

Chiquita Canyon Landfill (Facility ID: 119219)
Case No. 6177-4 Stipulated Order for Abatement (modified on January 17, 2024)
Action Items for South Coast Air Quality Management District

Condition No.	Prior Condition No.	Key Action	Start Date/Deadline Date	Completion Status/Date Submitted
COMPLETED				
1(f)		Designate an employee able to receive notifications related to odor surveillance results	9/7/2023	Completed
31	25	Submit completed design for the geosynthetic cover	9/12/2023	Completed
13		Connect 18 vertical dual extraction wells to the LFG system	9/15/2023	Completed
45	32	Install, maintain, and operate 1,000 feet or more of Semi-Permanent Vapor Odor Control in the Reaction Area	9/20/2023	Completed
1(a)		Contract with a trained third party to conduct odor surveillance	10/6/2023	Completed
12, 12(a)		Form the Reaction Committee	10/6/2023	Completed
12		Provide Reaction Committee member information to South Coast AQMD	10/6/2023	Completed
16		Submit permit modification application for LFG system	10/6/2023	Completed
19		Submit permit modification application for LFG condensate and leachate collection/storage system	10/6/2023	Completed
12(i)	12(d)	Submit report on initial flux chamber study	10/31/2023	Completed
15		Notify South Coast AQMD of number of wells added to wellfield	10/31/2023	Completed
21		Submit permit application for Flare 4	10/31/2023	Completed
31	25	Notify South Coast AQMD on progress of procuring and installing cover	10/31/2023	Completed
44	31	Obtain and install onsite MET station in the Reaction Area	10/31/2023	Completed
17		Identify LFG wells with worst liquid impaction issues in the Reaction Area	11/3/2023	Completed
12(g)(iv)	12(b)(iv)	Submit report on landfill best management practices	11/6/2023	Completed
20		Install and operate Flare 3; notify South Coast AQMD	11/24/2023	Completed: installed 11/15; notified 11/17
12(g)(iii)	12(b)(iii)	Submit report on feasibility of continuous community emission monitoring system	12/1/2023	Completed
32	26, 26(a)	Submit report on air dispersion modeling	12/1/2023	Completed
18		Submit proposed Reaction Area dewatering guidelines	12/5/2023	Completed
12(g)(ii)	12(b)(ii)	Submit report on investigation on landfill reaction cause and solutions to slow the reaction	12/8/2023	Completed
12(g)(iii)	12(b)(iii)	Submit workplan for installation of continuous monitoring	12/31/2023	Completed
12(i)	12(d)	Submit proposal for second flux chamber study	12/31/2023	Completed
12(g)(v)	12(b)(v)	Submit report on health risks of DMS	1/15/2024	Completed
32(b)	26(b)	Submit proposal for additional air modeling study	1/15/2024	Completed
34		Provide South Coast AQMD with access to all real-time continuous monitoring data for TRS and TAC	1/19/2024	Completed
35		Provide South Coast AQMD all SOPs and QA/QC documents for air monitoring equipment	1/19/2024	Completed
41		Submit Rule 1150 Landfill Excavation Plan	1/30/2024	Completed
15(a)		Provide the design and installation schedule for 70 new wells and their associated piping	1/31/2024	Completed
36		Provide updates to South Coast AQMD on the installation of the continuous BTEX/VOC monitoring equipment	2/16/2024	Completed

