

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

MINUTE ORDER

SOUTH COAST AQMD vs CHIQUITA CANYON, LLC
29201 Henry Mayo Drive
Castaic, CA 91348

Case No: 6177-4
Facility ID: 119219

Hearing Dates: 06/4/2025, 06/17/2025 and 06/24/2025

Hearing Type: Status Report/Modification Order for Abatement (Mod. O/A)

Previous Hearings: 09/06/2023, 01/16/2024, 01/17/2024, 03/21/2024, 04/24/2024, 08/17/2024,
08/27/2024, 11/13/2024 and 04/16/2025

Next Hearings: 10/29/2025 and 11/12/2025 (if needed)

HEARING BOARD ACTION

Action: Modified/Extended

Starting Date: 06/24/2025

Ending Date: 10/31/2026

RULES

203

402

431.1

1150

3002

Health and Safety §41700

EQUIPMENT DESCRIPTION

Landfill Operations

Present:

Micah Ali, Chair
Robert Pearman, Esq., Vice Chair
Jerry P. Abraham, MD MPH CMQ
Mohan Balagopalan
Cynthia Verdugo-Peralta

Representing the Petitioner:

Kathryn Roberts, Principal Deputy District Counsel
Mary Reichart, Senior Deputy District Counsel
Ryan Mansell, Principal Deputy District Counsel

Representing the Respondent:

Megan Morgan, Attorney at Law
Jake Duginski, Attorney at Law
Leigh Barton, Attorney at Law

Witnesses for the Public:

Abigail DeSesa
Kerry Frohling
Jennifer Elkins
James Stephens
Susie Evans
Elizabeth Jeffords

Witnesses for the Petitioner:

Todd Thalhamer, P.E., Senior Waste Management Engineer
Laurance Israel, Supervising Air Quality Inspector
Baitong Chen, Ph.D., Air Quality Engineer II
Stephen Dutz, Laboratory Manager

Witnesses for the Respondent:

Robert Dick, P.E., B.C.E.E.
Neal Bolton, P.E.
Patrick Sullivan, BCES, CPP, REPA

Petitioner's Exhibits:

#73 – Proposed Stipulated Modified Conditions
#74 – Proposed Contested Conditions
#75 – Curriculum Vitae, Todd Thalhamer, P.E.
#76 – CalRecycle, Review – Revised Soil Reaction Break/Barrier Plan – Sept. 20, 2024
#77 – CalRecycle, Review of the November 26, 2024, Revised Soil Reaction Break/Barrier Plan – March 28, 2025
#78 – May 2025 Monthly Reaction Committee Determination
#79 – August 2024 Monthly Reaction Committee Determination
#80 – Borehole Temperature Profiles April-June 2024 – June 6, 2024
#81 – Borehole Temperature Profiles March-May 2025 – May 8, 2025
#82 – Temperature Monitoring Probe Tracking
#83 – Wellheads Selected for Remote Monitoring – Condition No. 75
#84 – Well CV24083 Gas Data
#85 – Testimony Presentation, T. Thalhamer
*#86 – Declaration of Laurance B. Israel
*#87 – Combustion Capacity and Actual Collection
*#88 – Surface Emissions Data Jan 2022-April 2025
#89 – Source Test Report Evaluation – March 25, 2025
#90 – Excerpt, Assessment of Air Emissions from Landfill Surfaces Test Event 4 Report, Table 5.5 - May 2025
#91 – Hydrogen Sulfide Emissions 2023-2025
#92 – Hourly Methane Emissions Data
#93 – Proposed Stipulated Modified Conditions (Redlined)
#94 – Borehole Profiles Six Week Maximum - May 21, 2025
#95 – Borehole Profiles Six Week Maximum – May 28, 2025
*#96 – Declaration of Baitong Chen
#97 – Proposed Stipulated Conditions Nos. 75 & 77

*Entered into Evidence

Respondent's Exhibits:

- PPP – Declaration of Srividhya Viswanathan, P.E.
- QQQ – Declaration of Robert Dick, P.E., B.C.E.E.
- RRR – Declaration of Neal Bolton, P.E.
- SSS – Declaration of Patrick Sullivan, BCES, CPP, REPA
- TTT – Stipulated Order Conditions Chart
- UUU – Robert Dick, P.E., D.C.E.E. Testimony Presentation
- VVV – When Does a Municipal Solid Waste Landfill
Become an Elevated Temperature Landfill (ETLF)?
U.S. Environmental Protection Agency – Jan. 2022
- WWW – 2023-2025 CCL Visitor Logs – AQMD Visits
- XXX – James L Hanson, Spatial and Temporal
Temperature Distributions in Municipal Solid Waste
Landfills, Journal of Environmental Engineering –
Aug. 2010
- YYY – Morton A. Barlaz, Zisu Hao, Craig H. Benson,
Marco J. Castaldi, Joel Ducoste, and Scott Luetlich,
Understanding and Predicting Temperatures in
Municipal Solid Waste Landfills, Prepared for the
Environmental Research and Education Foundation
– 2022
- ZZZ – Temperature Probes Max Depth
- AAAA – CCLF Existing Temperature Probe Map – May
2025
- BBBB – Map of Temperature Probes 2024-2025
Comparison
- CCCC – CCLF Existing Horizontal Collectors Map – May
2025
- DDDD – National Waste & Recycling Association and Solid
Waste Association of North America Comments on
Non-Regulatory Public Docket: Municipal Solid
Waste Landfills Docket ID No. EPA-HA-OAR-2024-
0453 – May 23, 2025
- EEEE – Landfill Methane Rule Update – Landfill Operator
Comments on Proposed Regulatory Concepts –
April 25, 2025
- FFFF – Map of Oxygen – April 2025
- GGGG – Map of Methane to Carbon Dioxide Ratio - April
2025
- HHHH – Map of Methane – April 2025
- IIII – LoCI Controller Brochure
- JJJJ – LFG Wellhead Automated Remote Monitoring Plan
– April 19, 2024
- KKKK – Modified Stipulated Order for Abatement Conditions
66(a), (a)(i), and (a)(ii) Submittal – September 17,
2024
- LLLL – Response to South Coast AQMD Stipulated Order
for Abatement in Case No. 6177-4 Condition
66(a)(iii) – October 11, 2024
- MMMM – Landfill Gas Well Selection for Installation of
Remote Monitoring System Equipment – October
15, 2024

Respondent's Exhibits (cont):

- NNNN – Response to South Coast AQMD Stipulated Order for Abatement in Case No. 6177-4 Condition 66(a)(iv) – October 30, 2024
- OOOO – Proposal to Assess the Viability and Functionality of Landfill Gas Wellfield Automated Remote Monitoring System – January 31, 2025
- PPPP – Supplemental Declaration of Patrick Sullivan, BCES, CPP, REPA
- QQQQ – Supplemental Declaration of Neal Bolton, P.E.
- RRRR – Exhibit Withdrawn
- SSSS – Respondent's Revised Proposed Contested Condition No. 77
- TTTT – Patrick Sullivan, BCES, CPP, REPA Testimony Preparation
- UUUU – W. Park, A. Atreya, H. Baum: Experimental and Theoretical Investigation of Heat and Mass Transfer Processes During Wood Pyrolysis – Nov. 26, 2009
- VVVV – W. Mok, M Antal Jr.: Effects of Pressure on Biomass Pyrolysis II. Heats of Reaction of Cellulose Pyrolysis – Mar. 23, 1983
- WWWW – S. Ciuta, F. Patuzzi, M. Baratieri, M.J. Castaldi: Biomass Energy Behavior Study During Pyrolysis Process by Intraparticle Gas Sampling – 2014
- XXXX – S. Tupsakhare, T. Moutushi, M. Castaldi, M. Barlaz, S. Luettich, C. Benson: The Impact of Pressure, Moisture, and Temperature on Pyrolysis of Municipal Solid Waste Under Simulated Landfill Conditions and Relevance to the Field Data from Elevated Temperature Landfill – Mar. 18, 2020
- YYYY – Excerpt from August 2024 Condition 8 Report – As-Built Well Logs
- ZZZZ – June 10, 2025, Proposed Overall GCCS Site Plan
- AAAAA – Gas Well Information re CV-1906 and CV-2314
- BBBBB – Map of Landfill Gas Wells Collocated with Temperature Monitoring Probes
- CCCCC – LEA Letter to Chiquita Canyon Landfill re CalRecycle Review of the Ongoing Odor Incident at Chiquita Canyon Landfill – Oct. 17, 2023
- DDDDD – Excerpt of SCAQMD Exhibit 81, Solid Waste Borehole Maximum Temperature Profiles Over 6 Weeks, for 3/27/2025 to 5/7/2025
- EEEEEE – Email from Steve Cassulo to Ken Habaradas re Chiquita Canyon Landfill – TMP Temperature Submittal dated May 30, 2025

Public Exhibits:

- P-8 – Email from Abigail DeSesa to Clerk of the Board dated 6/4/25
- P-9 – Email from Jennifer Elkins to Clerk of the Board dated 6/4/25
- P-10 – Email from Kerry Frohling to Clerk of the Board dated 6/18/25
- P-11 – Email from Natalie Tate to Clerk of the Board dated 6/18/25
- P-12 – Email from Abigail DeSesa to Clerk of the Board dated 6/18/25

Comments:

June 4, 2025

On motion of Mr. Ali, seconded by Dr. Abraham, the Board voted to allow Ms. Verdugo-Peralta to participate remotely under the “Emergency Circumstances” of Assembly Bill (AB) 2449. The motion passed 4-0, with Ms. Verdugo-Peralta abstaining.

Public testimony was provided by Ms. DeSesa, Ms. Frohling, Ms. Elkins, Mr. Stephens, Ms. Evans and Ms. Jeffords.

Opening statements were made by both parties. Petitioner’s Exhibits Nos. 73 through 95 and Respondent’s Exhibits PPP through OOOO were marked for identification. Testimony was presented by Mr. Dick and Mr. Thalhamer. The Board continued the hearing to **June 17, 2025**.

June 17, 2025

On motion of Mr. Ali, seconded by Dr. Abraham, the Board voted to allow Ms. Verdugo-Peralta to participate remotely under the “Emergency Circumstances” of AB 2449. The motion passed 4-0, with Ms. Verdugo-Peralta abstaining.

Petitioner’s Exhibit No. 96 and Public Exhibits P-8 and P-9 were marked for identification. Petitioner’s Exhibits Nos. 86, 87, 88 and 96 were entered into evidence. Testimony was presented by Mr. Israel, Dr. Chen and Mr. Dutz. The Board continued the hearing to **June 24, 2025**.

June 24, 2025

On June 20, 2025, Respondent submitted to the Clerk of the Board supplemental Exhibits PPPP through EEEEE. Petitioner responded by filing a Motion to Strike in part, Respondent’s supplemental exhibits, except for the two supplemental declarations submitted to streamline testimony. The Board heard arguments regarding Petitioner’s motion. On motion of Mr. Ali, seconded by Mr. Balagopalan, the Board unanimously **denied** Petitioner’s Motion to Strike.

Respondent’s Exhibits PPPP through EEEEE, with Exhibit RRRR withdrawn, were then marked for identification. Testimony was provided by Mr. Dutz, Mr. Thalmer, Mr. Bolton and Mr. Sullivan. Closing statements were made by both parties and the matter submitted.

Motion:

Ali/Balagopalan

5-0

Board
Review/Approval



Micah Ali, Chair

Dated September 19, 2025

Prepared by James Chavez

Attachment: Stipulated Mod. O/A and Findings and Decision of the Hearing Board

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

In The Matter Of

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT,

Petitioner,

vs.

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

Respondent.

Case No. 6177-4

**FINDINGS AND DECISION FOR A
MODIFIED STIPULATED ORDER FOR
ABATEMENT**

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

Hearing Date: June 4, 17, and 24, 2025

Time: 9:30 A.M.

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

On June 4, 2025, the Hearing Board convened a hearing to consider further modifications to the Stipulated Order for Abatement, which was held pursuant to notice in accordance with the provisions of California Health and Safety Code §40823 and §42451(a) and District Rule 812. The matter was continued to June 17, and again to June 24, 2025. The following members of the Hearing Board were present: Micah Ali, Chair; Robert Pearman, Esq., Vice Chair; Jerry P. Abraham, MD MPH CMQ; Mohan Balagopalan; and Cynthia Verdugo-Peralta. Petitioner South Coast Air Quality Management District (“South Coast AQMD”) was represented by Kathryn Roberts, Principal Deputy District Counsel, Mary Reichert, Senior Deputy District Counsel, and Ryan Mansell, Principal Deputy District Counsel. Respondent Chiquita Canyon, LLC, was represented by Jacob P. Duginski, attorney at law, Megan L. Morgan, attorney at law, and Leigh S. Barton, attorney at law, of Beveridge & Diamond, P.C. Further exhibits were submitted by Petitioner and Respondent, and further testimony from both Petitioner’s and Respondent’s witnesses was taken. The Hearing Board finds and decides as follows:

STIPULATED FINDINGS

1. The Hearing Board convened a hearing on June 4, 2025, continued to June 17, 2025 and continued to June 24, 2025. The hearing was held pursuant to notice in accordance with the provisions of California Health and Safety Code §§ 40823 and 42451(a) and South Coast AQMD Rule 812 to consider modifications to the Modified Stipulated Order for Abatement.

2. The public was given the opportunity to testify and evidence was received.

3. Petitioner and Respondent stipulated to a further modification of conditions of the Order.

4. Petitioner presented evidence through both declaration and live testimony. Supervising Air Quality Inspector Laurence Israel testified to continuing odors in the affected communities, provided updates on the number of complaints (2,700 as of May 29, 2025) and Notices of Violation (38 as of May 29, 2025) issued to Respondent for creation of an odor public nuisance in calendar year 2025, as well as the cumulative totals of complaints and Notices of Violation for public nuisance since the current event back in early 2023 (over 29,000 complaints and 340 Notices of Violation for public nuisance between January 2023 and May 29, 2025). Petitioner also presented evidence of the Respondent's surface emissions monitoring results, collected by Respondent pursuant to the Order (Conditions 9 and 10) as well as pursuant to South Coast AQMD Rule 1150.1. Air Quality Engineer Baitong Chen, Ph.D. testified that since 2023 Respondent has seen elevated levels of surface emissions in both integrated and instantaneous monitoring and that there is not a notable trend showing any decrease in surface emissions since the increase in 2023. Petitioner also presented testimony from Todd Thalhamer, P.E. of CalRecycle. Mr. Thalhamer testified to his review of the temperature, gas composition, liquid levels, landfill settlement, and other associated data, and his expert conclusion that a subsurface elevated temperature (SET) event exists beyond the area that Respondent has delineated in its May, 2025 reaction area determination made pursuant to the Order (Condition 9). On June 10, 2025, during the pendency of Mr. Thalhamer's testimony, Respondent reported its June, 2025 reaction area determination and expanded the boundary east and south in multiple locations.

