

Proposed Contested Conditions, June 4 and 17, 2025 Status Hearing

South Coast AQMD v. Chiquita Canyon, LLC (Case No. 6177-4)

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
75	<p>Respondent shall install and operate a real-time, remote monitoring and control system (RMCS) to monitor and control the operation of vertical landfill gas extraction wells, and landfill gas headers. The RMCS shall include a minimum of 21 remote monitoring and control (controller) units mounted on wellheads located around the outside perimeter of the data determined Reaction boundary as specified in Condition 9(b), and shall include a minimum of 5 remote monitoring only (monitor) units mounted on landfill gas headers conveying gas from the Condition 9(b) Reaction boundary. The RMCS shall be procured, installed, and operated according to the following requirements:</p> <p>a. Procurement</p> <p> i. Respondent shall contact at least two reputable, third-party, RMCS vendors/distributors, separate from Respondent or its existing gas collection consultants, to determine the operational capabilities of their systems (temperature, pressure, gas quality, or other limitations), and ability to operate according to the requirements of this Order for Abatement. Respondent shall initiate contact with the vendors/distributors by June 27, 2025, with full Respondent and vendor/distributor communication logs and/or correspondence, including RMCS capabilities or any limitations, provided to South Coast AQMD [[Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by July 18, 2025, unless otherwise approved in writing by South Coast AQMD.</p> <p> ii. Respondent shall make request(s) for quote(s) from the third-party vendor(s)/distributor(s) by August 1, 2025,</p>	[None]

