and intention to commence operation.
[Rule 204]
6. This permit shall expire if construction of this equipment is not completed within one year from the date of issuance of this permit unless an extension is granted by the Executive Officer.
[Rule 205]
7. Sampling ports shall be installed at the inlet and outlet to the sulfur treatment system to allow the collection of landfill gas samples.
[Rule 204]



**FACILITY PERMIT TO OPERATE
CHIQUITA CANYON LLC**

8. Spent adsorbent media removed from the landfill gas treatment system (LFGTS) shall be stored in closed containers prior to disposal.
[Rule 204]
9. Samples shall be collected at the inlet and outlet of the LFG treatment system at initial start-up and on a monthly basis for the first three months, and, thereafter, on a quarterly basis. LFG treatment process operating parameters shall be recorded for each sampling event. All samples shall be analyzed for concentration (ppmv) of:
 - A. Total non-methane organic compounds (TNMOC)
 - B. Total reduced sulfur, as H₂SAll sampling and analyses shall conform to EPA, CARB, or South Coast AQMD approved methods (if available). All results shall be recorded.
[Rule 204, 217]
10. The LFGTS shall be operated as per manufacturer's recommended operating specifications. Records of the type of media, media replacement date, and quantity used for the respective adsorption vessel shall be kept on file.
[Rule 204]
11. The landfill gas combusted in air pollution control equipment shall contain no more than 150 ppmv total sulfur compounds, calculated as H₂S, averaged daily. The owner or operator of this equipment shall demonstrate compliance with this limit by regular sampling and laboratory analysis of gas samples collected at the outlet of the LFGTS and prior to air pollution control equipment per the approved Rule 431.1 Alternative Monitoring Plan A/N 352929.
[Rule 431.1]
12. All treated and untreated LFG shall be vented, at all times, to an air pollution control system which is in full operation and has a valid Permit to Construct/Operate issued by the South Coast AQMD.
[Rule 204]
13. Operation of this equipment shall not result in the release of raw LFG into the atmosphere. Any breakdown or malfunction which results in emissions of landfill gas shall be reported to the South Coast AQMD within one hour after occurrence, or within one hour of the time the owner/operator personnel knew or reasonably should have known of the occurrence, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions into the atmosphere.
[Rule 402, 430, 1150.1]
14. If a distinct odor resulting from the operation of this equipment is detected at or beyond the property line, all work shall cease until the odor sources are determined and immediate remedial measures shall be undertaken to correct the problem. Mitigation measures which are deemed appropriate by South Coast AQMD personnel as necessary to protect the comfort, repose, health, or safety of the public shall be implemented upon request.
[Rule 402]
15. All records required by this permit shall be kept and maintained for a minimum of five (5) years and shall be made available to South Coast AQMD personnel upon request.
[Rule 3004(a)(4)]

Rule 431.1 Alternative Monitoring Plan



South Coast Air Quality Management District

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

April 2, 2003

Mike A. Kaiser
Republic Services of California, L.L.C.
29201 Henry Mayo Drive
Valencia, California 91355

RE: Rule 431.1 Alternative Monitoring Plan for the Chiquita Canyon Landfill
Facility ID: 119219 Application No. 352929

Dear Mr. Kaiser;

On August 8, 1997, an Alternative Monitoring Plan (AMP) was submitted to demonstrate compliance with South Coast Air Quality Management District (AQMD) Rule 431.1 at the Chiquita Canyon Landfill. A subsequent revision to the AMP was submitted on May 26, 1998. The AMP has been approved by AQMD, CARB and EPA provided that the following conditions are met:

- 1) The colorimetric tubes (TUBES) for analyzing H_2S as TS shall be used in accordance with manufacturer's instructions. Testing with TUBES shall be conducted by personnel properly trained in its operation. The TUBES shall be used within their shelf life.
- 2) Based on the concentration of Total Sulfur (TS) in the landfill gas (as measured by a TUBE), tiered sampling and reporting requirements as outlined in the following table shall be implemented.