1 5. Respondent presented evidence of Respondent’s operational status updates and
2 efforts under the current Stipulated Order for Abatement to address the ongoing reaction through
3 both declarations and live testimony of Neal Bolton, P.E.; Srividhya Viswanathan, P.E; Robert
4 Dick, P.E., B.C.E.E.; and Patrick Sullivan, BCES, CPP, REPA. Mr. Dick testified to his
5 methodology for conducting the monthly reaction area boundary determinations and how he
6 considers all the data and parameters required to be considered by Condition 9 as well as other data
7 and parameters as documented in the monthly reports, not just temperature alone. Mr. Dick’s
8 opinion is that the geographical extent of the reaction has remained generally consistent since
9 October 2023, and that while there have been slight modifications to the data-driven reaction area,
10 these are not indicators that the reaction is worsening. Mr. Dick also distinguished between a SET
11 event as described by Mr. Thalhamer and the ETLF event or reaction as described in the Stipulated
12 Order. Mr. Sullivan’s opinion, based on his review of onsite and offsite data collected over the past
13 twenty-nine months, is that the onsite landfill gas and surface emissions data from drone flyovers
14 and flux chamber studies shows that the potential for offsite emissions from the Landfill is
15 decreasing, and that the offsite air quality data shows improvement. Respondent submitted but,
16 pursuant to a stipulation with South Coast AQMD, later withdrew the declaration of Richard Pleus,
17 Ph.D., M.S., and his declaration was not received as evidence.

18 6. At the conclusion of the testimony, Petitioner and Respondent stipulated that there
19 was good cause to adopt the Modified Stipulated Order for Abatement with conditions as presented
20 in Petitioner’s Exhibits 73 and 97, including that:

- 21 a. The imposition of the Modified Stipulated Order for Abatement would result in
22 the mitigation of conditions potentially impacting the public.

23 **CONCLUSIONS**

24 1. The Modified Stipulated Order for Abatement set forth hereinafter is likely to
25 mitigate conditions that could contribute to potential odors and potential nuisance.

26 2. The Modified Stipulated Order for Abatement is not intended to be nor does it act as
27 a variance.

28 3. The Hearing Board need not make the findings required by South Coast AQMD Rule

1 806(a) because the Modified Stipulated Order for Abatement is made pursuant to the stipulation of
2 Petitioner and Respondent.

3
4 **ORDER**

5 THEREFORE, subject to the aforesaid statements and good cause appearing, the Hearing
6 Board hereby orders Respondent to comply with California Health and Safety Code Section 41700,
7 South Coast AQMD Rules 402, 203, 431.1, and 3002, and all conditions of Respondents Permits.
8 The Hearing Board further hereby orders Respondent to comply with the following conditions and
9 increments of progress:

10 **Odor Surveillance**

- 11 1. Respondent shall conduct odor surveillance in the communities surrounding CCL as
12 follows:
- 13 a. Respondent shall contract with a trained third party to conduct odor surveillance
14 each operating day within thirty (30) days after the issuance of the September 6,
15 2023 Order (the "Initial Order"). Respondent shall conduct odor surveillance each
16 operating day until the trained third party has been contracted. Respondent, or
17 Respondent's contractor, as applicable, shall conduct community odor surveillance
18 at least twice each operating day, once between the hours of 6:00 a.m. and 11:00
19 a.m. and once between the hours of 7:00 p.m. and 12:00 a.m. If a three-week period
20 passes without Respondent receiving a Rule 402 NOV from the South Coast
21 AQMD, or detecting odors at above an intensity of 2 at more than 2 stops during a
22 single surveillance, then Respondent, or Respondent's contractor, as applicable,
23 may stop conducting the odor surveillances. If Respondent, or Respondent's
24 contractor, as applicable, has stopped conducting the odor surveillances pursuant to
25 this condition and Respondent subsequently receives a Rule 402 NOV from the
26 South Coast AQMD, then Respondent, or Respondent's contractor, as applicable,
27 must resume conducting the odor surveillances until another three-week period
28 passes with no Rule 402 NOVs issued by the South Coast AQMD, or without

Respondent or Respondent's contractor, as applicable, detecting odors at above an intensity of 2 at more than 2 stops in a single surveillance.

- b. Respondent, or Respondent's contractor, as applicable, shall conduct an odor surveillance at each of the following Surveillance Locations:

Stop	Description
1.	Intersection of Chiquito Canyon Road and driveway leading to the LA County Fire's Del Valle Regional Training Center
2.	Intersection of Chiquito Canyon Road and Lincoln Avenue
3.	Intersection of Lincoln Avenue and Jackson Street
4.	Intersection of Lincoln Avenue and Harding Avenue
5.	Intersection of Buchanan Way and Chiquito Canyon Road
6.	Intersection of Chiquito Canyon Road and San Martinez Road
7.	Intersection of San Martinez Road and Morningside Drive
8.	Intersection of Lexington Drive and Morningside Drive
9.	Intersection of Val Verde Road and Trellis Road
10.	Intersection of San Martinez Road and Euclid Ave.
11.	Intersection of San Martinez Road and Kennington Road
12.	Intersection of Hunstock Street and Windsor Road
13.	Intersection of Del Valle Road and Silver Street
14.	Intersection of Del Valle Road and Hasley Canyon Road
15.	Intersection of Hasley Canyon Road and Gibraltar Lane
16.	Intersection of Gibraltar Lane and Alton Way
17.	Intersection of Gibraltar Lane and Springvale Lane
18.	Intersection of Castlebury Place and Picadilly Place
19.	Intersection of Gibraltar Lane and Cambridge Avenue
20.	Intersection of Cambridge Avenue and Hasley Canyon Road
21.	Intersection of Creekbed Road and Firebrand Drive
22.	Intersection of The Old Road and Hillcrest Parkway
23.	Intersection of Hillcrest Parkway and Park Vista Drive at Castaic Elementary School
24.	Intersection of Hasley Canyon Road and Commerce Center Drive (Santa Clarita Valley International School & PlayMakers Preschool)
25.	Intersection of The Old Road and Live Oak Road
26.	Intersection of Live Oak Road and Hidden Trail Road
27.	Intersection of Rangewood Road and Buckskin Drive
28.	Intersection of Live Oak Elementary School at Saddleridge Way
29.	Intersection of Quincy Street and Cambridge Avenue

Stop	Description
30.	Intersection of Commerce Center Drive and Witherspoon Parkway
31.	Intersection of Franklin Parkway and driveway leading to the United States Postal Service
32.	Intersection of Henry Mayo Drive and Cambridge View Drive, leading into the Valencia Travel Village RV Resort
33.	Intersection of Valencia Boulevard at West Ranch High School
34.	Intersection of Magic Mountain Parkway and Commerce Center Drive
35.	Intersection of Commerce Center Drive and Middleton Street
36.	Intersection of Middleton Street and Magic Mountain Parkway
37.	Intersection of Hasley Canyon Road and Valley Glen Street
38.	Intersection of Hasley Canyon Road and Sloan Canyon Road
39.	Intersection of Sloan Canyon Road and Hillcrest Parkway
40.	Intersection of Hillcrest Parkway and The Old Road
41.	Intersection of Hillcrest Parkway at Castaic Middle School
42.	Intersection of Parker Road and The Old Road
43.	Intersection of Parker Road and Cherry Drive
44.	Intersection of Parker Road and Sloan Canyon Road
45.	Intersection of Lake Hughes Road and Castaic Road

- c. Respondent, or Respondent's contractor, as applicable, conducting the odor surveillance shall not have visited the Reaction Area (as defined in Condition 9(a)), working face, or other areas where exposed trash or landfill gas odors exist at CCL within four hours prior to conducting an odor surveillance.
- d. Odor surveillance shall be conducted by proceeding to each Surveillance Location and making an assessment of each parameter listed in Condition No. 1(e). Assessment of each parameter shall be made while standing in ambient air and shall not be made from within a vehicle.
- e. Respondent, or Respondent's contractor, as applicable, shall record odor surveillance results in an "Odor Surveillance Log" before the end of the work day. The Odor Surveillance Log shall contain, but not be limited to: (1) the date and time; (2) stop number; (3) the name of the person performing the surveillance and written acknowledgement that they did not visit the working face or other on-site areas where exposed trash or landfill odors such as, but not limited to landfill gas odors,

1 refuse or refuse contaminated material odors, or landfill liquids/landfill leachate
2 odors exist within a four hours prior to conducting an odor surveillance, (4) the wind
3 speed and direction; (5) a narrative description of any odor detected (including the
4 type of odor, such as trash, landfill gas, chemical, odor neutralizer, as applicable);
5 (6) current weather conditions; and (7) an assessment of the strength of any odor
6 detected using the scale below:

7	0	No odor detected
8	1	Very light odor detected
9	2	Light odor detected
10	3	Moderate odor
11	4	Strong odor
12	5	Very strong odor

- 13 f. If Respondent, or Respondent's contractor, as applicable, conducting the odor
14 surveillance detects odors at three or more stops that are determined to be of a
15 strength of 3 or higher on the scale above during any surveillance occurring during
16 Respondent's operating hours (between the hours of 4:00am and 5:00pm), that are
17 described as chemical, leachate, landfill gas, or similar non-trash landfill odors,
18 Respondent, or Respondent's contractor, as applicable, shall immediately notify
19 landfill operating staff responsible for the Reaction Area. If such odors are
20 described as trash, Respondent, or Respondent's contractor, shall immediately
21 notify landfill operating staff responsible for the Working Face Area. Respondent
22 shall designate an employee in each of the Reaction Area and the Working Face
23 Area able to receive and direct action related to such notifications promptly. Upon
24 receiving such notification for the Reaction Area, Respondent shall, within 30
25 minutes of receipt, review and initiate modifications, as appropriate, to fan
26 placement, and conduct a visual inspection of the Reaction Area (as defined in
27 Condition 9(a)) to assess, and address as needed, any cracks in the surface of the
28 area. Upon receiving such notification for the Working Face Area, Respondent shall
employ all appropriate trash odor mitigation strategies, including taking action
pursuant to Condition No. 43. Respondent shall have trained employee(s) or trained

contractor(s) re-perform odor surveillance following deployment of additional mitigation to assess if trash odors have dissipated, and, as applicable, take additional remedial steps pursuant to Condition No. 43(f).

2. Respondent shall maintain records of all Odor Surveillance Logs for the duration of this Order and shall make them available for inspection by South Coast AQMD in an easy-to-review chart-style format within 5 working days of request. Respondent shall maintain a written record of any notification received, and any action taken in response to notice under Condition 1(f).

Reducing Sulfur in the Landfill Gas to be Flared

3. Respondent 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. Respondent shall ensure adequate stock of all odor control products and supplies are maintained on site.
 - a. Respondent shall monitor and record the landfill gas temperature at least daily at the inlet of the Landfill Gas Treatment System. The temperature of the landfill gas shall not exceed 145 F.
4. Respondent shall maximize landfill gas combustion utilizing all operational flares (excepting periods of maintenance, breakdowns, or automatic shutdown) to limit release of raw landfill gas. Respondent shall prioritize and maximize the use and operation of landfill gas flares No. 2 (under Permit G73696, A/N 645450) and No. 3 (under A/N 624296) over landfill gas flare No. 1 (under Permit G73696, A/N 645450) to the maximum extent feasible when combusting landfill gas at the facility (FID 119219). Once Respondent receives the necessary permits and puts the new landfill gas flare discussed in Condition 21 ("landfill gas flare No. 4") into operation, Respondent shall prioritize and maximize the use and operation of landfill gas flares Nos. 3 and 4 over landfill gas flares No. 1 and No. 2 (under Permit G73696, A/N 645450) and prioritize and maximize the use and operation of landfill

gas flare No. 2 over landfill gas flare No. 1 to the maximum extent feasible when combusting landfill gas at the facility (FID 119219).

5. Respondent shall sample, analyze, and record the landfill gas sulfur compounds combusted in each flare (as measured at sampling location FL-150 that is representative of the gas combusted in the flares under Permit G73696, A/N 45450; A/N 624296), in the thermal oxidizer/flare, and in any other landfill gas control equipment operating on site at least once each week using colorimetric tests for H₂S and at least once each day sample for analysis for total sulfur compounds as H₂S using South Coast AQMD Method 307-91. Additionally, Respondent shall sample, analyze, and record the landfill gas sulfur compounds and speciated organic compounds found in the raw, pre-treatment and pre-control, landfill gas collected from the Reaction Area (as defined in Condition 9(a)) at least once each calendar month for total sulfur compounds as H₂S using South Coast AQMD Method 307-91 and for speciated organic compounds using U.S. Environmental Protection Agency (EPA) Method TO-15.

a. Respondent 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 when the measurement or sample collection was conducted, and initialed by the personnel that conducted the measurement or sample collection.

b. Sulfur compound readings and analysis shall be reported to South Coast AQMD pursuant to Condition No. 8.

i. Tedlar bags used for Method 307-91 sampling and analysis shall not contain droplets or debris.

ii. Colorimetric tube readings shall be conducted by taking a reading from a Tedlar bag sample using an appropriate colorimetric tube sample collection pump. All sampling shall be performed in accordance with the operational manual for the colorimetric tube sample collection pump.