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>unless otherwise approved in writing by South Coast AQMD.</p> <p>iii. Respondent shall finalize contracts with the third-party RMCS vendor/distributor, and shall submit finalized contracts to South Coast AQMD [[Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by August 22, 2025, unless otherwise approved in writing by South Coast AQMD. The contracts shall include, at a minimum, an agreement for procurement of equipment, installation and setup of equipment, ongoing maintenance, ongoing monitoring of landfill gas data at the site, and ongoing advisement, support, and input from the vendor/distributor on operation of the system.</p> <p>b. Installation</p> <p>i. Upon finalization of contracts, Respondent and its RMCS vendor/distributor shall conduct site assessments to determine the best two method(s) of communication (Radio, Cell, Satellite internet, etc.) for each individual controller unit located on the wellheads, and each individual monitor unit located on the headers by September 12, 2025, unless otherwise approved in writing by South Coast AQMD. The site assessment shall be performed to ensure the units are capable of consistent upload of real-time data to the vendor/distributor's historical data platform and user interface. Each unit shall have at least two methods of communication tied into the unit, to allow for redundancy of data communication.</p> <p>ii. Respondent shall procure, install and begin operation of the minimum 21 controller and 5 remote monitoring units by October 31, 2025, unless otherwise approved in writing by South Coast AQMD. Notice of completed installation and operational start shall be provided to South Coast AQMD [[Baitong Chen, Air Quality Engineer,</p>	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>(bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by November 3, 2025.</p> <p>iii. The controller units shall include 19 permanent units, to be located on a particular wellhead for at least 12 months, except as described in subpart (b)(iv) below, and shall include 2 mobile units which may be relocated on site as necessary. Relocation of the mobile controller units shall be performed according to analysis from Respondent and its vendor/distributor, or according to South Coast AQMD written request.</p> <p>iv. The 19 permanent controller units shall be installed on wells located in the immediate vicinity surrounding the Condition 9(b) Reaction boundary, including the following wells: CV-1906, CV-24120, CV-24126, CV-2455, CV-2454, CV-2305, CV-2476, CV-24148, CV-24149, CV-2314, CV-2474, CV-24151, CV-2472, CV-2488, CV-2482, CV-2480, CV-2466, CV-2344, and CV-2350, or as recommended by Respondent and its vendor/distributor. Any changes to the above-mentioned well selection shall be provided to South Coast AQMD in writing, shall include rationale and justification for installing the controller(s) on any alternative wells, and shall be signed by Respondent and its vendor/distributor. In the case that the Reaction boundary expands beyond the existing data determined reaction boundary (per Condition 9(b)) as of October 31, 2025, which results in or is expected to result in higher temperatures or other unfavorable conditions which may damage the controller equipment, the controller unit(s) may be relocated to well(s) in the immediate vicinity outside the boundary of the revised data determined Reaction boundary.</p> <p>v. The 5 monitor units shall be installed on primary header lines conveying gas from the Condition 9(b) Reaction boundary and surrounding areas. The monitor unit locations shall be determined by Respondent in</p>	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>coordination with its vendor/distributor, for strategic monitoring of the gas collection system to allow for maximum gas extraction, and to allow for quick actions to be taken to resolve issues noticed upstream or downstream of the monitor units. Two monitor units shall be installed on the following header lines: 24-inch header piping running near CV-1426, 12-inch header piping running near CV-24098, unless otherwise approved in writing by South Coast AQMD.</p> <p>vi. The controllers and monitor units shall be battery powered and solar charged, with batteries capable of lasting at least two weeks without solar charging.</p> <p>c. Operation</p> <p>i. The RMCS controller units shall monitor the parameters listed below, at the wellhead of a minimum 21 operating wells located in the immediate vicinity surrounding the data determined Reaction boundary as specified in Condition 9(b), unless otherwise approved in writing by South Coast AQMD. The RMCS controller units shall additionally include the ability to remotely adjust valve positioning and tuning of the wells.</p> <ol style="list-style-type: none"> 1. Wellhead pressure (gauge) 2. Barometric pressure 3. Liquid level sensor 4. Landfill gas temperature 5. Landfill gas flowrate 6. Landfill gas composition (oxygen, methane, carbon dioxide, and balance gas). <p>ii. The RMCS monitor units shall monitor the parameters listed below, on a minimum 5 landfill gas collection headers conveying gas extracted from wells located in and around the data driven Reaction Area as specified in Condition 9(b), unless otherwise approved in writing by South Coast AQMD.</p> <ol style="list-style-type: none"> 1. System pressure (gauge) 2. Barometric pressure 	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>3. Landfill gas temperature</p> <p>4. Landfill gas flowrate</p> <p>5. Landfill gas composition (oxygen, methane, carbon dioxide, and balance gas)</p> <p>iii. The RMCS controller and monitor units shall record or upload the required measurements, as listed above, at least once every 3 hours.</p> <p>iv. Respondent shall monitor the collected controller and monitor data, reviewing it at least daily, and shall utilize the data to guide and optimize the operation of the landfill gas collection system in accordance with a written policy which adheres to recommendations from Respondent's vendor/distributor. The landfill gas collection system shall additionally be optimized according to a written policy developed by Respondent with input from the third-party vendor/distributor, and approved by South Coast AQMD. The written policy shall be submitted to South Coast AQMD [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] not later than September 2, 2025. South Coast AQMD may provide comments or require revisions to the written policy prior to approval. Respondent shall implement the written policy to optimize the landfill gas collection system not later than 7 calendar days following approval in writing from South Coast AQMD, or once the RMCS equipment is installed and operational, whichever is later. Revised written policy(ies) may be submitted in response to data collected and reviewed, changing conditions on site, or other factors as necessary, and shall be implemented according to the same requirements and upon approval from South Coast AQMD. The written policy directing optimization of the landfill gas collection system shall be developed giving due</p>	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>consideration and priority to, at minimum, the following:</p> <ol style="list-style-type: none"> 1. Wellhead valve position (opened or closed) optimized to maximize landfill gas extraction, with healthy gas (methane ~50%, methane to CO2 ratio > 1.0), and minimize oxygen intrusion (maintain oxygen less than 2%); 2. Performance of well tuning immediately if oxygen composition at a wellhead reaches or exceeds 2%, to reduce vacuum at the well, and/or other measures as necessary to reduce oxygen intrusion into the landfill and gas collection system; 3. Optimizing nearby vertical extraction wells to increase vacuum if a wellhead valve is completely open with full vacuum, and the well is not experiencing oxygen intrusion (oxygen is less than 2%), or installing an additional vertical dual extraction well to increase gas extraction in the vicinity; 4. Inspection and appropriate measures to address the controller unit, wellhead, and upstream/downstream conveyance piping for any controller unit which measures an unexpected or unexplained decrease in gas flow of 15% or more over a 1 week period (as compared to the prior week's average), or decrease in vacuum at a wellhead of 5% or more over a one week period (as compared to the prior week's average); 5. Inspection and appropriate measures to address the monitor unit, upstream wellheads, and upstream/downstream conveyance piping for any monitor unit which measures an unexpected or unexplained decrease in gas flow of 5% or more over a 1 week period (as compared to the prior week's average), decrease in vacuum pull in the header of 5% or more over a one week period (as compared to the prior week's average), or increase in oxygen concentration of 0.2% (measured against the prior week's average). 	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>d. Inspection and Maintenance</p> <p>i. Respondent shall perform routine inspection and maintenance of the controller and monitor units, according to a written protocol which adheres to the manufacturer's and vendor's/distributor's recommendations.</p> <p>ii. Calibration of the gas composition measurement devices within each controller and monitor unit shall be performed and documented at least once every 2 weeks.</p> <p>iii. Cleaning of the solar panels attached to the controller and monitor units' batteries shall be performed and documented at least once each calendar month.</p> <p>e. Data and Reporting</p> <p>i. Data collected by the controller and monitor units shall be immediately recorded and uploaded as to be available to review in the vendor/distributor's provided graphical user interface. The graphical user interface shall include historical data, and shall be continuously updated with newly gathered data. Additionally, the graphical user interface shall allow for simple filtering and review of wellhead pressure, system pressure, landfill gas temperature, landfill gas flowrates, and landfill gas composition measurements and trends for each controller and monitor unit. South Coast AQMD shall be granted read and download access to this graphical user interface, to review historical and real-time data.</p> <p>ii. Respondent shall conduct a study of the RMCS and monitoring unit data gathered, LFG well and header issues discovered as a result of the RMCS and monitoring unit and actions performed to resolve issues, dates and times for discovering and resolving issues as a result of the RMCS, comparison of landfill gas well operational history and data pre- and post-RMCS installation, advantages and disadvantages of the RMCS, recommendation of additional wells or headers (if any) which would benefit from the installation of a RMCS, and Respondent and its vendor/distributor's written</p>	