ACTION LEVEL	PROPOSED MONITORING	AQMD MODIFIED TIERS	SAMPLING REQUIREMENT
Tier I	$TS \leq 100$ ppm	$TS < 80$ ppm	- Quarterly using Method 307-91 - Monthly using TUBE
Tier II	$100 \text{ ppm} \leq TS < 120$ ppm	$80 \text{ ppm} \leq TS < 120$ ppm	- Monthly using Method 307-91 - Weekly using TUBE
Tier III	$120 < TS \leq 135$ ppm	$120 \leq TS \leq 138$ ppm	- Weekly using Method 307-91 - Daily using TUBE
Tier IV	$135 < TS \leq 150$ ppm	$TS \geq 138$ ppm	- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91

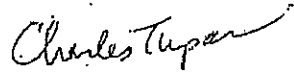
Republic Services of California L.L.C.
April 2, 2003

Page 2 of 2

Since this AMP is approved, fuel gas determination and reporting for sulfur content, as described in Rule 431.1(g)(10) and outlined in your approved Rule 1150.1 Compliance Plan, no longer serves as a surrogate method of compliance with Rule 431.1.

If you have any further questions, please contact me at (909) 396-2684.

Sincerely,



Charles Tupac
Air Quality Analysis and Compliance Supervisor
Toxics and Waste Management Team

CT:sc

cc: David Jones, Compliance
File

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

IN MATTER OF THE PETITION OF

CHIQUITA CANYON LANDFILL

for a variance under Section
42359.5 et seq. of the
California Health and Safety
Code

Case No. **6177-3**
Facility ID No. 119219

EX PARTE MINUTE ORDER

M.O.
IV
2/15/23
RV
5/3/23

I. Good Cause:

The verified petition having been submitted and considered by the Hearing Board Chair; and thereupon determined that good cause exists to issue an ex parte emergency variance to petitioner, an essential public service, without public notice or hearing because a February 1, 2023, lab analysis of landfill gas samples reported elevated levels of dimethyl sulfide, causing petitioner to be in violation, or eminently in violation, of permit limits of total sulfur content and flare emissions.

II. Rules/Conditions:

Rules 203(b) and 3002(c)(1) {from Facility Wide Condition No. 3, Conditions Nos. 16 & 17 of P/O No. G23473 and Condition No. 11 of P/O No. G55163} and Rule 431.1(c)(3) of the South Coast AQMD Rules and Regulations.

III. Equipment & Location:

Landfill gas flare system, P/O No. G23473, and landfill gas treatment system, P/O No. G55163, located at **29201 Henry Mayo Drive, Castaic, CA 91384**.

IV. Period of Variance:

Commencing February 8, 2023 and continuing for 30 days or until the interim variance hearing currently scheduled for February 15, 2023, whichever comes first.

V. Variance Conditions:

1. Petitioner shall expedite, to the maximum extent feasible, replacement of granular activated carbon media in the Landfill Gas Treatment System (under Permit

G55163, A/N 603249), including the execution of contracts, as well as the delivery, replacement, startup, and testing of any operation necessary to replenish and/or replace spent granular activated carbon media in the Landfill Gas Treatment System. Petitioner shall ensure adequate stock of all odor control products and supplies are maintained on site.