- 1 iii. Colorimetric tube readings shall use colorimetric tubes of appropriate
2 concentration range and shall be reported as follows:
- 3 1. Respondent shall first use the estimated appropriately ranged colorimetric
4 tube.
- 5 2. If the resulting reading reaches the upper concentration of the colorimetric
6 tube concentration range, subsequent reading(s) shall be taken using a
7 colorimetric tube with a concentration range that has a larger upper
8 concentration threshold until the result is not the upper concentration
9 threshold of the concentration range. Report the tube concentration range
10 and tube concentration result for each reading.
- 11 3. If the reading results in the lower concentration of the colorimetric tube
12 concentration range or does not register a result, subsequent reading(s)
13 shall be taken using a colorimetric tube with a concentration range that has
14 a smaller lower concentration threshold, if available, until the colorimetric
15 tubes available to the facility result in:
- 16 a. A reading that is within the concentration range of the tube,
17 b. A reading is the lower concentration of the colorimetric tube
18 concentration range, or
19 c. The colorimetric tube does not register a result.
- 20 4. When the result is the lower concentration of the colorimetric tube
21 concentration range or does not register a result, the lower concentration
22 of the colorimetric tube concentration shall be considered the
23 concentration result. Report the tube concentration range and tube
24 concentration result for each reading. If a lower range colorimetric tube is
25 not used and the tube concentration result is below the lower range of the
26 colorimetric tube used, Respondent shall report the result as “less than” or
27 “<” the lower range value of the tube. Notwithstanding the forgoing,
28 Respondent shall ensure that the colorimetric tube result is below the upper

- 1 range of the colorimetric tube used and shall report the precise result of all
2 results above the lowest range of the colorimetric tube used.
- 3 6. Respondent shall maintain adequate stock of appropriately ranged colorimetric tubes.
- 4 7. Respondent shall maintain a record of the following information, and provide such records
5 to the South Coast AQMD pursuant to Condition No. 8:
- 6 a. The hourly and daily flow of landfill gas combusted, in standard cubic feet, in each
7 flare (flares No. 1 & No. 2 under Permit G73696, A/N 645450; flare No. 3 under
8 A/N 624296), the thermal oxidizer/flare (under Zeeco A/N 653611), and any other
9 equipment used to combust or control landfill gas at the facility, and the total amount
10 of landfill gas combusted at the facility;
- 11 b. The daily flow of landfill gas not flared, in standard cubic feet, if applicable; and
- 12 c. The results of the sulfur readings, sampling, and analyses, calculated as H₂S with
13 the time and date when each measurement or sample collection was conducted.
- 14 8. Respondent shall submit a monthly written report on the landfill operation, progress of the
15 status of the Landfill Gas Flares (flares No. 1 and No. 2 under Permit G73696, A/N 645450;
16 flare No. 3 under A/N 624296), Landfill Gas Treatment System (under Permit G55163,
17 A/N 603249), and efforts to resolve the total sulfur concentration in the landfill gas
18 exceeding 150 ppmv calculated as H₂S. As of March 21, 2024, monthly reports shall be
19 submitted to South Coast AQMD on the 20th of each subsequent month, or the following
20 business day, not later than 5:00pm via email to Baitong Chen, Air Quality Engineer,
21 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov),
22 and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov). Each monthly report shall
23 contain at a minimum the following information:
- 24 a. The landfill gas sulfur compounds measurements and laboratory analysis with the
25 time and date of each measurement or sample collection, as identified in Condition
26 No. 5.
- 27 b. The landfill gas records and calculations identified in Condition No. 7, in a
28 Microsoft Excel spreadsheet format. If the landfill gas records show any landfill gas

combustion/control equipment (flares or thermal oxidizers) are offline for a period exceeding 7 consecutive calendar days, or offline for more than 15 calendar days in any one calendar month, Respondent shall report a detailed description of the reason(s) the equipment was offline (equipment breakdown, maintenance, construction, whether there was sufficient landfill gas control redundancy to control the collected landfill gas, etc.).

- c. The integrated landfill surface sample analysis and landfill surface monitoring readings identified in Condition Nos. 9 and 10, in a Microsoft Excel spreadsheet format. The aerial surveillance maps, follow-up field inspection measurements with associated dates/times, cause of exceedances, any corrective actions performed, and documentation (date, time, reasoning) of field inspections not performed due to inaccessibility or dangerous conditions identified in Condition 77.
- d. 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. 3. The landfill gas temperature at inlet of the Landfill Gas Treatment System (under Permit G55163, A/N 603249) identified in Condition No. 3(a).
- e. 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). Respondent shall submit copies of documents or other records to support any problems or delays noted pursuant to this Condition No. 8(e) along with such description.
- f. Specifications of the equipment and materials used for the weekly colorimetric tests (only if there is a change from the previously provided specifications of the colorimetric instrumentation or method used).

- 1 g. All wellhead temperature, temperature probe, CO concentration measurements for
2 those wells requiring analytical data, H2 concentration measurements for those
3 wells requiring analytical data, CH4 measurements, O2 measurements, CO2
4 measurements, CH4:CO2 ratios, lab analysis, and Draeger tube readings for landfill
5 gas from the past month in a Microsoft Excel spreadsheet format.
- 6 h. A graphic map showing location of each well with temperature exceedances (above
7 145 degrees Fahrenheit), each well with CO exceedances (above 1,000 ppmv and
8 less than or equal to 1,500 ppmv, above 1,500 ppmv and less than or equal to 2,000
9 ppmv, and above 2,000 ppmv), and stratification of temperature ranges during that
10 month, which includes a description of any remedial measures taken to address or
11 lower gas well temperatures or gas concentrations.
- 12 i. All vertical liquid impacted landfill gas wells, per Condition No. 17, including a
13 description of any remedial measures taken to address or reduce liquids in landfill
14 gas wells.
- 15 j. Updates on the investigation into the availability, viability, and utilization, including
16 pilot testing if needed, of an alternative sulfur compound treatment system that
17 controls, treats, or removes dimethyl sulfide (“DMS”) and other sulfur compounds,
18 if any.
- 19 k. A summary report on Respondent’s implemented improvements to the landfill gas
20 collection system beyond the additions to the landfill gas collection system required
21 pursuant to Condition No. 15 and 8(m).
- 22 l. An inspection and repair log for the landfill cover and geosynthetic cover
23 inspections, pursuant to Condition No. 30 and any connection points, seams, and
24 seals of the geosynthetic cover, pursuant to Condition No. 97.
- 25 m. Any subsequent additions to the landfill gas collection system, pursuant to
26 Condition No. 15; an updated vertical extraction well map detailing all existing fully
27 functional working vertical extraction wells and the vertical extraction well
28 additions completed within the month; a map showing an overlay of fully

operational working wells and landfill surface monitoring grids, and outlines of the areas demarcated as exempt in the attached Exhibit A pursuant to Condition 15(b); copies of as-built well logs (regarding well depth installations and updates) for vertical extraction wells completed within the month; and an updated map or drawing of as-built landfill gas collection and conveyance infrastructure, current with respect to any substantial modifications to the main headers of the landfill gas collection and control system, with the boundaries of the Reaction Area included.

- n. Any subsequent additions to the landfill gas condensate or leachate collection system, such as dewatering sumps/pumps, or other dewatering work performed per the dewatering guidelines and implementation plan pursuant to Condition No. 18.
- o. Updates on the procurement and installation of the geosynthetic cover(s), pursuant to Condition No. 31, and including changes required or approved by the Local Enforcement Agency.
- p. Updates on landfill excavation work subject to Rule 1150, including excavation location(s) (that are identified on graphic map(s) of the landfill), and excavated/exposed waste characteristics (saturated, semi-dry, dry, odor type and intensity, etc.) Excavation work occurring pursuant to an exemption as listed in South Coast AQMD Rule 1150(c)(3), or Rule 1150(c)(2) that is performed in the Reaction Area, must also be included in these updates.
- q. Updates regarding leachate including:
 - i. Leachate temperature recordings pursuant to Condition No. 27(a);
 - ii. Daily log of inspection findings and containment activities pursuant to Condition 27(b);
 - iii. Weekly record of leachate seepage and pooling pursuant to Condition 27(c);
 - iv. Quantity of leachate measured, and associated company name and physical address of the off-site disposal/treatment facility(ies) that

- 1 receive leachate generated by the landfill, pursuant to Condition
2 27(d); and
- 3 v. A list of all hazardous and non-hazardous liquid storage and
4 treatment facilities that have been contacted and current status of
5 each facility including available, contracted, and utilized capacity
6 to receive hazardous and non-hazardous landfill liquids.
- 7 r. Daily landfill gas composition analysis, including CH₄%, CO concentration (ppm),
8 CO₂%, and O₂%, as recorded by a real time analyzer and/or sample collected, at
9 the inlets of the control equipment (TO_x, Flares, and any additional control
10 equipment brought on site to combust landfill gas). The analysis shall be conducted
11 by a South Coast AQMD approved analyzer for CH₄, CO₂, or O₂ and analyzed
12 pursuant to U.S. EPA Method 10 or Method ALT-144 for CO. Request for approval
13 shall include submittal of analyzer specifications.
- 14 s. Updates regarding the procurement of the equipment needed to construct Flare No.
15 4 pursuant to Condition No. 74.
- 16 9. Respondent shall collect integrated landfill surface samples for analysis across the Reaction
17 Area (as defined in Condition 9(a)) at least three times per month, at intervals no more than
18 once every 7 days (unless conducting additional monitoring events exceeding three per
19 month), and additionally across the remainder of the landfill at least four times per quarter
20 as specified in Rule 1150.1 Attachment A 2.0. In the event Respondent is unable to sample
21 specific landfill surface area(s) or grid(s) due to inaccessibility or dangerous conditions for
22 a technician, Respondent shall document the date and the conditions that do not allow the
23 sampling of the specific area(s) or grid(s). Documentation shall be sufficient to show the
24 inaccessibility or dangerous conditions and may include weather forecasts and actual
25 rainfall measurements, or photographs and/or videos that depict the site conditions that
26 prevent such sampling activities for each specific area or grid affected.
- 27 a. The “Reaction Area” shall be defined initially by the boundary of Cells
28 1/2A, 2B/3, 4, and Module 2B/3/4 P2. The boundary of the Reaction Area

1 shall be modified to include the associated landfill surface area of the cells
2 and modules that experience well temperatures of at least 170 degrees
3 Fahrenheit, settlement, cracks in the landfill cover, presence and quantity
4 of liquids, the presence of hydrogen in the landfill gas, and readings of
5 temperature probes (once data is available). The Reaction Committee
6 (defined in Condition No. 12), shall transmit to the South Coast AQMD
7 [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
8 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov]: 1) the revised
9 map which clearly displays the proposed boundary change(s) and depicts
10 the new Reaction Area; 2) a narrative summary explaining the rationale
11 behind the proposed changes, including memorializing any dissenting
12 view of any member of the Reaction Committee; 3) any supporting data
13 relied upon in the decision to revise the Reaction Area; and 4) locations of
14 each temperature probe, clearly distinguished from the landfill gas wells
15 on the map.

- 16 b. The Reaction Committee shall review applicable data to determine the
17 extent and boundary of the ongoing Reaction. The Reaction Committee
18 shall consider revision to this data determined Reaction boundary, and the
19 Reaction Area as defined in Condition 9(a), as frequently as appropriate
20 but shall make a determination about whether to revise the data determined
21 Reaction boundary, and the Condition 9(a) Reaction Area map at least
22 once per month. The determination shall be made according to landfill gas
23 wellhead temperatures, temperature probe measurements, landfill gas
24 quality and methane to CO2 ratio, landfill gas concentration of carbon
25 monoxide and hydrogen, landfill settlement, leachate quantities,
26 pressurized leachate releases, odor characteristics, and waste conditions
27 according to borehole drilling logs. Supporting evidence, assumptions,
28 and explanation for the determination, revised Reaction boundary,

Reaction Area map (if applicable), isothermal gradient range map consisting of wellhead temperature measurements, wellhead carbon monoxide range map, wellhead hydrogen range map, wellhead CH₄:CO₂ ratio range map, quarterly landfill settlement isopach map, and vertical temperature profiles for temperature probes shall be submitted to the South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov] no later than 10 days following the end of the month. Each map specified above shall include an outline of the data determined reaction boundary. The carbon monoxide map shall include differentiated concentration ranges of < 500 ppmv, ≥ 500 and < 1,000 ppmv, ≥ 1,000 and < 1,500 ppmv, ≥ 1,500 and < 2,000 ppmv, and ≥ 2,000 ppmv. The hydrogen map shall include differentiated hydrogen concentration ranges of < 2%, ≥ 2 and < 5%, ≥ 5 and < 10%, and ≥ 10%. The CH₄:CO₂ map shall include differentiated ratios of < 0.5, ≥ 0.5 and < 0.9, ≥ 0.9 and < 1.1, ≥ 1.1 and < 1.5, and ≥ 1.5. The landfill settlement isopach map shall include a color scale to demonstrate severity of settlement and shall be updated at least once quarterly.

10. Respondent shall conduct instantaneous landfill surface monitoring across the Reaction Area (as defined in Condition 9(a)) at least three times per month, at intervals no more than once every 7 days (unless conducting additional monitoring events exceeding three per month), and additionally across the remainder of the landfill at least four times per quarter as specified in Rule 1150.1, Attachment A 3.0, beginning no later than seven (7) days after the issuance of this Order. In the event Respondent is unable to monitor specific landfill surface area(s) or grid(s) due to inaccessibility or dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the monitoring of the specific area(s) or grid(s).

11. Respondent shall continue operating its flares and landfill gas treatment system even if the emitted landfill gas exceeds the limits on total reduced sulfur and SO_x laid out in CCL's permits (Permit G55163, Condition Nos. 11 and 16 and CCL's Facility-Wide Permit, Condition No. 3) and South Coast AQMD Rules 431.1(c)(2), 3002(c)(1), and 203(b). Respondent shall include deviation reporting associated with exceedances of these emissions limits in its semi-annual Title V reports and in accordance with the requirements of Respondent's Title V permit.

Investigation of Underlying Reaction and Odor Impacts

12. Respondent shall organize a committee (the "Reaction Committee") consisting of subject matter experts to aid in the investigation, impact assessment, and remediation of the ongoing landfill reaction and resultant odors as specified below. Respondent shall, through retention of one or more consultants and/or designation of one or more new or existing employees, complete the formation of the Reaction Committee within thirty (30) days of the issuance of this Order. Respondent shall, within thirty (30) days of the issuance of this Order, or within ten (10) days of their appointment, if appointment occurs after October 6, 2023, provide to the 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)] the names of all persons included in the Reaction Committee along with a Curriculum Vitae, or other description of the individual's credentials, experience, and/or expertise in the applicable subject matter.

a. The Reaction Committee shall include, at a minimum, at least one person with subject matter expertise in each of the following areas:

- i. Landfill design and operational best management practices;
- ii. Landfill gas collection/extraction systems, landfill gas condensate/leachate collection systems, and landfill gas control;
- iii. Chemical reaction(s) within landfills leading to formation of and elevated levels of dimethyl sulfide ("DMS") and non-methane organic compounds ("NMOC");

iv. Public health relating to air quality and exposure to air contaminants including DMS. The public health member shall, at a minimum, apply CAAQS and applicable OEHHA standards, reference exposure levels, and cancer potency factors in performing analyses of potential health impacts or effects and in reaching conclusions. The public health member shall also include in any human health screening evaluation an odor assessment evaluating the potential health impact of exposure to odorants in addition to cancer and non-cancer risk determination.

b. Reaction Committee members shall be subject to ongoing oversight by the South Coast AQMD. If in the South Coast AQMD's determination one or more members appointed by Respondent to the Reaction Committee is not serving in this capacity satisfactorily, as defined herein, South Coast AQMD may provide written notice to Respondent through Counsel that the applicable person(s) is no longer serving satisfactorily. Failure to serve in a satisfactory capacity is defined as:

- i. Failure of a Reaction Committee member to attend regularly scheduled meetings of the Reaction Committee and South Coast AQMD technical staff without prior notice;
- ii. Failure of a Reaction Committee member to meet deadlines imposed on the Reaction Committee for deliverables set forth in this Order;
- iii. Failure of the Public Health member to include the analyses required by Condition 12(a)(iv); or
- iv. Failure of a Reaction Committee member to respond in a timely and substantive manner to recommendations provided by South Coast AQMD technical staff, as required by Condition 12(f)(iv)

c. If Respondent receives such notice from South Coast AQMD, Respondent may respond in writing within ten (10) days to contest South Coast AQMD's conclusion and explain how the member will remedy the cited unsatisfactory conduct and why

1 such conduct does not affect the member's ability to serve in a satisfactory capacity
2 on the Reaction Committee in the future.