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>recommendation for relocations of the existing RMCS units to alternative wells or headers (if any). The study shall be conducted based on the collection of at least six (6) months of RMCS data. The study shall be submitted to South Coast AQMD [[Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by May 29, 2026, or within 60 days of collecting six (6) months of RMCS data, whichever is later.</p> <p>f. Recordkeeping</p> <p>i. Records documenting the landfill gas collection system adjustments, and inspections of well and header piping performed under Condition 75(c)(iv) shall be kept and maintained daily on site, and shall be provided to South Coast AQMD upon request.</p> <p>ii. Records documenting the inspection and maintenance activities specified in Condition 75(d) shall be kept and maintained on site, and shall be provided to South Coast AQMD upon request.</p> <p>iii. Records documenting any periods of RMCS equipment downtime, controller and/or monitor units involved, the date and times of the downtime, reason(s) for the downtime, and steps taken to resolve the downtime shall be kept and maintained on site, and shall be provided to South Coast AQMD upon request.</p>	
77	<p>Respondent shall conduct aerial surveillance over the entire landfill surface on a monthly basis, and over the Reaction Area defined in Condition 9(a) on a weekly basis, employing a drone equipped with sensors with a minimum detection level of 1 ppmv methane, and in accordance with OTM-51. If an aerial surveillance reading reaches or exceeds 200 ppmv methane, Respondent shall conduct follow-up ground-based surface emission monitoring field inspections according to the</p>	<p>Respondent shall perform, or cause to be performed, a pilot project that conducts aerial surveillance over the entire landfill surface on a monthly basis, employing a drone equipped with sensors with a minimum detection level of 1 ppmv methane, and in accordance with OTM-51, concurrently with surface</p>