2. Petitioner shall prioritize and maximize the use and operation of the landfill gas flare No. 2 over landfill gas flare No. 1 (under Permit G23473, A/N 491442) to the maximum extent feasible.
3. Petitioner shall sample, analyze, and record (upon receipt of laboratory data) the landfill gas sulfur compounds combusted in each flare (under Permit G23473, A/N 491442) at least once each shift using colorimetric tests for hydrogen sulfide (H₂S) and at least once each day for total sulfur compounds as H₂S using South Coast AQMD Method 307-91. Sulfur compound readings and analysis shall be reported to South Coast AQMD pursuant to Condition No. 5.
4. Petitioner shall maintain a record of the following information, and provide such records to the District pursuant to Condition No. 5:
 - A. The hourly and daily flow of landfill gas combusted, in standard cubic feet, in each flare (No. 1 & No. 2 under Permit G23473, A/N 491442) and the total amount of landfill gas combusted at the facility;
 - B. The daily flow of landfill gas not flared, in standard cubic feet, if applicable;
 - C. The results of the sulfur readings, sampling, and analyses, calculated as hydrogen sulfide (H₂S);
 - D. Daily excess emissions in pounds (lbs) of sulfur oxides (SO_x) per day for each flare (under Permit G23473, A/N 491442), including any assumptions, equations, supporting information, and basis for the calculations used in the excess emissions calculations.
5. Petitioner shall submit a written report weekly beginning Monday, February 13, 2023 on the progress of the status of the Landfill Gas Flares (under Permit G23473, A/N 491442), Landfill Gas Treatment System (under Permit G55163, A/N 603249), and efforts to resolve the total sulfur concentration in the landfill gas exceeding 150 ppmv calculated as H₂S. Weekly reports shall be submitted to the District each Monday not later than 5:00pm via email to [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov)]. The initial weekly report shall provide information on the landfill gas sulfur compounds measurements and laboratory analysis conducted in the last 6 months pursuant to Rule 431.1 Alternative Monitoring Plan (under Plan no. 352929). Each weekly report shall contain at a minimum the following information:
 - A. The landfill gas sulfur compounds measurements and laboratory analysis identified in Condition No. 3.
 - B. The landfill gas records and calculations identified in Condition No. 4.

- C. Estimated schedule for any replacement or refurbishment of granular activated carbon media in the Landfill Gas Treatment System (under Permit G55163, A/N 603249) identified in Condition No. 1.
 - D. Description of any problems or delays, if any, encountered or projected to occur pertinent to the execution of contracts, as well as the delivery, replacement, startup, and testing of any operation necessary to replenish and/or replace spent granular activated carbon media in the Landfill Gas Treatment System (under Permit G55163, A/N 603249).
 - E. Specifications of the equipment and materials used for the daily colorimetric tests (include in initial weekly report (due Monday February 13, 2023), and in the subsequent weekly report(s) only if there is a change in the specifications of the colorimetric instrumentation or method used).
 - F. Status updates pursuant to Condition no. 6 (beginning February 27, 2023).
 - G. Status updates pursuant to Condition No. 7 (beginning February 27, 2023).
6. Petitioner shall perform a root cause analysis to investigate and determine the underlying cause of total sulfur concentration exceedances and submit a preliminary written report to South Coast AQMD staff via email to Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov), Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov) within fourteen (14) days of the granting of this variance. Any updates to this analysis shall be included in the weekly report submitted pursuant to Condition no. 5, until it reaches a final written report.
7. Petitioner shall investigate the availability, viability, and utilization, including pilot testing if needed, of an alternative sulfur compound treatment system that controls, treats, or removes dimethyl sulfide and other sulfur compounds and shall report and submit status updates on this investigation in the weekly report per Condition no. 5 starting in the weekly report that is due February 27, 2023 by 5:00pm. Any permit applications required to install and operate equipment shall be complete and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.
8. Petitioner shall investigate the availability, viability and utilization of valid and active South Coast AQMD permitted Various Location sulfur compound treatment system that controls, treats, or removes dimethyl sulfide and other sulfur compounds and shall report and submit status updates on this investigation in the weekly report per Condition no. 5 starting in the weekly report that is due February 27, 2023 by 5:00 pm.
9. Excess emissions of unflared landfill gas or from the combustion of landfill gas in the flares (under Permit G23473, A/N 491442) shall be calculated in a manner approved by South Coast AQMD staff. All necessary supporting information to determine an appropriate calculation method shall be provided to South Coast AQMD staff [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov), and Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov)] within five (5) days of the granting of this variance.

10. The granting of relief pursuant to this variance shall not exempt Petitioner from complying with all other applicable South Coast AQMD Rules and Regulations, including those for nuisance per Rule 402.
11. Petitioner shall pay all applicable fees to the Clerk of the Board or the variance shall be invalidated pursuant to Rule 303(k), except for excess emissions fees (as calculated according to Table II of South Coast AQMD Rule 303), which shall be paid within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board.
12. Petitioner shall notify the South Coast AQMD (Attention: Kathryn Roberts, kroberts@aqmd.gov and Ryan Mansell, rmansell@aqmd.gov) and the Clerk of the Board in writing when final compliance is achieved.