3 d. If South Coast AQMD receives such a response, South Coast AQMD shall have
4 ten (10) days to determine whether a member of the Reaction Committee may
5 continue to serve on the Reaction Committee. If South Coast AQMD determines
6 that Respondent's written response does not address the alleged unsatisfactory
7 performance, then South Coast AQMD may petition for a status/modification
8 hearing before the Hearing Board, and the Hearing Board shall determine if a
9 member of the Reaction Committee should be removed.

10 e. While awaiting a decision from the Hearing Board, a member of the Reaction
11 Committee may continue to serve on the Reaction Committee. If the Hearing Board
12 determines that a member of the Reaction Committee's performance has not been
13 satisfactory, then it may issue an Order directing Respondent to remove and replace
14 that member of the Reaction Committee. Respondent shall remove the applicable
15 person from any further work or service on the Reaction Committee within ten (10)
16 days of receipt of the Order. Respondent shall identify and appoint a replacement
17 member of the Reaction Committee, pursuant to Condition No. 12(a) above, within
18 thirty (30) days of receipt of the Order.

19 f. Beginning in March 2024, Respondent shall host a monthly virtual meeting with all
20 members of the Reaction Committee and South Coast AQMD technical staff. The
21 purpose of the monthly meeting shall be to allow Reaction Committee members to
22 provide an update on progress of ongoing and future planned work performed/to be
23 performed pursuant to this Order which is directly related to the subsurface reaction
24 at the Landfill, and allow South Coast AQMD to provide recommendations and/or
25 feedback on such progress.

26 i. To facilitate each meeting, Respondent shall provide South Coast
27 AQMD (attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
28 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov; Payam
Pakbin, ppakbin@aqmd.gov; Kathryn Roberts,
kroberts@aqmd.gov; Mary Reichert, mreichert@aqmd.gov) a

1 proposed agenda listing the topics to be discussed, and the
2 presenter, not later than ten (10) calendar days prior to the meeting.
3 South Coast AQMD shall have the option to expand the agenda to
4 include additional topics within the purview of the Reaction
5 Committee. If South Coast AQMD elects to expand the agenda, it
6 shall provide notice to Respondent not later than four (4) calendar
7 days prior to the meeting. Any tables, graphs, or documents that
8 will be presented during the meeting shall be provided to South
9 Coast AQMD no later than two (2) calendar days prior to the
10 meeting.

11 ii. Respondent shall ensure that all members of the Reaction
12 Committee with responsibility for any topic included on the
13 agenda shall attend that month's meeting. At Respondent's
14 election, additional staff or consultants may also attend. At South
15 Coast AQMD's sole discretion, it may invite any staff or consultant
16 of any regulatory agency with jurisdiction over Respondent,
17 including jurisdiction predicated on the subsurface reaction at the
18 Landfill, to participate in and provide recommendations or
19 feedback on any agenda topics.

20 iii. South Coast AQMD, and any personnel invited pursuant to the
21 clause above, may provide feedback or recommendations on any
22 topic on the agenda. Comments noted as "recommendations" shall
23 include suggestions to revise, change, expand, or otherwise alter
24 any aspect of the topic discussed on the agenda. All other
25 comments shall be considered feedback.

26 iv. Following each monthly meeting, Respondent shall prepare a
27 summary of the meeting, including the topics discussed and all
28 recommendations received. Respondent shall include in the

1 summary a response from the Reaction Committee to all
2 recommendations and, as applicable, any changes made as a result.
3 Respondent, at its election, may also include a summary of and
4 response to any feedback received. Respondent shall post the
5 summary of the meeting to the webpage created pursuant to
6 Condition No. 39, not later than twenty (20) days following the
7 meeting.

8 g. Respondent, through the Reaction Committee, shall conduct investigations and
9 studies into the cause of the landfill reaction, the impact of air emissions, interim
10 measures to limit odor transport, and corrective measures to reduce or abate the
11 landfill reaction. Such investigations shall include, at a minimum:

12 i. A study into known and possible methods for effective treatment
13 of DMS and preventative mechanisms for DMS formation in
14 landfill gas, including assessment of other landfills and review of
15 scientific studies. By no later than April 30, 2024, Respondent shall
16 provide a report detailing the findings of this Landfill Gas DMS
17 Treatment Study and the proposals for implementation of the
18 treatment methods. This report shall be submitted to South Coast
19 AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
20 Nathaniel Dickel, Senior Air Quality Engineer,
21 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
22 (cojeda@aqmd.gov)]. Respondent shall submit any required
23 permit applications, with information included, for equipment
24 installations or modifications necessary for implementation of the
25 remedy strategies and/or treatment methods;

26 ii. An investigation and report on 1) the cause of the alleged chemical
27 reaction(s) resulting in the elevated well temperatures, elevated
28 levels of DMS formation in the landfill gas, and elevated levels of

1 NMOC formation in the landfill gas and 2) solutions to slow and
2 stop the reaction(s) in the landfill. Investigation into the cause of
3 the alleged chemical reaction(s) shall include, but not be limited
4 to, waste characterization study of waste disposed within the
5 Reaction Area, to the extent records of such waste are within
6 Respondent's possession, including (but not limited to) analysis of
7 chemical and physical characteristics, BTU, moisture content,
8 biological methane potential. Respondent shall also conduct drill
9 core sampling in the Reaction Area (as defined in Condition 9(a))
10 to assess waste characterization in areas not affected by elevated
11 temperatures at the time of drilling. Respondent shall submit a
12 report on the findings of the investigation by no later than
13 December 8, 2023 to South Coast AQMD [Baitong Chen, Air
14 Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior
15 Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda,
16 Air Quality Inspector, (cojeda@aqmd.gov)];

- 17 iii. An investigation and report on the feasibility and availability of a
18 continuous community emission monitoring system to conduct
19 continuous monitoring and provide estimates of DMS
20 concentrations at the facility fenceline and within the affected
21 community. By no later than December 1, 2023, Respondent shall
22 submit to the South Coast AQMD [Baitong Chen, Air Quality
23 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air
24 Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air
25 Quality Inspector, (cojeda@aqmd.gov)], the feasibility and
26 availability findings of this fenceline and community DMS
27 monitoring program. The findings shall identify all companies,
28 vendors, contractors, and consultants that were inquired regarding

1 the feasibility and availability and the results for each inquiry,
2 including an ultimate decision if monitoring is feasible. If the
3 Reaction Committee deems monitoring under this provision
4 feasible, Respondent shall prepare and submit to the South Coast
5 AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
6 Nathaniel Dickel, Senior Air Quality Engineer,
7 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
8 (cojeda@aqmd.gov)] a workplan for the installation of and
9 operation of the required monitoring equipment and related
10 installations within thirty (30) days of the Reaction Committee's
11 decision. This workplan will include a timeline for procurement of
12 monitoring equipment and for the commencement of monitoring.
13 It will also include a timeline for reporting out on the collected
14 data, including a proposal relating to the real-time posting of
15 monitoring data on Respondent's website or other regular report-
16 outs on the data;

- 17 iv. A study and report on landfill best management practices and
18 alternative methods to minimize the release of fugitive surface gas
19 and minimize odors from fugitive surface gas, including cover
20 practices at the Reaction Area (as defined in Condition 9(a)) and
21 working face, and how best to address related odorous emissions,
22 such as through the use of misting systems, fans, odor neutralizer,
23 or other means. By no later than November 6, 2023, Respondent
24 shall submit a report detailing the findings of this Fugitive Landfill
25 Gas Odor Mitigation Study and the proposals for the minimization
26 of landfill gas release and odors. This report shall be submitted to
27 South Coast AQMD [Baitong Chen, Air Quality Engineer,
28 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality

1 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
2 Inspector, (cojeda@aqmd.gov)];

3 v. A report on the known health risks from acute and long-term
4 exposure to DMS, including any action levels from other public
5 health or government entities, and including a summary of
6 recommended actions for persons exposed to DMS for acute and
7 long-term durations. By no later than January 15, 2024,
8 Respondent shall submit this report to South Coast AQMD
9 [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
10 Nathaniel Dickel, Senior Air Quality Engineer,
11 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
12 (cojeda@aqmd.gov)];

13 vi. A report of the health impacts from ongoing and long-term (e.g.
14 greater than one year) exposure to hydrogen sulfide (H₂S), or other
15 speciated sulfur compounds, and any other hazardous air pollutants
16 (HAPs), as defined in the federal Clean Air Act, 42 U.S.C. § 7412.
17 The HAPs evaluated in the report shall include those which are
18 detected: (1) in landfill gas over the past twelve months at the
19 Chiquita Canyon Landfill as documented in the initial or additional
20 flux chamber study (per Condition No. 12(f)) or detected in stack
21 emissions testing; (2) in the liquids and leachate samples collected
22 and analyzed (per Condition No. 37); (3) in air sampling performed
23 to determine emissions from exposed liquids/leachate; and (4) in
24 the community pursuant to the enhanced community air
25 monitoring program in exceedance of recommended toxicity
26 screening values published by the US EPA or other applicable
27 screening values where US EPA toxicity screening values are
28 unavailable. The report shall include, but not be limited to,

1 assessment and analysis of any action levels from other public
2 health or government entities in the United States for any such
3 constituents, recommended actions for persons exposed to such
4 constituents, and recommendations on how to limit any anticipated
5 adverse health impacts. Such report shall also include a summary
6 of all findings, health impacts and recommendations in an easy-to-
7 read format designed for distribution to and use by the public. By
8 no later than August 1, 2024, Respondent shall submit this report
9 to South Coast AQMD [Baitong Chen, Air Quality Engineer,
10 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
11 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
12 Inspector, (cojeda@aqmd.gov)]; and

13 vii. The development of a model to estimate the rate of liquid
14 generation in the landfill, and total quantity of liquid existing
15 within the landfill waste mass at any given time (including
16 supporting assumptions, references, and calculations). By no later
17 than June 25, 2024, Respondent shall submit to South Coast
18 AQMD a report summarizing the model and results of modeling.

19 1. Respondent shall update this model and submit to South
20 Coast AQMD [Baitong Chen, Air Quality Engineer,
21 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
22 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air
23 Quality Inspector, (cojeda@aqmd.gov)] a report
24 summarizing the updated model and results of modeling on
25 a semi-annual basis beginning on January 7, 2025 and
26 every six calendar months thereafter.

27 viii. The Reaction Committee, on behalf of Respondent, shall conduct
28 an investigation into the existing landfill gas collection and

1 conveyance piping materials (e.g. high-density polyethylene
2 (HDPE)), alternative landfill gas collection and conveyance piping
3 materials, and current landfill conditions to determine whether the
4 existing HDPE piping is appropriate for the current and expected
5 future temperature conditions at the landfill, and to determine
6 whether viable alternative landfill gas collection/conveyance
7 piping materials exist, which shall include investigation results of
8 materials used by other landfills that have experienced high
9 temperature events. The investigation shall include a study of the
10 material properties, specifications, and ratings and manufacturer's
11 operating properties of piping (e.g. HDPE) within a landfill,
12 including but not limited to, short term maximum manufacturer's
13 temperature rating, long-term manufacturer's maximum
14 temperature rating, effects and associated timeline of effects from
15 operating above manufacturer rated temperatures or specifications,
16 effects and associated timeline effects from consistent exposure of
17 piping to sunlight, ability to convey landfill gas with minimal
18 fugitive vapor leaks, and pliability for integrity of the system
19 during landfill settlement or other common landfill operations or
20 occurrences. These properties shall then be compared with several
21 landfill gas conveyance piping material alternatives. Respondent
22 shall submit a report on this investigation which includes the
23 details of the material and manufacturer operating properties and
24 specifications of piping (e.g. HDPE) and alternative piping as
25 specified above. It shall additionally detail existing and future
26 expected landfill gas temperatures within the landfill gas
27 conveyance piping, including expected temperatures within the
28 piping leaving the landfill gas extraction wells and within the

larger conveyance header within the Reaction Area. If applicable, it shall additionally include an analysis on existing landfill gas conveyance piping and future planned piping, and associated piping lengths and diameters, which conveys or will convey landfill gas above the existing HDPE piping's manufacturer rated temperature threshold. Finally, the report shall include a recommendation of the appropriate piping material to use moving forward and when existing piping materials shall be replaced with more robust materials or replaced with existing materials at higher frequencies, at the landfill while the landfill is experiencing elevated temperatures. This report shall be submitted by June 21, 2024 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)].

- h. Respondent shall make public all reports resulting from investigations and studies done pursuant to this Condition through a link preceded by a brief narrative description on the webpage created pursuant to Condition No. 39.
- i. Respondent has conducted an initial flux chamber study pursuant to the direction of the Los Angeles County Department of Public Health. Respondent shall conduct landfill gas flux studies for, at a minimum, methane, non-methane organic compounds ("NMOC"), speciated hydrocarbons (C2-C12), toxic air contaminants (TAC) analyzed by EPA Method TO-15 (including acrolein and additionally at least the ten highest concentration tentatively identified compounds), total reduced sulfur ("TRS"), and speciated sulfur compounds to determine the surface flux throughout the landfill starting with Quarter Four 2024 and once every four months thereafter. The studies shall be conducted through the use of dynamic flux chambers oriented at various locations throughout the landfill site, according to a South Coast AQMD

1 approved protocol. Respondent shall prepare a proposed protocol(s) for the studies
2 and shall submit the protocol(s) to South Coast AQMD [Baitong Chen, Air Quality
3 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
4 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
5 (cojeda@aqmd.gov)] for review and approval at least 75 days prior to the start of
6 the month in which the test is planned, unless otherwise approved in writing by
7 South Coast AQMD. A previous flux study protocol, reviewed and approved by
8 South Coast AQMD, may be used if the proposed testing will follow all aspects of
9 the prior South Coast AQMD approved protocol, with the exception of the
10 testing/sampling locations on site. Reports detailing the operational conditions,
11 methodology, quantity of tests and locations, sampling location determination,
12 sampling results, data analysis, emission results, discussion of the results, and
13 comparison of previous flux chamber test results to the current results shall be
14 submitted by no later than 45 days after the end of the month during which a test
15 was conducted, or no later than 90 days after South Coast AQMD approves the
16 protocol, whichever is later, to South Coast AQMD [Baitong Chen, Air Quality
17 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
18 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
19 (cojeda@aqmd.gov)], unless otherwise approved in writing by South Coast AQMD.
20 The initial flux study report, covering the flux study for the fourth quarter of year
21 2024, shall be submitted earlier than the schedule indicated above, by January 15,
22 2025 to South Coast AQMD [Baitong Chen, Air Quality Engineer,
23 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
24 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
25 (cojeda@aqmd.gov)], unless otherwise approved in writing by South Coast AQMD.
26 Respondent shall provide notice of the test date for each test to South Coast AQMD
27 [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior
28

Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] at least 14 days prior to the scheduled test.