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Ongoing Actions				
1		Conduct odor surveillance	9/7/2023; ongoing	Ongoing
1(e)		Maintain odor surveillance log	9/7/2023; ongoing	Ongoing
1(f)		Review and modify odor mitigation measures based on odor surveillance results, as appropriate	9/7/2023; ongoing	Ongoing
2		Log odor surveillance notifications and actions taken in response	9/7/2023; ongoing	Ongoing
3		Expedite replacement of granular activated carbon media in LFG treatment system	9/7/2023; ongoing	Ongoing; see Condition 8 monthly reports
3		Ensure adequate stock of all odor control products and supplies are maintained on site	9/7/2023; ongoing	Ongoing
3(a)		Monitor and record landfill gas temperature at the inlet of the treatment system; temp must not exceed 145oF	1/18/2024; ongoing	Ongoing
4		Prioritize Flare 2 and Flare 3 over Flare 1	9/7/2023; ongoing	Ongoing
5		Sample LFG sulfur compounds combusted using colorimetric tests for H2S	9/7/2023; ongoing	Ongoing
5		Sample LFG sulfur compounds for total sulfur compounds as H2S using South Coast AQMD Method 307-91	9/7/2023; ongoing	Ongoing
5		Sample, analyze, and record the landfill gas sulfur compounds in the raw, pre-treatment and pre-control, landfill gas collected from the Reaction Area for total sulfur compounds as H2S using Method 307-91	1/18/2024; ongoing	Ongoing
6		Maintain adequate stock of appropriately ranged colorimetric tubes	9/7/2023; ongoing	Ongoing
7(a), (b)		Measure the total amount of landfill gas combusted at the facility; measure the daily flow of landfill gas not flared	9/7/2023; ongoing	Ongoing; see Condition 8 monthly reports
8		Submit monthly written report to South Coast AQMD	9/30/2023; monthly	Ongoing; submitted on 9/30/23, 10/16/23, 11/20/23, 12/18/23, 01/15/24, 02/19/2024
9		Conduct integrated landfill surface sampling	9/20/2023; ongoing	Ongoing
9(b)		Review and revise Reaction Area	10/6/2023; ongoing	Ongoing
9(a)		Submit revised Reaction Area map and related documentation to South Coast AQMD	10/6/2023; monthly	Ongoing; submitted on 10/06/23, 11/06/23, 12/06/23, 01/05/24, 02/07/2024
10		Conduct instantaneous landfill surface monitoring	9/13/2023; ongoing	Ongoing
11		Continue operating flares and treatment system despite exceedances of the TRS and SOx limits	9/7/2023; ongoing	Ongoing
11		Submit deviation reports in accordance with Title V permit to South Coast AQMD	1/18/2024; ongoing	Ongoing
12(h)	12(c)	Post all expert reports on Odor Mitigation webpage	Upon submission of export reports	Ongoing
13		Expand gas well system	9/7/2023; ongoing	Ongoing
14		Address wells with temps above 170 degrees Fahrenheit	9/7/2023; ongoing	Ongoing
14		Monitor each LFG system well for temperature at least monthly	9/7/2023; ongoing	Ongoing
14		Continue to operate all wells despite temp exceedances as necessary	9/7/2023; ongoing	Ongoing

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14(a)		Ensure the operation of the collection system equipment does not result in the release of raw landfill gas or condensate into the atmosphere	1/18/2024; ongoing	Ongoing

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14(b)		Report breakdowns or malfunctions of the collection system resulting in the emission of raw landfill gas within one hour after occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. Take immediate remedial measure to correct the breakdown or malfunction and prevent further emissions	1/18/2024; as needed	Ongoing
15		Add vertical dual extraction wells (as needed)	9/7/2023; ongoing	Ongoing
15		Expand well-field (as needed)	9/7/2023; ongoing	Ongoing
15		Document subsequent additions to the wellfield	9/7/2023; ongoing	Ongoing; see Condition 8 monthly reports
15(a)		Provide updates to the design and schedule for the 70 wells in Condition 8 reports	2/19/2024; ongoing	See Condition 8 monthly reports
15(c)		Notify South Coast AQMD which wells are scheduled to be installed the following week	1/18/2024; ongoing	Ongoing
15(e)		Use a landfill gas control box vented to an approved emissions control system while drilling a new well	1/18/2024; ongoing	Ongoing
15(f)		Complete and cap each well the same day its construction commences unless the well hole is completely covered or the subsequently installed pipe is capped	1/18/2024; ongoing	Ongoing
15(g)		Connect each horizontal well to an operating header or seal the ends of the well with blind flanges, glued or fused caps, or other approved seals as soon as the well is installed	1/18/2024; ongoing	Ongoing
15(h)		Properly cover and seal all openings and connections of the collection system in accordance with Title V permit and all applicable rules and regulations	1/18/2024; ongoing	Ongoing
15(i)		Install additional stainless steel, carbon steel, or CPVC wells in the Reaction Area	1/18/2024; ongoing	Ongoing
17, 17(a)		Expediently dewater wells being impacted by liquids; take proactive measure to remove additional liquids in the Reaction Area	11/5/2023; ongoing	Ongoing; see Condition 8 monthly reports
18		Implement proposed Reaction Area dewatering guidelines and implementation procedures	12/5/2023; ongoing	Ongoing
22		Continue using portable thermal oxidizer(s) until Reaction Committee concludes they are no longer needed; notify South Coast AQMD within 48 hours of determination	9/7/2023; ongoing	Ongoing
23		Continue using Flares 1 and 2 until Flare 4 is permitted and operational.	9/7/2023; ongoing	Ongoing
24		Operate and maintain the landfill to prevent standing leachate and the pooling or ponding of leachate exposed to the atmosphere	1/18/2024; ongoing	Ongoing
24		If pooling or ponding of liquid/leachate occurs, immediately collect and contain it in a sealed tanker truck or leachate tank, or promptly perform repairs to redirect the leachate into the leachate collection system	1/18/2024; ongoing	Ongoing
25		When encountering a discharge of pressurized leachate, mitigate odors and the dispersion and exposure of leachate into the atmosphere to the maximum extent possible. Once the discharge of pressurized leachate ends, remove soil saturated with leachate or add dry soil cover	1/18/2024; ongoing	Ongoing