VI. **EXCESS EMISSIONS**: To be determined

DATED: February 8, 2023

For the Board:



Cynthia Verdugo-Peralta, Chair

Prepared by Rosalinda Diaz

M.O.
RV
5/3/23

**BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
MINUTE ORDER**

CHIQUITA CANYON LANDFILL, LLC

29201 Henry Mayo Drive
Castaic, CA 91384

Case No: 6177-3

Facility ID: 119219

Hearing Date: 02/15/2023

Hearing Type: Interim

Consent Calendar:

Next Hearing: 5/3/23

HEARING BOARD ACTION

Action: Granted

Starting Date: *02/15/2023

Ending Date: 05/09/2023

RULES

203(b) {from Facility Wide Condition No. 3; Permit Condition Nos. 16 & 17 of Permit to Operate (P/O) No. G23473; and from Permit Condition No. 11 of P/O No. G55163}

431.1(c)(2)

3002(c)(1) {from Facility Wide Condition No. 3; Permit Condition Nos. 16 & 17 of P/O No. G23473; and from Permit Condition No. 11 of P/O No. G55163}

COMMENTS

***The Variance period began with the granting of the Ex Parte Emergency variance on February 8, 2023, the Interim variance commenced on February 15, 2023, and is for 90 days or until the Regular variance hearing, currently scheduled for May 3, 2023, whichever occurs first.**

EQUIPMENT DESCRIPTION

DEVICE/APPLICATION/PERMIT

Landfill Gas Flare System
Landfill Gas Treatment System

G23473
G55163

CONDITIONS

1. Petitioner shall expedite, to the maximum extent feasible, replacement of granular activated carbon media in the Landfill Gas Treatment System (under Permit G55163, A/N 603249), including the execution of contracts as well as the delivery, replacement, startup, and testing of any operation necessary to replenish and/or replace spent granular activated carbon media in the Landfill Gas Treatment System. Petitioner shall ensure adequate stock of all odor control products and supplies are maintained on site.
2. Petitioner shall prioritize and maximize the use and operation the landfill gas flare No. 2 over landfill gas flare No. 1 (under Permit G23473, A/N 491442) to the maximum extent feasible when combusting landfill gas at the facility (FID 119219).
3. Petitioner shall sample, analyze, and record the landfill gas sulfur compounds combusted in each flare (under Permit G23473, A/N 491442) at least once each shift using

colorimetric tests for hydrogen sulfide (H₂S) and at least once each day sample for analysis for total sulfur compounds as H₂S using South Coast AQMD Method 307-91. Petitioner shall record South Coast AQMD Method 307-91 analysis upon receipt of laboratory analysis report. Each recorded measurement or result shall be documented with the time and date of the measurement or sample collection was conducted, and initialed by the personnel that conducted the measurement or sample collection. Sulfur compound readings and analysis shall be reported to South Coast AQMD pursuant to Condition No.5.