Landfill Gas Collection and Leachate/Landfill Gas Condensate Collection and Storage Systems

13. Respondent shall expand its gas well system. Respondent shall continue to operate the two sumps with pumps along the west slope until final design is implemented. Additional landfill gas collection equipment shall be operated as construction is completed. Respondent has installed 18 vertical dual extraction wells, and these 18 vertical dual extraction wells shall be connected to the landfill gas system by September 15, 2023 unless the circumstances outlined in Condition 13(a) apply.

a. In the event Respondent is unable to meet these deadlines due to inaccessibility or dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the installation of the wells and/or their connection to the landfill gas system. Respondent shall submit this documentation to the South Coast AQMD and provide the South Coast AQMD with an updated date of completion for the required work.

14. Respondent shall continue to monitor each landfill gas collection system well at least monthly for at least temperature pursuant to 40 CFR Part 63 Subpart AAAA. Respondent shall address wells with a temperature reading of at least 170 degrees Fahrenheit or greater in accordance with 40 CFR 63 Subpart AAAA. Notwithstanding temperature exceedances, Respondent shall continue to operate all wells as necessary to ensure the continued operation of the landfill gas collection system.

a. Consistent with Respondent's Title V permit and all applicable rules and regulations, Respondent shall ensure the operation of the landfill gas collection system equipment does not result in the release of raw landfill gas or condensate into the atmosphere.

b. Any breakdown or malfunction of the landfill gas collection system resulting in the emission of raw landfill gas as described in Condition 14(a)

shall be reported to the South Coast AQMD by phone (1-800-CUT-SMOG) or other District-approved method within one hour after occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions into the atmosphere.

15. Respondent shall continue to evaluate and install, as needed, vertical dual extraction wells to collect both landfill gas and leachate. Respondent shall continue to expand the well-field as needed, and notify South Coast AQMD by October 31, 2023 of the number of wells added, attention to 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). Any subsequent additions to the well-field shall be documented in the monthly reports pursuant to Condition No. 8. In installing any additional wells, Respondent shall ensure it complies with all conditions in Respondent's currently operative landfill gas collection system permit. In installing any additional wells pursuant to this Condition, Respondent shall additionally take the following measures:

- a. By January 31, 2024, Respondent shall provide to the 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)] the design and installation schedule for a minimum of an additional seventy (70) wells and their associated piping. The proposed well locations and connecting piping shall be identified on a drawing which shows the entire gas collection system and shall be described in writing. Estimated gas collection volume, well depths, pipe lengths, diameters and layouts shall be supplied to the South Coast AQMD in this advance notification. Updates to the design and schedule shall be provided in the monthly report pursuant to Condition No. 8(m);

1 b. By January 6, 2025, unless otherwise approved in writing by the South
2 Coast AQMD, Respondent shall install vertical landfill gas extraction
3 wells in the initial Reaction Area (including the boundary of Cells 1/2A,
4 2B/3, 4, and Module 2B/3/4 P2 as defined in Condition 9(a)). These wells
5 shall be fully operational, working wells, installed with desired depth
6 within the landfill waste mass (approximately 30 ft from the bottom liner),
7 with the ability to extract landfill gas within the depths of the landfill waste
8 mass and deliver it to the gas control system(s). Respondent shall achieve
9 a vertical gas extraction well density of wells installed at the desired depth,
10 at a minimum, an average of three (3) wells per acre within the initial
11 Reaction Area stated above, and within the estimated extent of elevated
12 temperature landfill conditions as depicted by the Reaction Committee in
13 their monthly determinations submitted in accordance with Condition
14 9(a). The wells with the desired depth shall be installed with even
15 dispersion, achieving a well density of at least two (2) vertical extraction
16 wells within any one acre, except for the areas demarcated in the attached
17 Exhibit A to this Modified Stipulated Order. The following interim
18 deadlines shall apply to this Condition 15(b) for wells installed with the
19 desired depth:

- 20 i. By July 1, 2024, installation of 50% of wells necessary to achieve
21 the well installation density; and
22 ii. By October 1, 2024, installation of 75% of wells necessary to
23 achieve the well installation density.
24 iii. In the circumstance that vertical landfill gas extraction wells are
25 incapable of being installed with the desired depth within the initial
26 Reaction Area in accordance with the schedule specified above,
27 due to the ongoing Reaction Area conditions, Respondent shall
28 install the wells to the depths achievable at the densities specified

1 in Condition No. 15(b)(i) above, and in accordance with the
2 schedule specified in Condition Nos. 15(b), 15(b)(i) and 15(b)(ii).
3 Respondent shall then achieve the well installation depth and
4 density requirements of described above in Condition 15(b) by
5 August 17, 2026, unless otherwise approved in writing by South
6 Coast AQMD.

7 iv. If any reading of 500 ppmv TOC or greater is detected during
8 instantaneous surface monitoring required by Condition No. 10,
9 corrective actions shall be taken by the Respondent within 2
10 calendar days after detecting the exceedance, including, but not
11 limited to the following: cover maintenance or repair, or well
12 vacuum adjustments. The location shall be remonitored no later
13 than 10 calendar days after detecting the exceedance. If the
14 remonitoring of the location shows a second exceedance, the
15 Respondent shall install and operate the new and/or replacement
16 well(s) no later than 30 days after detecting the initial exceedance,
17 or otherwise approved in writing by South Coast AQMD.

18 v. If any reading of 25 ppmv TOC or greater is detected during
19 integrated surface sampling required by Condition No. 9,
20 corrective actions shall be taken by Respondent within 2 calendar
21 days after detecting the exceedance, including, but not limited to,
22 the following: the gas collection equipment and the landfill cover
23 shall be serviced in the vicinity of the grid with the exceedance
24 (e.g. cover maintenance or repair, or well vacuum adjustments).
25 The grid shall be resampled no later than 10 calendar days after
26 detecting the exceedance. If the resampling of the grid shows a
27 second exceedance, the Respondent shall install and operate the
28 new and/or replacement well(s) no later than 30 days after

1 detecting the initial exceedance, or otherwise approved in writing
2 by South Coast AQMD.

3 vi. An extension to the well installation timelines under Condition
4 15(b)(iv and v) above may be requested in writing, submitted to
5 South Coast AQMD [Baitong Chen, Air Quality Engineer,
6 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
7 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
8 Inspector, (cojeda@aqmd.gov)]. The extension request shall be
9 submitted at least 7 days prior to the 30-day well installation
10 deadline, and shall include, at a minimum, the instantaneous
11 surface monitoring and/or integrated surface sampling data,
12 corrective actions performed, date of all monitoring/sampling and
13 corrective actions performed, and detailed reasoning of equipment
14 delays, operational concerns, safety concerns, or other reasons
15 inhibiting the installation of the well(s) according to the 30-day
16 schedule.

17 c. While installing wells pursuant to Conditions 15(a) and 15(b), Respondent
18 shall notify the South Coast AQMD [attn: Baitong Chen, Air Quality
19 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
20 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
21 Inspector, (cojeda@aqmd.gov)] in writing, by Friday of each week, which
22 wells are scheduled to be installed the following week;

23 d. Following installation of all wells pursuant to Conditions 15(a) and 15(b),
24 Respondent shall notify the South Coast AQMD in writing [attn: Baitong
25 Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel,
26 Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda,
27 Air Quality Inspector, (cojeda@aqmd.gov)] at least one (1) week in
28 advance when an additional well or set of wells and their associated piping

1 will be installed. The information required by Condition 15(a) shall be
2 included in the notification. Updates to the design and schedule shall be
3 provided in the monthly report pursuant to Condition No. 8(m);

4 e. During any well drilling a landfill gas control box shall be used to prevent
5 the emissions of landfill gas into the atmosphere, and this control box shall
6 be vented to an approved emissions control system;

7 f. Each well shall be completed and capped the same day its construction
8 commences, unless the well hole is completely covered (using a minimum
9 8'x 8' at least 0.25" thick steel plate, and 12 inches depth of clean dirt), or
10 the subsequently installed pipe is capped;

11 g. Each gas collection well shall be connected to an operating landfill gas
12 header or the ends of the well shall be sealed with blind flanges, glued or
13 fused caps, or other types of seals approved by the South Coast AQMD as
14 soon as the well is installed;

15 h. All openings and connections of the landfill gas collection system shall be
16 properly covered and sealed to prevent leaks in accordance with
17 Respondent's Title V Permit and in accordance with all applicable rules
18 and regulations;

19 i. Respondent shall install additional stainless steel, carbon steel, or
20 chlorinated polyvinyl chloride (CPVC) wells in the Reaction Area per
21 recommendation of the Reaction Committee. Stainless steel or carbon
22 steel shall be installed for any well which has gas temperatures exceeding
23 170 degrees Fahrenheit;

24 j. Following the installation of additional wells per Conditions 15(a) and
25 15(b), Respondent shall replace any wells in the Reaction Area which are
26 damaged, blocked, pinched, or which have gas temperatures exceeding
27 145 degrees Fahrenheit with CPVC wells, carbon steel, and/or stainless
28 steel wells, or add new wells that replace the landfill gas extraction

1 capacity. Within 7 days of discovery of any such well, Respondent shall
2 notify South Coast AQMD in writing [attn: Baitong Chen, Air Quality
3 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
4 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
5 Inspector, (cojeda@aqmd.gov)] of a proposed installation schedule.
6 Installation shall take place within 7 days of the notification, whenever
7 feasible, but the schedule shall take into account availability of drilling
8 equipment, replacement materials, and weather and safety conditions.
9 Following initial notification, Respondent shall update South Coast
10 AQMD in writing every 7 days until the well installation is complete, with
11 evidence substantiating the delay, and additionally shall provide an
12 updated installation schedule.

13 k. Respondent shall, once additional/adequate gas extraction capacity is
14 installed, operate gas extraction wells with less than 3 percent oxygen
15 where feasible, and follow landfill best management practices to keep the
16 oxygen below 5 percent in interior wells;

17 l. Respondent shall install well boots seals on all wells in the Reaction Area
18 in accordance with the installation schedule for the geosynthetic cover that
19 is being installed pursuant to Condition No. 31 and consistent with
20 requirements of the Local Enforcement Agency;

21 m. Respondent shall submit semi-annual as-built drawings in duplicate to the
22 South Coast AQMD [attn: Baitong Chen, Air Quality Engineer,
23 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
24 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
25 (cojeda@aqmd.gov)]. As-built drawings shall depict all wells constructed
26 to date.

27 n. As of April 25, 2024, all new vertical extraction wells installed within the
28 Reaction Area (as defined in Condition 9(a)) shall be dual extraction wells

1 with the ability to extract both landfill gas and liquid/leachate within the
2 well, to maximize landfill gas collection and prevent liquid/leachate build-
3 up within wells and within the landfill. Dewatering pumps and associated
4 infrastructure (pneumatic supply piping, liquid forcemain piping, etc.)
5 shall be installed, allowing the pump at each well to be capable of
6 operation. For 75% of wells, installation of all associated infrastructure
7 shall be completed within 30 days of completion of the vertical extraction
8 well drilling operation. For the remaining 25% of wells, installation of all
9 associated infrastructure shall be completed within 60 days of completion
10 of the vertical extraction well drilling operation. This sub-condition shall
11 supersede the specific language listed in Condition No. 15 allowing
12 Respondent to evaluate and install vertical dual extraction wells as needed.

- 13 o. Respondent shall, on a monthly basis determine whether any of the
14 existing landfill gas collection wells in the Reaction Area (as defined in
15 Condition 9(a)), which were not able to be drilled and installed at the
16 desired well depth (generally approximately 30 ft above the bottom liner),
17 can be expanded deeper or drilled to achieve the initially desired depth, or
18 whether new replacement wells can be drilled nearby to achieve the
19 initially desired depth. This determination shall include an evaluation of
20 the landfill gas well/wellbore conditions, landfill liquid/leachate flow data,
21 pressurized liquid/leachate release data, and landfill gas data, wellhead
22 temperature data, temperature probe data, and any additional parameters
23 as necessary. Respondent shall report on the monthly determination, along
24 with any supporting evidence and reasoning for the determination, as part
25 of the monthly report pursuant to Condition No. 8, beginning with the
26 report submitted in October 2024 covering data from September 2024.

- 27 16. Respondent shall submit, by October 6, 2023, a complete permit modification application
28 for the Landfill Gas Collection System (under Permit G43917, A/N 578102) to increase the

number of permitted wells in the well field. 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.

17. Respondent shall expeditiously dewater wells being impacted by liquids to the maximum extent feasible, and shall take proactive measures to remove additional liquids in the Reaction Area to limit the reaction severity and spread. This shall be accomplished through the installation of dewatering sumps/pumps of at least 60 percent of the landfill gas vertical extraction wells in the Reaction Area (as defined in Condition 9(a)) that are capable of extracting liquids by March 15, 2024 unless otherwise determined infeasible per Condition No. 17(a). below. Respondent shall provide updates in the monthly reports pursuant to Condition No. 8.

- a. In the event Respondent determines that the installation of dewatering sump/pumps of at least 60 percent of the landfill gas vertical extraction wells that are capable of extracting liquids to be infeasible, Respondent shall provide detailed rationale and reasoning in the monthly report submitted pursuant to Condition No. 8 and shall continue with implementation of the dewatering guidelines pursuant to Condition No. 18 to remove liquids to the maximum extent possible.

18. Respondent shall, in addition to the installation of dewatering sumps/pumps specified in Condition No. 17 above, within ninety (90) days of the issuance of the Initial Order, provide proposed Reaction Area dewatering guidelines and implementation procedures for the landfill to South Coast AQMD (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov)) that include but are not limited to the following:

- a. Proposed methodologies and monitoring procedures that determine the level of dewatering within the Reaction Area (as defined in Condition 9(a)) wells impacted by liquid. Methods may include the measurement of the gas flow at each landfill gas collection well impacted by liquids;

- b. Use of dewatering pumps or other methods to remove liquids from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;
- c. An implementation plan for the use of dewatering pumps or other methods to remove liquids from the Reaction Area wells impacted by liquids. The plan shall include a list of wells in the Reaction Area and depth where liquids are expected to impact landfill gas collection efficacy or be a concern, the proposed action to remove the liquids, and the schedule for liquid removal. The implementation plan shall also include pro-active measures, such as additional dewatering pumps, to be installed at landfill gas collection wells where liquid impaction issues have not yet occurred, but may be expected to occur.
- d. Upgrades to the site leachate collection system as needed, including through the addition of increased air compressor and/or drain line infrastructure;
- e. Protocols for the pumping and monitoring of dewatering pumps and other such methods to remove water from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;
- f. Well field liquid sounding in the Reaction Area (as defined in Condition 9(a)), and a proposed schedule for conducting liquid sounding on a consistent basis;
- g. A timeline for appropriate reporting on impacted wells;
- h. The feasibility of integrity testing of all vertical gas wells in the Reaction Area (as defined in Condition 9(a)) and a timeline and protocol for addressing any wells that the integrity testing demonstrates are damaged or are exhibiting temperatures of at least 170 degrees Fahrenheit; and
- i. A timeline for implementation of appropriate dewatering procedures upon discovery of wells impacted by liquids.