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
	<p>procedures of OTM-51 and U.S. EPA Method 21, unless Respondent is unable to monitor the subject locations due to inaccessibility or dangerous conditions for a technician. The follow-up field inspection shall be performed within 2 hours of becoming aware of aerial surveillance exceedances. If an exceedance of 500 ppmv methane is found or confirmed during the follow-up inspection, Respondent shall implement corrective actions within 2 calendar days, including but not limited to, geosynthetic cover maintenance or repair, landfill cover maintenance or repair, wellfield vacuum adjustments, and piping/gas component maintenance or repair. Respondent shall develop a color-coordinated geospatial methane map displaying the results of the methane readings, a color-coordinated geospatial interpolated methane map displaying the change in methane readings as compared to the prior aerial surveillance, and a map displaying geolocated coordinates with local methane peaks. The methane map displaying the results of methane readings shall include a color legend to differentiate locations displaying methane readings of 1) < 200 ppmv, 2) ≥ 200 and < 500 ppmv, 3) ≥ 500 and < 1,000 ppmv, 4) $\geq 1,000$ and < 2,000 ppmv, 5) $\geq 2,000$ and < 5,000ppmv, and 6) ≥ 5000 ppmv, or as otherwise approved by South Coast AQMD. The interpolated map displaying the change in methane readings shall include a color legend to differentiate the magnitude of the differential reading as determined by Respondent, or as otherwise requested by South Coast AQMD. The maps, follow-up field inspection measurements and locations with associated dates/times, causes of exceedances (500 ppmv methane or greater), any corrective actions performed, and documentation (date, time, reasoning) of field inspections not performed due to inaccessibility or dangerous conditions shall be provided in the subsequent monthly report pursuant to Condition 8(c).</p>	<p>emissions monitoring conducted in accordance with U.S. EPA Method 21. If an aerial surveillance reading reaches or exceeds 200 ppmv methane, Respondent shall conduct follow-up ground-based surface emission monitoring field inspections according to the procedures of OTM-51 and U.S. EPA Method 21, unless Respondent is unable to monitor the subject locations due to inaccessibility or dangerous conditions for a technician. The follow-up field inspection shall be performed within 2 hours of becoming aware of aerial surveillance exceedances. If an exceedance of 500 ppmv methane is found or confirmed during the follow-up inspection, Respondent shall implement corrective actions within 2 calendar days, including but not limited to, geosynthetic cover maintenance or repair, landfill cover maintenance or repair, wellfield vacuum adjustments, and piping/gas component maintenance or repair. Respondent shall develop a color-coordinated geospatial methane map displaying the results of the methane readings, a color-coordinated geospatial interpolated methane map displaying the change in methane readings as compared to the prior aerial surveillance, and a map displaying</p>

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
		<p>geolocated coordinates with local methane peaks. The methane map displaying the results of methane readings shall include a color legend to differentiate locations displaying methane readings of 1) < 200 ppmv, 2) ≥ 200 and < 500 ppmv, 3) ≥ 500 and $< 1,000$ ppmv, 4) $\geq 1,000$ and $< 2,000$ ppmv, 5) $\geq 2,000$ and $< 5,000$ppmv, and 6) ≥ 5000 ppmv, or as otherwise approved by South Coast AQMD. The interpolated map displaying the change in methane readings shall include a color legend to differentiate the magnitude of the differential reading as determined by Respondent, or as otherwise requested by South Coast AQMD. The maps, follow-up field inspection measurements and locations with associated dates/times, causes of exceedances (500 ppmv methane or greater), any corrective actions performed, and documentation (date, time, reasoning) of field inspections not performed due to inaccessibility or dangerous conditions shall be provided in the subsequent monthly report pursuant to Condition 8(c).</p> <p>Following three months of data collection using both OTM-51 and U.S. EPA Method 21, the Reaction Committee shall review and analyze concurrently collected</p>

Condition No.	South Coast AQMD Proposed Language	Chiquita Canyon, LLC Proposed Language
		<p>OTM-51 and U.S. EPA Method 21 data, and shall submit a report to South Coast AQMD on the equivalency of the monitoring methods. If the Reaction Committee finds that the two monitoring methods are equivalent, Respondent may conduct the surface emissions monitoring required by Condition Nos. 9 and 10 using OTM-51. If the Reaction Committee finds that the two monitoring methods are not equivalent, Respondent may stop conducting the OTM-51 monitoring pursuant to this Condition No. 77.</p>