4. Petitioner shall maintain a record of the following information, and provide such records to the South Coast AQMD pursuant to Condition No.5:
 - A. The hourly and daily flow of landfill gas combusted, in standard cubic feet, in each flare (No. 1 & No. 2 under Permit G23473, A/N 491442) and the total amount of landfill gas combusted at the facility;
 - B. The daily flow of landfill gas not flared, in standard cubic feet, if applicable;
 - C. The results of the sulfur readings, sampling, and analyses, calculated as hydrogen sulfide (H₂S);
 - D. Daily excess emissions in pounds (lbs.) of sulfur oxides (SO_x) per day for each flare (No. 1 & No. 2 under Permit G23473, A/N 491442), including any assumptions, equations, supporting information, and basis for the calculations used in the excess emissions calculations.
5. Petitioner shall submit a written report weekly beginning Monday, February 20, 2023 on the progress of the status of the Landfill Gas Flares (under Permit G23473, A/N 491442), Landfill Gas Treatment System (under Permit G55163, A/N 603249), and efforts to resolve the total sulfur concentration in the landfill gas exceeding 150 ppmv calculated as H₂S. Weekly reports shall be submitted to the District each Monday no later than 5:00pm via email to [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov)]. Each weekly report shall contain at a minimum the following information:
 - A. The landfill gas sulfur compounds measurements and laboratory analysis identified in Condition No. 3.
 - B. The landfill gas records and calculations identified in Condition No.4.
 - C. Estimated schedule for any replacement or refurbishment of granular activated carbon media in the Landfill Gas Treatment System (under Permit g55163, A/N 603249) identified in Condition No.1.
 - D. Description of any problem or delays, if any, encountered or projected to occur pertinent to the execution of contracts, as well as the delivery, replacement, startup, and testing of any operation necessary to replenish and/or replace spent granular activated carbon media in the Landfill Gas Treatment System (under Permit G55163, A/N 603249).
 - E. Specifications of the equipment and materials used for the daily colorimetric tests weekly report(s) only if there is a change in the specifications of the colorimetric instrumentation or method used.
 - F. All wellhead temperature readings from the past twelve (12) months in a Microsoft Excel spreadsheet format (included in the February 27, 2023 status update report).
 - G. All wellhead temperature readings, lab analysis, and Draeger tube readings for landfill gas from the past twelve (12) months in a Microsoft Excel spreadsheet format (included in the February 27, 2023, status update report).
6. Petitioner shall perform a root cause analysis to investigate and determine the underlying cause of total sulfur concentration exceedances and submit a preliminary written report to South Coast AQMD staff via email to Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov), Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov) by February 22,

2023. Any updates to this analysis shall be included in the weekly report submitted pursuant to Condition No. 5, until it reaches a final written report.
7. By no later than 5:30 p.m. on February 28, 2023, the Petitioner shall submit a complete permit modification application to the Landfill Gas Treatment System (under Permit G55163, A/N 603249) to include alternative media and/or additional media vessels. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.
 8. By no later than 5:30pm on March 31, 2023, the Petitioner shall submit a complete permit application for a slip stream pilot test to evaluate alternative sulfur removal proposals. The submittal shall be accompanied with a Title V Revision application and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.
 9. Petitioner shall investigate the availability, viability, and utilization, including pilot testing if needed, of an alternative sulfur compound treatment system that controls, treats, or removes dimethyl sulfide and other sulfur compounds and shall report and submit status updates on this investigation in the weekly report per Condition No. 5 starting in the weekly report that is due February 27, 2023, by 5:00pm.
 10. Petitioner shall investigate the availability, viability, and utilization of valid and active South Coast AQMD permitted Various Location sulfur compound treatment system that controls, treats, or removes dimethyl sulfide and other sulfur compounds and shall report and submit status updates on this investigation in the weekly report per Condition No. 5 starting in the weekly report that is due February 27, 2023, by 5:00 pm.
 11. Whenever South Coast AQMD permitted Various Location equipment is brought or operated on site to process, treat or control the landfill gas, Petitioner shall:
 - A. Notify South Coast AQMD in writing of the date and time that the equipment is brought to the facility in the corresponding weekly report per Condition No. 5 and include a copy of the various locations permit (s) in the corresponding weekly report per Condition No. 5.
 - B. Maintain a daily log including the following information for each permit unit: permit number, application number, equipment location, and start and end time of equipment operation (as applicable). Petitioner shall submit the daily log in the corresponding weekly report per Condition No. 5.
 - C. Notify South Coast AQMD in writing of the date and time that the equipment is removed from the facility in the corresponding weekly report per Condition No. 5.
 12. Petitioner shall collect integrated landfill surface samples for analysis at least every two weeks as specified in Rule 1150.1 Attachment A 2.0, the first round of which shall begin no later than 7 days after the variance is granted. In the event the Petitioner is unable to sample the landfill surface area or grids due to inaccessibility or dangerous conditions for a technician, Petitioner shall document the date and the conditions that do not allow the sampling of the area or grid.
 13. Petitioner shall conduct instantaneous landfill surface monitoring at least monthly as specified in Rule 115.1 Attachment A 3.0, the first round of which shall begin no later than 14 days after the variance is granted. In the event the Petitioner is unable to monitor the landfill surface area or grid due to inaccessibility or dangerous conditions for a technician, Petitioner shall document the date and the conditions that do not allow the monitoring of the area or grid.
 14. Excess emissions from any release of unflared landfill gas to atmosphere in the flares (under Permit G23473, A/N 491442) shall be calculated in a manner approved by South Coast AQMD staff. All necessary supporting information to determine an appropriate calculation method shall be provided to South Coast AQMD staff [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov), Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov) and Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov) within thirty five (35) days of the granting of this variance.