Respondent shall, within 14 calendar days of approval of this Order, revise the dewatering guidelines according to the comments received by email on March 13, 2024, and re-submit the revised dewatering guidelines to South Coast AQMD for final written approval. The proposed Reaction Area dewatering guidelines and implementation procedures shall be

implemented within seven (7) days of South Coast AQMD approval, and shall be implemented to the maximum extent feasible if Respondent's facility is encountering leachate tank capacity shortages. If any conflict exists between any condition or requirement of this Order and any part of the South Coast AQMD approved Dewatering Guidelines, this Order shall take precedence over the approved Dewatering Guidelines and Respondent shall submit revised Dewatering Guidelines that resolve such a conflict to South Coast AQMD for final written approval.

19. Respondent shall submit, by October 6, 2023, a complete permit modification application to the Landfill Gas Condensate and Leachate Collection/Storage System (under Permit G66132, A/N 613131) to increase the landfill's liquid storage capacity. 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.

20. Respondent shall increase its landfill gas control capacity. Respondent has submitted a permit application for a new 6,000 scfm ultra-low emissions landfill gas flare (Flare No. 3), which is currently in a public comment period. Once the flare is fully permitted and fully operational equipment is received, Respondent shall have forty-five (45) days to finish installation and begin operating the new landfill gas flare unless the circumstances outlined in Condition No. 20(a) apply. Respondent shall notify the South Coast AQMD that the new landfill gas flare is operational within 48 hours of beginning operation (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)).

a. In the event Respondent is unable to meet these deadlines due to inaccessibility or dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the installation of the new flare. Respondent shall submit this documentation to the South Coast AQMD and provide the South Coast AQMD with an updated date of completion for the required work.

21. Respondent shall submit, by October 31, 2023, a complete permit application for the new construction of a Landfill Gas Flare (Flare No. 4) to increase the landfill gas control capacity. 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.
22. Respondent shall continue to use one or multiple portable thermal oxidizer(s)/flare(s) that operate under a permit to operate or temporary permit to operate for additional landfill gas control capacity until the Reaction Committee concludes that such portable thermal oxidizer(s)/flare(s) are no longer needed. Respondent shall notify the South Coast AQMD as to the Reaction Committee's recommendation within 48 hours of when the Reaction Committee's recommendation was determined (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)).
23. Respondent shall continue to use one or both 4,000 scfm flares (under Permit No. G73696, A/N 645450) when the Reaction Committee determines that such use is necessary due to insufficient flaring capacity or other such necessity-based situations, until the third new 6,000 scfm ultra-low emissions flare (Flare No. 5) referenced in Condition No. 70(a) is permitted and operational.
24. Respondent shall operate and maintain the landfill so as to prevent standing leachate and the pooling or ponding of leachate exposed to atmosphere throughout the facility. If pooling or ponding of liquid/leachate is occurring, safety permitting, the liquid/leachate shall be immediately collected and contained in a sealed tanker truck or leachate tank that minimizes emissions, or repairs promptly performed to redirect leachate into the leachate collection system.
25. Respondent shall, when encountering landfill leachate geysers or other discharges of pressurized leachate as a result of drilling/maintenance/other operations, perform actions to mitigate odors and the dispersion and exposure of leachate into the atmosphere, to the maximum extent possible. Upon the equalization of pressure or diminished flow/end of the

landfill leachate geysers or other discharges of pressurized leachate, Respondent shall remove soil saturated with leachate or add sufficient dry soil cover to the soil saturated with the leachate, to mitigate the potential for odors from the saturated soil.

26. Respondent shall investigate and report on the feasibility of temporary containment measures for the purposes of controlling leachate and possible discharges of pressurized leachate when drilling additional holes for wells, liquid pumps, temperature devices, or other purposes. This Discharge of Pressurized Leachate Containment Feasibility Study shall include an analysis on the feasibility of a temporary tenting, containment vessel(s)/dome(s), other enclosure(s), or partial enclosure system designed to collect and contain the leachate flow while limiting the escape of odors produced from drilling/discharges of pressurized leachate, to allow for additional well drilling in the Reaction Area. By no later than March 12, 2024, Respondent shall submit 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)], a report on the findings of this feasibility study.

27. Respondent shall conduct the following actions and report them 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)] in each monthly report submitted pursuant to Condition No. 8 beginning with the report due on February 19, 2024:

- a. Measure and record the leachate temperature within all the 6-inch leachate pipes feeding into the onsite frac tanks, and at the piping leading into the tanks at all tank farms. The temperature measurements reported shall include a map clearly indicating temperature monitoring location(s), and the reported results shall clearly state which tank(s) or tank farm(s) are downstream of the monitoring location, receiving the measured leachate;
- b. Respondent shall have dedicated staff or a contractor conduct and document inspections twice each calendar day, once in the morning,

1 completing the inspection prior to 10 am, and once in the afternoon,
2 starting the inspection at 1 pm at the earliest. The inspections shall begin
3 with the surface of the Western and Northern slopes of the Reaction Area
4 for liquid/leachate seepage and pooling and shall additionally consist of
5 inspecting the facility's stormwater channel(s), and the facility's
6 stormwater basin(s). Respondent shall maintain records from each
7 inspection that include the details of any leachate seepage and pooling,
8 including location(s) (identified on graphic map(s) of the landfill, with the
9 subject landfill surface grid, and GPS coordinates), time discovered,
10 estimated duration of presence of leachate at such locations, the
11 characteristics of the leachate (estimated quantity in gallons, extent of area
12 impacted in square footage, odor type and intensity), the leachate
13 saturation level of surrounding soils (standing free liquid, saturated, semi-
14 dry, dry), and additional containment systems or measures deployed to
15 route, collect, and contain the exposed leachate and prevent further
16 leachate exposure

17 i. In the event that two weeks of twice daily inspections show no
18 exposed liquid/leachate seepage or pooling, Respondent may
19 reduce the inspection frequency to once daily. If after another two
20 weeks of daily inspections, no exposed liquid/leachate seepage or
21 pooling is observed, Respondent may reduce the inspection
22 frequency to once every other day during the operating week (i.e.,
23 three times each operating week). If at any point inspections show
24 exposed liquid/leachate seepage or pooling, inspection frequency
25 shall return to twice daily inspections.

26 c. On a weekly basis, compile and report the details of the inspection logs
27 from that calendar week required under Condition 27(b). Respondent shall
28 additionally report on any ongoing leachate seepage and pooling at the

landfill, found to have occurred at a location more than once within the calendar week, including location(s) (identified on graphic map(s) of the landfill), estimated duration of presence of leachate at such locations, characteristics of leachate (estimated quantity, extent of area impacted, odor type and intensity), leachate saturation of surrounding soils (standing free liquid, saturated, semi-dry, dry), and containment systems or measures deployed to route, collect, and contain the exposed leachate and prevent further leachate exposure. By no later than January 23, 2024, Respondent shall submit 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)], the first weekly report, and shall submit an additional weekly report every 7 calendar days thereafter;

d. Measure and record quantities of leachate sent off-site for disposal/treatment during the previous week for so long as all leachate is transported offsite for disposal. Records shall include the associated company name and physical address of the off-site disposal/treatment facility(ies) that receive leachate generated by the landfill. If Respondent begins onsite treatment, it shall also record on a weekly basis quantities of leachate collected and leachate treated onsite. Respondent shall report this information in the monthly reports pursuant to Condition 8(c). Respondent shall submit copies of the manifests to South Coast AQMD within three weeks of request.

e. Respondent shall report to South Coast AQMD any leachate leak or spill separately from leachate seeps reports specified in Condition 27(c). The report 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)] within 48 hours of discovering the leak or spill. The report shall, at a minimum, include (1) the date and time of the leak or spill; (2) area designation inspected; (3) the name of the person that discovered the leak or spill; (4) written acknowledgement that they did, or did not, take corrective action with rationale for these actions; (5) a root cause analysis on why and how the leak or spill occurred; (6) the estimated quantity of the leak or spill; (7) corrective actions to clean and/or remove the leak or spill; (8) corrective actions implemented or to be implemented, including an estimated timeline, to prevent future recurrence; (9) the type of affiliation of the operator involved in the root cause (e.g., employee, regularly onsite contractor, other contractors, or haulers); (10) whether any individuals involved in the root cause had previously received training on applicable operations to avoid leaks or spills; and (11) the number of times individuals involved in the root cause had previously been involved in the root cause of a leachate leak or spill. If any of the above items are not able to be determined, Respondent shall list “not determined” and a brief explanation. Root cause shall include ultimate determination of attribution of error, including, as applicable, operator error, equipment breakdown, equipment malfunction, lack of training, lack of documented procedures, lack of following procedures, etc, to the extent known at the time the report is submitted to South Coast AQMD after good faith investigation. For spills or leaks of greater than 100 gallons where root cause was not determined at the time of report submission, Respondent shall provide a supplement to the report following completion of investigation and determination of the root cause.

- f. Respondent shall develop Standard Operating Procedures (SOPs) for leachate tank operations in accordance with industry standards and best management practices, to prevent leachate tank overflow, failure, and

1 spillage in the tank farm areas. Respondent shall additionally conduct daily
2 inspections of leachate tanks, tank connections, ports, valves, tank hoses,
3 and any other equipment associated with leachate tank filling/emptying
4 operations, to determine equipment condition material integrity, to prevent
5 leaks. The SOPs shall be submitted to South Coast AQMD for review and
6 approval [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
7 Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and
8 Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)], by no later
9 than September 23, 2024, unless otherwise approved in writing by South
10 Coast AQMD. The SOPs shall be implemented within 7 days of South
11 Coast AQMD approval.

12 g. Respondent shall not overfill leachate collection/storage tanks or liquid
13 treatment tanks.

14 28. Respondent shall operate and maintain the landfill gas collection and control system, and
15 condensate/leachate collection system with materials capable of handling gases and/or
16 liquids at the temperatures recorded at landfill gas wells and/or the leachate temperatures
17 measured pursuant to Condition No. 27(a). This shall include, but is not limited to, landfill
18 gas extraction wells, liquid/leachate extraction wells, sumps, pumps, piping, French drain
19 system(s), landfill gas treatment and control equipment, and condensate/leachate storage
20 equipment. Respondent shall utilize casing materials for wells with elevated temperatures
21 as agreed upon with the LEA. Information pertaining to the installed equipment and its
22 specifications, including material/temperature threshold specifications, shall be provided to
23 South Coast AQMD personnel within 48 hours of request. If Respondent is not in
24 possession of this information, it shall be requested from the manufacturer within 24 hours
25 of request by South Coast AQMD personnel and provided to South Coast AQMD personnel
26 within 24 hours of receipt from the manufacturer.

27 29. Respondent shall ensure it has proper landfill leachate and landfill gas condensate capacity
28 (based on liquid production and collection reporting pursuant to Condition 8) to accumulate

onsite and/or dispose of collected liquids/leachate at an appropriate facility or facilities. Respondent shall comply with the Leachate Management Plan approved by the EPA and submitted to the South Coast AQMD pursuant to Condition No. 64, which includes contingency measures such as whether it is appropriate to reduce pumping operations in case of an emergency.

Landfill Cover

30. Respondent shall visually inspect the landfill cover and geosynthetic cover(s) in and around the Reaction Area (as defined in Condition No. 9(a)), and any additional geosynthetic cover installed on site, each operating day and shall promptly repair any cover issues identified, which may include adding and spreading of clean soil, wetting, retracking any damaged area, and repairing or resealing of the geosynthetic cover. Any repair of the geosynthetic cover which includes addition of material to add or replace to the existing cover shall be done using an EVOH, or, if EVOH is unavailable and repair is on or before three months from the date DTSC approves the EVOH, an HDPE geomembrane. The EVOH or HDPE geomembrane shall be of at least 60 mil thickness continuously seamed and continuously welded to the existing 30 mil HDPE geomembrane. All repair and correction actions to the landfill cover, and interim repair of geosynthetic cover shall be conducted promptly and no later than two hours after identification during inspection, safety permitting. Permanent repair of geosynthetic cover shall be scheduled immediately and shall take place as soon as possible following identification of cover issue. Respondent shall maintain a log demonstrating that it has addressed any damages to the landfill cover or geosynthetic cover, including the date the damage was identified, the action taken to repair the damage, and the time at which the repair was completed. Results of the daily inspection and the repair log required by this condition shall be included in the monthly reports required pursuant to Condition No. 8.

31. Respondent shall install a geosynthetic cover over western portions of Module 2B/3/4 Phase 2, Module 2B/3, and Module 4 to limit the migration of landfill gas from the site. Respondent shall submit the completed design for the cover, which will provide greater

definition to the cover location, including associated landfill gas extraction infrastructure to be installed underneath the cover, to the South Coast AQMD by September 12, 2023 (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)). Respondent shall then obtain and install the geosynthetic cover material of at least 30 mil thickness. Respondent shall notify South Coast AQMD by October 31, 2023 (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)) on the progress of procuring and installing the geosynthetic cover. Respondent shall include updates on the procurement and installation of the geosynthetic cover in the monthly reports pursuant to Condition No. 8.

Ambient Air, Leachate & Emissions Monitoring

32. The Reaction Committee shall review air dispersion modeling, smoke release studies, and computational fluid dynamics (“CFD”) modeling that have previously been completed for the landfill to assess odor and emissions transport into the nearby community. The Reaction Committee shall use the previous models updated with current datapoints to undertake a study to determine odor and emission transport of odors from the landfill and to identify effective techniques that may be used to remedy potential odor impacts on the nearby community. The study shall include an evaluation of the efficacy of odor control measures, including but not limited to perimeter misting equipment, wind barriers, wind cutter fans, and odor dispersion/misting fans, for purposes of minimizing odors in the surrounding community. The study shall be based on both the landfill’s current and projected closure in 2047, topography and configuration. The study shall include, but not be limited to, identifying transport trajectories and quantifying odor gas concentrations within the surrounding community. Upon completion of the study, a written report documenting the study and the findings, shall be submitted to South Coast AQMD by December 1, 2023. [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air

Quality Engineer, (ndickel@aqmd.gov); Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)].

a. The report shall include a recommendation on whether additional modeling is recommended to fully address the current odor circumstances at the landfill and potential odor impacts on the nearby community.

b. If such additional modeling is recommended by the Reaction Committee, the Reaction Committee shall, within 45 days of providing the report and recommendation, provide a proposal to the South Coast AQMD that shall, at a minimum, include the following:

i. The identification and qualifications of the primary personnel and/or firms proposed to conduct the study, as well as the specific techniques and location(s) where the study will be conducted;

ii. A timeline for completion of the study and submittal of the final written reports to South Coast AQMD no later than 150 days after South Coast AQMD approval of the study proposal.

c. Since the Reaction Committee recommended additional modeling, Respondent shall, within 14 calendar days of approval of this Order, revise the air modeling study proposal according to the comments received by email on March 28, 2024, and re-submit the revised proposal to South Coast AQMD for approval. Respondent shall submit a final written report on the additional modeling to South Coast AQMD by September 2, 2024 or 90 days following approval of the air modeling study proposal by South Coast AQMD, whichever is later.