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27(a)		Measure, record, and report on leachate temps within the four 6-inch pipes feeding into the onsite frac tanks and at the piping leading into the bottom tanks	1/18/2024; ongoing	Ongoing; see Condition 8 monthly reports
27(b)		Conduct and document inspections for leachate seeps twice each calendar day	1/18/2024; ongoing	Ongoing; see Condition 8 monthly reports
27(c)		Compile and report the details of the inspection logs, including any ongoing leachate seepage and pooling	1/23/2024; weekly	Ongoing; see weekly leachate inspection reports
27(d)		Measure and record quantities of leachate sent offsite for disposal/ treatment	1/18/2024; ongoing	Ongoing; see Condition 8 monthly reports
27(d)		Submit copies of leachate manifests to South Coast AQMD within 3 weeks of request	1/18/2024; as requested	Ongoing
28		Operate and maintain the landfill gas and liquids systems with materials capable of handling gases/liquids at the temps measured. Utilize casing materials for elevated temp wells as agreed upon with the LEA	1/18/2024; ongoing	Ongoing
28		Provide information pertaining to installed equipment and specifications to SCAQMD upon request	1/18/2024; ongoing	Ongoing
29		Ensure proper capacity to dispose of collected liquids/leachate at appropriate facilities	1/18/2024; ongoing	Ongoing
30	24	Visually inspect landfill cover around the Reaction Area; repair landfill cover Issues as needed; maintain log of cover repairs	9/7/2023; ongoing	Ongoing; see Condition 8 monthly reports
31	25	Notify South Coast AQMD on progress of procuring and installing cover	10/31/23; ongoing	Ongoing; see Condition 8 monthly reports
33	27	Expand and enhance current ambient air monitoring program pursuant to DPH's direction.	9/7/2023; ongoing	Ongoing
33	27	Submit ambient air monitoring reports for DPH to South Coast AQMD	As needed	Ongoing
34(a)		Ensure that live, real-time H2S concentration data, wind speed, and direction from all offsite monitors are accessible on Chiquita's Odor Mitigation webpage, including the acute 1-hour REL for H2S and a map of the monitoring station locations	2/16/2024; ongoing	Ongoing
34(b)		Provide weekly data collected by the offsite monitors on Chiquita's Odor Mitigation webpage in downloadable format	2/16/2024; ongoing	Ongoing
34(b)(i)		Document dates and times of unexpected monitor downtime. Keep documentation of monitor downtime on file and post to Chiquita's Odor Mitigation webpage	2/16/2024; ongoing	Ongoing
35		Provide updates to the QA/QC docs, a calibration log, and maintenance activities performed	1/18/2024; ongoing	Ongoing; see Condition 8 monthly reports
35(a)		Provide South Coast AQMD with the same access as Chiquita to onsite and offsite monitoring equipment	1/18/2024; ongoing	Ongoing
35(a)		Provide South Coast AQMD list of appropriate PPE within 24 hours of request	1/18/2024; ongoing	Ongoing
36(b)		Increase the number of 24-hour time integrated canister sampling and analysis for VOCs at MS-10 and MS-12 to 3 times per week	1/18/2024; ongoing	Ongoing
38		Take at least one representative sample of liquids from the Reaction Area and one from the bottom tanks and analyze per USEPA Method 624.1 for VOCs and TACs	1/18/2024; monthly	Ongoing

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38		Post leachate analytical results on website and provide to South Coast AQMD	Within 1 week of receipt from contract lab	Ongoing
39	28	Maintain Odor Mitigation webpage; update weekly	9/7/2023; weekly	Ongoing
39	28	Translate Odor Mitigation webpage and reports into Spanish	10/6/2023; ongoing	Ongoing
40	29	Host community information meetings	9/14/2023; monthly based on receipt of NOV's	Ongoing
42		Until final approval of Rule 1150 landfill excavation plan, implement additional mitigation measures while conducting non-exempt Rule 1150 excavation activities	When conducting non-exempt Rule 1150 excavation	Ongoing
42(a)		Until final approval of Rule 1150 landfill excavation plan, notify South Coast AQMD at least two days before and within five days after completion of excavation activities	When conducting non-exempt Rule 1150 excavation	Ongoing
43	30	Maintain fresh trash odor mitigation measures during Unfavorable Wind Conditions	9/7/2023; ongoing	Ongoing
44	31	Maintain onsite MET station in the Reaction Area	10/31/2023; ongoing	Ongoing
45	32	Maintain and operate 1,000 feet or more of Semi-Permanent Vapor Odor Control in the Reaction Area	9/20/2023; ongoing	Ongoing
46, 47	33, 34	Operate and maintain a landfill perimeter odor control misting system	9/7/2023; ongoing	Ongoing
51		Permit South Coast AQMD personnel to conduct inspections deemed necessary, including sample collection	1/18/2024; ongoing	Ongoing
51		Provide South Coast AQMD with list of appropriate PPE upon request	1/18/2024; ongoing	Ongoing
52		Host meetings between South Coast AQMD technical staff and Chiquita's technical consultants	1/18/2024; biweekly	Ongoing