15. Petitioner shall pay all applicable fees to the Clerk of the Board, or the variance shall be invalidated pursuant to Rule 303(k), except for excess emission fees, which shall be paid within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board. Petitioner shall pay excess emission fees from the combustion of landfill gas in the flares (under Permit G23473, A/N 491442) based on the methodology used in the petition:

TRS: Total reduced sulfur concentration calculated as H₂S using South Coast AQMD Method 307-91
lb./scf: pounds per standard cubic feet
scf/day: standard cubic feet per day
LFG: landfill gas
SOx: Oxides of Sulfur expressed as sulfur dioxide

16. The granting of relief pursuant to this variance shall not exempt Petitioner from complying with all other applicable South Coast AQMD Rule and Regulations, including those for nuisance per Rule 402.
17. Petitioner shall pay all applicable fees to the Clerk of the Board, or this variance shall be invalidated pursuant to Rule 303(k), except for excess emissions fees (as calculated according to Table II of South Coast AQMD Rule 303), which shall be paid within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board.
18. Petitioner shall notify the South Coast AQMD (Attention: Kathryn Roberts, kroberts@aqmd.gov) and the Clerk of the Hearing Board in writing when final compliance has been achieved.

EXCESS EMISSIONS

SOx: 230 lbs./day

Failure to comply in full with any and all conditions and increments of progress may result in modification or revocation of this order by the Hearing Board, and/or enforcement actions by the South Coast AQMD.

REMINDER

The Regular Variance hearing is scheduled for May 3, 2023.

Present:

Cynthia Verdugo-Peralta, Chair
Robert Pearman, Esq., Vice Chair
Micah Ali
Mohan Balagopalan
Dr. Allan Bernstein, DPM

Representing the Petitioner: Jacob Duginski, Attorney at Law

Representing the Respondent: Kathryn Roberts, Senior Deputy District Counsel

Witness for the Petitioner: Patrick Sullivan, Consultant, SCS Engineering

Petitioner's Exhibits: #1 - Weekly Report from SCS Engineering dated 2/13/23
#2 - Timeline

Respondent's Exhibits: A - Proposed Interim Variance Conditions

Comments:

Testimony was presented that on January 31, 2023, petitioner collected a laboratory sample of its landfill gas, after being notified that Ameresco Chiquita Energy LLC shutdown its landfill gas-to-energy plant due to high sulfur in the landfill gas coming from Chiquita Canyon Landfill. On February 1, 2023, petitioner received a lab report indicating that the total reduced sulfur concentration in the landfill gas was at 143 parts per million by volume (ppmv). The report showed elevated dimethyl sulfide (DMS) at 117 ppmv. Petitioner's permits limit total sulfur concentrations to 150 ppmv, and Rule 431.1 Alternative Monitoring Plan states that sulfur content at or above 138 ppm is a potential violation of Rule 431.1. Petitioner called South Coast AQMD notifying them of a breakdown for the Alternative Monitoring Plan, as the sulfur content was at or above 138 ppm. On February 2, 2023, Petitioner immediately began compiling data to complete calculations to determine if hourly and daily oxides of sulfur (SOx) emissions were exceeded. The calculations determined that the flares were exceeding their permitted SOx limits. On February 3, 2023, Petitioner prepared the forms as a follow-up to the breakdown and described the sulfur concentrations and SOx emissions exceedances. Petitioner submitted a petition on February 4, 2023, which was as soon as petitioner was able to get the petition prepared. The petition was processed on February 7, 2023, which was not enough time to meet the notice requirements to the public for a regular variance to be held on February 15, 2023.

Motion: Balagopalan/Bernstein 5-0

Board Review/Approval


Mohan Balagopalan

Dated

4/3/23

Prepared by Altheresa Rothschild