33. Respondent shall follow the direction of DPH to expand and enhance its current ambient air monitoring program to include DMS and other constituents of landfill gas, sampling at residential locals where recent odor complaints have been reported and at on-site locations where odors are most pronounced, and to conduct a flux chamber study (the “initial” flux chamber study discussed in Condition No. 12(i)). Any reports submitted to DPH related to these studies shall also be submitted to the 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)).

34. By January 19, 2024, Respondent shall provide South Coast AQMD with access to all real-time continuous monitoring data for PM2.5, PM10, and H2S recorded at all monitoring stations (MS-01 through MS-12, and any subsequent additional monitoring stations). Respondent shall by January 19, 2024 or within 5 calendar days after enhanced monitors are brought online, provide South Coast AQMD with access to all real-time continuous monitoring data for total reduced sulfur (TRS) and toxic air contaminants (TAC) recorded by the enhanced monitors (MS-04, MS-12, and any additional enhanced monitors thereafter, including additional monitors as required by Condition No. 36.).

a. Within 30 days of this issuance of this Modified Order, Respondent shall ensure that the weekly 24-hour time-integrated canister samples for benzene, continuous H2S, and methane, and all hourly microGC DMS and VOC concentration data from current and future fenceline and community monitoring sites are posted to and accessible at the webpage created pursuant to Condition 39 for public access, displayed in an easy to read graphical format plot with compound concentration (y-axis) in parts per billion volume (ppbV) vs. time (x-axis) in DD/MM/YYYY HH:MM format, which is simple to review and understand. The compounds concentration data displayed in the graphical plot in ppbV shall be plotted based on the finalized data as reported by the testing laboratory or monitoring device ensuring all significant figures are preserved and without rounding. The display shall allow the public to determine the 24-hour time-integrated canister samples for benzene, continuous H2S and methane, and hourly microGC DMS and VOC concentrations, and the geographic location where the concentration is monitored. The graphical format plot shall additionally reference and display a horizontal dotted or dashed line for each compound's respective Reference Exposure Level (REL) (as applicable) established by California Office of Environmental Health Hazard Assessment (OEHHA): (1) the acute 1-hour OEHHA REL for H2S, which is the same as the state-level standard for this compound (30

1 ppb), and (2) the acute 1-hour OEHHA REL for benzene (8 ppb). An intuitive
2 mechanism (e.g., a link) to download historical data (for each data source) in a
3 compiled, usable format (such as .csv) should be provided and made publicly
4 accessible on the webpage created pursuant to condition 39 – including full analytical
5 results of the 24-hour time-integrated canister samples, continuous monitoring data
6 for H2S and methane (including meteorological data), and the hourly DMS and VOC
7 results for all microGC instruments.

- 8 i. Real-time data shall include, but not be limited to, chronological one-hour
9 average H2S concentrations as time series at each monitoring location. Wind
10 speed and direction shall also be included, if currently monitored by
11 Respondent.
- 12 ii. The website shall include a map which clearly marks the location of each air
13 monitoring station.
- 14 b. Within 30 days of this issuance of this Order, weekly data (from Saturday at 12:00
15 am to Friday at 11:59 pm) collected by these monitors shall be made available on the
16 webpage created pursuant to Condition No. 39, in a manner which allows for user
17 defined data download, no later than the following Monday at 5:30 pm. Data from
18 these monitors shall be kept on file and made available to South Coast AQMD
19 personnel upon request.
- 20 i. In the event of unexpected downtime of a monitor, bump tests, maintenance,
21 or other scenario which may result in missing data or test data being recorded,
22 by March 29, 2024, Respondent shall provide flags or other visual indicators
23 on its website (created pursuant to Condition No. 39) for each data point/set
24 that clearly indicate and document the range of dates/times with the missing
25 or affected data, and indicate the reason for the missing or affected data.
- 26 c. Respondent shall, by April 30, 2024, retain a third party to develop and install a
27 system that provides automatic electronic notification via email for any exceedance
28 of the applicable 1-hour NAAQS, CAAQS, or acute 1-hour OEHHA REL, whichever

1 is lower (both in time and concentration) based on a time weighted average for
2 benzene and H2S monitored in real-time by Respondent's monitoring network within
3 the surrounding community (MS-06 through MS-12) by May 30, 2024. Additionally,
4 by September 23, 2024, Respondent, through its retained contractor, shall develop
5 and install a system allowing identical electronic notification via email for any
6 exceedance of the applicable 1-hour NAAQS, CAAQS, or acute 1-hour OEHHA
7 REL, whichever is lower (both in time and concentration) based on a time weighted
8 average for benzene and H2S monitored in real-time by Respondent's monitoring
9 network surrounding the Landfill (MS-01 through MS-05). Such systems shall also
10 provide an automatic electronic notification once the applicable time weighted
11 average falls below the applicable REL. Respondent shall be responsible for the third
12 party including in such system a method for members of the public to sign up to
13 receive such notifications without any personally identifying information (including
14 email address) being disclosed to Respondent. Respondent shall be responsible for
15 the third party putting into effect the notification system within three business days of
16 direction from South Coast AQMD.

- 17 35. Respondent shall, by January 19, 2024, provide all standard operating procedures (SOPs)
18 and any other Quality Control and Quality Assurance (QA/QC) documents describing the
19 operation and maintenance of all instruments used at the air monitoring stations and/or
20 enhanced monitoring stations specified in Condition No. 34. These QA/QC documents shall
21 include detailed information on the calibration, and maintenance of the monitoring
22 equipment and associated instrumentation, and procedures used for data handling,
23 validation, and analysis. They shall additionally include the frequency/schedule of these
24 actions. Respondent shall provide these QA/QC documents to South Coast AQMD
25 [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air
26 Quality Engineer, (ndickel@aqmd.gov); Christina Ojeda, Air Quality Inspector, Payam
27 Pakbin, Atmospheric Measurements Manager, ppakbin@aqmd.gov)]. Respondent shall
28 provide updates to these QA/QC documents (if any) and a log for calibration, and

1 maintenance activities performed on the monitors in the monthly reports pursuant to
2 Condition No. 8.

3 a. Respondent shall provide South Coast AQMD with the same access that Respondent
4 has to on-site and off-site monitoring equipment. With respect to on-site monitoring
5 equipment, Respondent may require all visitors, including South Coast AQMD staff,
6 to don appropriate personal protective equipment. Upon request by South Coast
7 AQMD, Respondent shall, within 24 hours, provide a list of all personal protective
8 equipment that Respondent deems appropriate for accessing the monitoring
9 equipment. Respondent shall not prohibit South Coast AQMD staff from access to
10 Respondent's facility, including the monitoring equipment, if South Coast AQMD
11 staff don all personal protective equipment included on a list issued by Respondent
12 pursuant to this condition. With respect to off-site monitoring equipment, South Coast
13 AQMD shall arrange permission from third-party property owners for access, if
14 necessary, and Respondent shall provide access to equipment and accompany South
15 Coast AQMD personnel.

16 b. Respondent shall implement quality control measures (such as span and blank checks,
17 calibration, etc.) as specified by South Coast AQMD to ensure the accuracy of their
18 monitoring network within 30 days of notification.

19 i. If, following receipt of notification from South Coast AQMD, Respondent
20 disputes the need to take one or more specified quality control measures,
21 Respondent shall submit a response letter to the South Coast AQMD (attn:
22 Stephen Dutz, sdutz@aqmd.gov) not later than 20 days prior to the time for
23 implementation which details the dispute or objection, including provision
24 of supporting evidence as applicable. Respondent shall further propose not
25 less than 3 potential time slots for a virtual meeting during South Coast
26 AQMD business hours where appropriate staff or consultants from
27 Respondent are able to discuss the matter with South Coast AQMD.
28

- 1 ii. If Respondent follows the procedures outlined in Condition No 35(b)(i)
2 above, the deadline for implementing the disputed quality control measures
3 shall be delayed until a further deadline is set by South Coast AQMD in a
4 response determination.
- 5 iii. If EPA requires Respondent to take any action that is inconsistent with
6 quality control measures specified by South Coast AQMD under this
7 Condition 35(b) with respect to the MicroGCs, Respondent shall
8 immediately contact the South Coast AQMD [attn: Steven Dutz,
9 sdutz@aqmd.gov; Kathryn Roberts, kroberts@aqmd.gov; Mary Reichert,
10 mreichert@aqmd.gov] and describe the inconsistency. Respondent shall
11 endeavor to resolve the inconsistency with the Executive Officer, while
12 adhering to the measures specified by EPA.

13 36. Respondent shall, by May 1, 2024, install and maintain instrumentation within the nearby
14 residential community, at sites MS-10 and MS-12, as defined in Respondent's existing
15 Community Air Monitoring Program. These instruments shall be capable of measuring
16 hourly concentrations of benzene, toluene, ethylbenzene, xylenes, and other relevant
17 volatile organic compounds (VOC) with site surface emissions greater than 1 ton/year, as
18 indicated in Table 5.5 of the Chiquita Canyon Landfill Assessment of Air Emissions from
19 Landfill Surfaces Report dated October 2023. While long-term solutions for permanent
20 power are implemented and any necessary permits and approvals by regulatory agencies
21 for permanent power are obtained, these instruments will be installed and put into operation
22 using temporary power to allow for continuous measurements of all volatile organic
23 compounds required. It is recognized that the use of temporary power may not guarantee
24 the uninterrupted operation of these instruments. Respondent shall develop a monitoring
25 plan that utilizes reliable and field-proven instrumentation, such as a micro gas
26 chromatograph (MicroGC) with pre-concentration, and seek approval from South Coast
27 AQMD. Respondent shall request and pay for expedited processing of all permits and
28 procurement of the instruments, if available. To ensure Respondent is on schedule to

complete installation within the 75 days, Respondent shall provide the South Coast AQMD (attn: Kathryn Roberts, [kroberts@aqmd.gov](mailto: kroberts@aqmd.gov); Mary Reichert, [mreichert@aqmd.gov](mailto: mreichert@aqmd.gov)) an update at intervals of 30 days and 60 days from the issuance of the Order. Respondent shall specifically address whether it believes an extension is necessary and provide supporting documentation if it is seeking such extension. The AQMD may grant an extension of up to 60 days as appropriate based on the evidence submitted.

- a. Upon installation, data from these instruments shall be made available to the public via the publicly accessible webpage detailed in Condition No. 34. The display shall additionally reference and display the acute 1-hour Reference Exposure Levels (RELs) for any compounds with established acute exposure limits by California Office of Environmental Health Hazard Assessment (OEHHA).
- b. Until installation of the additional instrumentation is complete, Respondent shall increase the number of 24-hour time integrated canister sampling and analysis taken and analyzed for VOCs at MS-06 through MS-12 to three times per week.
- c. By the time of the status hearing contemplated in Condition No. 93, or unless otherwise approved in writing by South Coast AQMD, the MicroGCs installed pursuant to Condition No. 36 shall also be capable of measuring hourly concentrations of acrolein. The South Coast AQMD has requested EPA concurrence on the addition of acrolein; if EPA does not concur, the parties will address this provision at the status hearing contemplated in Condition No. 93.

37. Respondent shall, by March 5, 2024, take at least ten liquid samples from wells with pumps located in the Reaction Area, including wells with the highest average temperatures to the extent feasible. Respondent shall submit the liquid samples to a laboratory for analysis. Sampling and analysis shall be performed per U.S. EPA Method 624.1. Respondent shall, within 1 week of receipt from the contract laboratory, submit the results 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)). With the results, Respondent shall also submit laboratory analysis from samples taken on October 20, 2023 from leachate seeps on the western slope of the Reaction Area.

38. Respondent shall take at least one representative monthly sample of liquids from the Reaction Area of the Landfill and at least one representative monthly sample of leachate from the bottom tanks where liquids/leachate from the entire Landfill collect and analyze them per U.S. EPA Method 624.1 for the presence of volatile organic compounds (VOCs) and toxic air contaminants (TACs). In the event that Respondent demonstrates, to the satisfaction of South Coast AQMD, that generated liquid/leachate is sufficiently collected with no remaining seepage or potential for discharges of pressurized leachate, then the leachate sampling and analysis shall be reduced to a quarterly schedule. If further leachate seepage or discharges of pressurized leachate are found to occur, resulting in the exposure of the liquid/leachate to atmosphere, then the sampling and analysis shall return to a monthly schedule. Respondent shall, within 1 week of receipt from the contract laboratory, post the analytical results on Respondent's website, and provide to South Coast AQMD along with a detailed description and depiction of the sampling locations (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)).