Future Actions

37		Take at least 10 liquid samples from wells with pumps in the Reaction Area with the highest average temps to the extent possible and analyze per USEPA Method 624.1	3/5/2024	
37		Submit the results to South Coast AQMD along with the lab analysis from the 10/20/23 sampling event	Within 1 week of the results	
26		Prepare and submit to South Coast AQMD the Discharge of Pressurized Leachate Containment Feasibility Study	3/12/2024	
50		Provide a workplan listing the actions Chiquita plans to take to address the reaction	3/13/2024	
17		Install dewatering sumps/pumps in at least 60% of vertical wells in the Reaction Area capable of extracting liquids; if infeasible, provide detailed rationale and reasoning in Condition 8 report and continue implementing dewatering guidelines	3/15/2024	
36		Provide updates to South Coast AQMD on the installation of the continuous BTEX/VOC monitoring equipment	3/17/2024	
31	25	Add Reaction Committee member relating to public health	3/25/2024	
12(f)		Host a monthly virtual meeting with all members of the Reaction Committee and South Coast AQMD technical staff	March 2024; monthly	
12(f)(iv)		Following each Reaction Committee meeting, prepare meeting summary and post on webpage	March 2024; monthly	

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36		Install and maintain continuous BTEX/VOC monitoring equipment at MS-10 and MS-12	4/1/2024	
12(g)(i)	12(b)(i)	Submit report on study of treatment of DMS and preventative mechanisms for DMS formation	4/30/2024	
12(g)(vi)		Prepare and submit to South Coast AQMD a report of the health impacts from ongoing and long-term exposure to H2S or other speciated sulfur compounds and other HAPs	8/1/2024	
50		Provide quarterly updates to the workplan in Condition 50	6/13/2024; quarterly	
4		Once Flare 4 is in operation, prioritize Flare 3 and Flare 4 over Flare 1 and Flare 2	Once Flare 4 is in operation	
12		Provide new Reaction Committee member information to South Coast AQMD	TBD	
34		Provide South Coast AQMD access to all real-time continuous monitoring data for TRS and TAC at enhanced monitors	Within 5 calendar days after enhanced monitors are brought online	
12(a)(iv)		Add Reaction Committee member relating to public health	TBD	
12(i)	12(d)	Conduct second flux chamber study	No later than 90 days after South Coast AQMD approval of protocol	
12(i)		Submit report on second flux chamber study	No later than 90 days after South Coast AQMD approval of protocol	
15(b)		If Chiquita decides that more wells are imminently necessary, submit the design and installation schedule of the additional wells and their associated piping	Within 14 days of completion of the installation of the 70 wells	
15(b)		Provide updates to the design and schedule for the additional wells	Within 14 days of completion of the installation of the 70 wells; monthly	
15(d)		Notify South Coast AQMD at least 1 week in advance when an additional well or set of wells and associated piping will be installed	Following installation of additional 70+ wells	
15(d)		Provide updates to the design and schedule for the additional wells	Following installation of additional 70+ wells; monthly	
15(j)		Replace any wells in the Reaction Area which are damaged, blocked, pinched, or have temps exceeding 145 degrees F	Following installation of additional 70+ wells; as needed	
15(j)		Notify South Coast AQMD of proposed installation schedule for replacement of damaged, blocked, pinched, or high temp wells	Following installation of additional 70+ wells; within 7 days of discovery	
15(j)		Install replacement well within 7 days of notification; update South Coast AQMD every 7 days until installation is complete	Following installation of additional 70+ wells; within 7 days of notification	

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15(k)		Operate gas extraction wells with less than 3% oxygen and follow BMPs to keep oxygen below 5% in interior wells	Once additional/adequate gas extraction capacity is installed	
15(l)		Install well boots seals on all wells in Reaction Area	TBD	
15(m)		Submit semi-annual as-built drawings in duplicate to South Coast AQMD	TBD; semi-annually	
27(d)		If Chiquita begins onsite leachate treatment, record on a weekly basis quantities of leachate collected and treated onsite	TBD	
32(b)(ii)	26(b)(ii)	Complete additional air modeling study (if recommended) and submit final written report	No later than 150 days after South Coast AQMD approval of protocol	
36(a)		Make continuous BTEX/VOC monitoring data available on Chiquita's Odor Mitigation webpage	Upon installation	