Community Outreach

39. Respondent shall continue to maintain and update regularly (on a weekly basis) a dedicated page of its website with a highly visible link on its homepage (the "odor mitigation section") for presenting information discussing odor mitigation at CCL. Such webpage shall include all information in English and Spanish. Subsequent reports posted on the webpage shall be sent to a translation service within 2 business days of posting on the webpage, and shall be

translated and uploaded to the webpage within 2 business days of receipt from translation service. Such webpage shall also meet the following requirements:

- a. The odor mitigation webpage shall be accessible via a direct hyperlink included on the homepage of CCL's website (<https://chiquitacanyon.com>), via a clickable link with text stating "Odor Mitigation;"
- b. The odor mitigation webpage shall display prominently at the top of the page a notification that complaints of any odors believed to be caused by CCL can be made to CCL (24-Hour Hotline) at (661) 253-5155;
- c. The odor mitigation webpage shall display prominently at the top of the page a notification that complaints may also be submitted to the South Coast Air Quality Management District via telephone at 1 (800) CUT-SMOG or 1 (800) 288-7664 or online on South Coast AQMD's website (which shall hyperlink to the following: <http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx>);
- d. The odor mitigation webpage shall include a "Recent Updates" section which shall provide a narrative description of Respondent's understanding of the reaction and DMS;
- e. The odor mitigation webpage shall include an "Odor Mitigation Efforts" section which shall describe the efforts Respondent is taking to mitigate potential odors;
- f. The odor mitigation webpage shall include an "Odor and Maintenance Logs" section which shall include via hyperlink any logs created pursuant to this Order, preceded by a brief narrative description;
- g. The odor mitigation webpage shall include a "Reports, Permits, and Other Documents" section which shall include via hyperlink, preceded by a brief narrative description:
 - i. This Order;
 - ii. Safety Data Sheets for odor neutralizer used at the facility and compounds used in the Semi-Permanent Vapor Odor Control system referenced in Condition No. 45;

- iii. A copy of Respondent's current Conditional Use Permit (No. 2004-00052-(5));
 - iv. Any reports relating to odor or odor mitigation required by Respondent's Conditional Use Permit (No. 2004-00052-(5)) to be submitted to any government agency, including any responses or discussion of remedial actions to odor violations or complaints required by any government agency; and
 - v. All reports created by the Reaction Committee pursuant to this Order.
 - vi. Any other reports or correspondence requested by the County of Los Angeles agencies related to the reaction, odor, and Respondent's mitigation efforts.
- h. The odor mitigation webpage shall include an "Air Quality" Section which shall include a brief narrative describing the current status of air quality monitoring required under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)). The "Air Quality" Section shall also include, via hyperlink, preceded by a brief narrative description:
- i. Any consultant reports submitted to the Community Advisory Committee ("CAC"), TAC, or any government agency under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)).
 - ii. Any quarterly or annual reports submitted to the Los Angeles County Department of Public Health or South Coast AQMD under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)).
- i. The odor mitigation webpage shall include an "Upcoming Public Meetings" Section, which shall display the title/subject, date, time, location and/or virtual access information (including videoconference link or teleconference number as applicable), and a note of whether public comment will be received for the following meetings:
- i. Any noticed hearing of the South Coast AQMD Hearing Board in Case No. 6177-4;

- ii. Any meeting of the CAC where odor mitigation and/or violations are included as an agenda item or anticipated to be discussed;
- iii. Any meeting of the TAC where odor mitigation and/or violations are included as an agenda item or anticipated to be discussed; and
- iv. Any other meeting open to the public at which CCL is a scheduled host and/or participant where odor mitigation and/or violation are included as an agenda item or anticipated to be discussed.

40. Respondent shall host a public one-hour community meeting once each calendar month following a month in which Respondent receives three or more Rule 402 NOV's from the South Coast AQMD. If Respondent does not receive three or more Rule 402 NOV's from the South Coast AQMD in a calendar month, Respondent does not need to host a community meeting during the following month. During each meeting, Respondent shall provide updates with regards to implementation of this Order and make time available for public comment on matters related to CCL. The meeting date and time and format (in-person or virtual) shall be announced via Respondent's website and shall also be sent via email to everyone who has signed up for email notifications on Respondent's website. The announcement shall include a link and dial-in information to the virtual platform used to conduct the meeting, or if the meeting is in-person, the location of the meeting. All meetings held in person shall adhere to all applicable public health guidelines and shall take place within the Val Verde community. Any presentation, meeting materials, or other media created or shared by Respondent at such community meeting shall be posted to Respondent's Odor Mitigation webpage via hyperlink, including a brief narrative description of the materials.

Rule 1150 Landfill Excavation

41. Respondent shall submit, by January 30, 2024, a complete plan application for a Rule 1150 Landfill Excavation Plan. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited processing request and

1 associated required fees, forms, and information. A generic Rule 1150 plan application and
2 Title V Revision application shall include the following:

- 3 a. A signed and completed Form 400-A.
- 4 b. A signed and completed Form 400-CEQA.
- 5 c. Reason for excavation.
- 6 d. A site summary indicating the site history.
- 7 e. A list of materials buried or suspected materials buried in the site based on available
8 records.
- 9 f. Results of any boring tests done to characterize the disposal site.
- 10 g. Results of recent landfill gas analysis or soil vapor phase analysis including the
11 concentrations of methane, sulfur compounds, and speciated non-methane
12 hydrocarbons.
- 13 h. A plot plan indicating the location of the excavation, staging areas, vehicle route(s),
14 vehicle cleaning area, and any nearby buildings, roadways, or other site identifying
15 features, and including any schools, residential area or other sensitive receptors such
16 as hospitals or locations where children or elderly people live or work up to 2,500
17 feet away.
- 18 i. Operating schedule for excavation and removal (hours/day, days/week, weeks/year,
19 or equivalent).
- 20 j. Scheduled excavation starting and completion dates, and number of working days
21 required for the excavation.
- 22 k. Description of how the excavation will be conducted, including excavation
23 equipment and vehicles hauling the excavated material.
- 24 l. Description of mitigation measures for dust, odors, and hydrocarbons.
- 25 m. Description of monitoring to be conducted, including monitoring equipment and
26 techniques.
- 27 n. Total amount of material to be excavated in cubic yards under this project.
- 28

- o. Description of disposal of the material (re-burial on-site or sent off site for disposal, if off-site provide name of landfill where material will be disposed).
- p. Maximum surface area of excavation workface.
- q. Maximum surface area of refuse or contaminated material to be exposed to atmosphere at any one time.
- r. Fees in the amount \$1,090.43 (for Title V facilities, fee schedule FY 23-24).
- s. A Title V Permit Revision application shall be submitted with associated application fees in the amount of \$1,820.84 (fee schedule FY 23-24) and required forms (Form 400-A, Form 500-A2, Form 500-C1).
- t. A signed Form 400-XPP and additional 50% more fees from the plan fees listed above (\$545.22).

42. Respondent shall comply with the following requirements in the interim period, starting upon issuance of this Order and until the final approval of the Rule 1150 landfill excavation plan under the application specified in Condition No. 41 above, for all excavation, as defined in Rule 1150(a)(5), unless excavation is occurring pursuant to one or more exemption as listed in South Coast AQMD Rule 1150(c):

- a. The South Coast AQMD shall be notified at least two (2) days prior to each excavation commencement and within five (5) days after its completion. The notification shall be made by email [Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov); Gerardo Vergara, Air Quality Inspector, (gvergara@aqmd.gov); and Rule1150notifications@aqmd.gov]. The subject line of the email shall contain "Rule 1150 Notification." The body of the email shall contain the following information:

- i. Company Name and Company ID
- ii. Site Address
- iii. Notification Type (2 days prior or 5 days after)
- iv. Estimated Excavation Start Date and Completion Date

v. A Map of the Facility with Excavation Location Indicated

- b. Excavation shall not be conducted between the hours of 6:00 p.m. and 6:00 a.m. or on weekends and legal holidays unless excavation is occurring to comply with Condition 24, or otherwise approved in writing by the South Coast AQMD.
- c. Excavation shall not be conducted on days when South Coast AQMD forecasts first, second, or third stage episodes for area number 13 or when South Coast AQMD requires companies in area number 13 to implement their first, second or third stage episode plans. Episode forecasts for the following day can be obtained by calling (800) 288-7664.
- d. During excavation, continuous monitoring and recording of the wind speed and directions shall be conducted at an appropriate site or, through the meteorological station if present at the site.
- e. Excavation shall not be conducted, except in the Reaction Area, when the wind speed is greater than 15 mph (averaged over 15 minutes) or the wind speed instantaneously exceeds 25 mph. If Respondent receives either any NOV for violation of Section 41700 / Rule 402 or any complaints for dust, Respondent shall stop excavation in the Reaction Area during such wind conditions.
- f. During excavation, all working excavation areas, excavated material and unpaved roadways shall be watered down until the surface is moist and then maintained in a moist condition to minimize dust and emissions without creating a safety hazard condition.
- g. VOC contaminated soil (as defined by Rule 1166) shall not be spread onsite or offsite, nor stockpiled, if it results in uncontrolled evaporation of VOC to the atmosphere. VOC contaminated soil shall not be used for landfill cover.
- h. During excavation, monitoring for Total Organic Compounds as methane using an Organic Vapor Analyzer (OVA) or other monitor approved by the South Coast AQMD shall be conducted continuously at the working face of the excavation and at the downwind property line or other approved locations. The maximum sustained

1 readings (greater than 15 seconds) shall be recorded every 15 minutes. The OVA
2 or other approved monitor shall be calibrated each day in accordance with
3 manufacturers' specifications.

- 4 i. If the OVA or other approved organic monitor shows a sustained reading (greater
5 than 15 seconds) of 2,000 ppmv Total Organic Compounds as methane or greater
6 at the working face of the excavation, the excavation shall cease and the area
7 generating the emissions shall immediately be completely covered with a minimum
8 of 6 inches of clean dirt, plastic sheet, or other South Coast AQMD approved cover.
9 Excavation shall not resume until the readings return to the pre-excavation level.
- 10 j. If the OVA or other approved organic monitor shows a sustained reading (greater
11 than 15 seconds) of 200 ppmv Total Organic Compounds as methane or greater
12 downwind from the site at the property line (or other approved locations), the
13 excavation shall cease and the area generating the emissions shall immediately be
14 completely covered with a minimum of 6 inches of clean dirt, plastic sheet, or other
15 South Coast AQMD approved cover. Excavation shall not resume until the readings
16 return to the pre-excavation level.
- 17 k. Excavated landfill material and refuse shall be immediately, not to exceed 1 hour,
18 relocated for burial onsite, immediately deposited into trucks/trailers for off-site
19 transport and completely covered with automated vinyl tarps, with such covers tied
20 down, except for during active loading/unloading of refuse.
- 21 l. When refuse loading is completed and during transport, no material shall extend
22 above the sides or rear of the truck or trailer which will haul the excavated material.
23 Excavated material shall be completely covered with automated vinyl tarps, with
24 the cover tied down.
- 25 m. Respondent shall ensure that there is no track-out from the excavation area.
26 Respondent shall ensure that all trucks used for excavation in Reaction Area go
27 through a rumble strip before exiting the excavation area, and Respondent shall
28 ensure that all trucks shall, following the conclusion of excavation, but not less than

once per day, be free of excavation materials. The rumble strip(s) shall be adequately sized consistent with South Coast AQMD Rule 403 and maintained as to prevent saturation/caking of soils that would cause the unit to become ineffective in removing soil from tires.

n. Landfill materials and refuse which have been exposed to the atmosphere as a result of the excavation, which have not been excavated and relocated for burial or transported off site, shall be immediately, not to exceed 30 minutes, safety permitting or unless otherwise approved in writing by South Coast AQMD, covered (with a minimum of 6 inches of clean soil, secured plastic sheeting that is at least 10 mil, or other South Coast AQMD approved cover) whenever excavation is not actively in progress, and at the end of each working day so that no portion of landfill material and refuse is exposed to the atmosphere. Foam by itself shall not be used as a night cover if it is raining or rain is predicted by the National Weather Service prior to the next scheduled day of excavation. For the west slope excavation project, Respondent shall follow the timing and cover procedures set forth in the west slope excavation project work plan. If Respondent follows the work plan, it is otherwise exempt from this Condition 42(n).

o. Daily inspections shall be conducted of any covered excavation area (per Conditions 42(i), 42(j), and 42(n) above) to ensure the integrity of the cover(s) is maintained and secured so that no portion of the soil is exposed to atmosphere. If the cover material is not completely covering the landfill materials and refuse generating emissions, or if the integrity of the cover has been compromised, immediate corrective action shall be taken to add and secure a new cover, or additional cover, on the area requiring corrective action. An inspection log shall be maintained to record the time of the inspections and any corrective action performed.

p. All materials that are listed as hazardous by a federal or state agency shall be considered "hazardous materials" for the purpose of this Order.

- i. All excavated hazardous material shall be transported in such a manner as to prevent any emissions of hazardous materials.
 - ii. All hazardous materials shall be transported in containers clearly marked as to the type of material contained and what procedures should be followed in case of accidental spills.
 - iii. Excavated liquid hazardous materials with the potential to cause air emissions shall be encapsulated or enclosed in containers with sealed lids before loading into the transport vehicles.
- q. Excavation, handling and stockpiling activities shall comply with the applicable requirements of Rule 403.
 - r. All records required to demonstrate compliance with Condition No. 42 shall be kept and maintained for at least 5 years.
 - s. Landfill excavation mitigation measures, other than those listed in this Condition No. 42, which South Coast AQMD personnel determine are necessary to protect the health and safety of the public, shall be implemented upon request.
 - t. During excavation, odor neutralizer and/or odor suppressant (e.g. clay binder polymer spray-applied crusting cover material), shall be applied to the excavation working face and excavated materials to minimize emissions and odor without creating a safety hazard condition. Odor neutralizer applying equipment may include but not be limited to, fans and arm tower misters.
 - u. During excavation in the Reaction Area as defined in Condition 9(a), Respondent shall employ fresh, new (unused) bed liners in trucks for each load during loading and transport. Respondent shall change out the existing bed liners in the trucks with fresh, new bed liners for each subsequent load in each truck.
 - v. Respondent shall post a notice on the front page of its website (chiquitacanyon.com), and notify in writing all addresses located within 5,280 feet (1 mile) of the excavation area, at least 48 hours in advance of planned excavation commencement with a short description of the proposed excavation work, the

estimated times of day excavation is proposed to occur, the estimated excavation start date, and estimated excavation end date. For unplanned excavation, or excavation where there is insufficient time to provide written notice at least 48 hours in advance of commencement, and where such excavation is expected to last more than one day, Respondent shall post a notice on the front page of its website as soon as possible upon learning such excavation is necessary, not to exceed 2 business hours. A copy of this notification shall be submitted to South Coast AQMD [Attention: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov].

w. If a South Coast AQMD Rule 402 Nuisance Notice of Violation is received by the Respondent during excavation, or a distinct odor (level 3 or greater per below Odor Scale) resulting from the excavation is detected at or beyond the property line, then the Respondent shall, in accordance with its Health and Safety Plan, conduct ambient air quality sampling within 2 hours of receipt of Rule 402 Nuisance Notice of Violation or of when a distinct odor (level 3 or greater) is detected at or beyond the property line and analyze for TOC and speciated TOCs as follows:

Odor Scale Description of Odor Intensity

0	No odor detected
1	Very light odor detected
2	Light odor detected, distinguishable
3	Moderate odor, very distinguishable
4	Strong odor, very distinguishable, irritable
5	Very strong odor, very distinguishable, overpowering

i. Samples shall be collected at the following locations: immediately upwind of the excavation site, immediately downwind of the excavation site, within 3 inches of the exposed excavation workplace, safety permitting, and at the downwind property line, or other location(s) approved in writing by South Coast AQMD. If

1 deemed unsafe, Respondent shall document the date and
2 conditions preventing compliance with this condition. Records of
3 such conditions shall be submitted in the following monthly report
4 pursuant to Condition 8.

5 ii. Sampling shall conform to CARB Method 422 or equivalent.
6 Samples with high moisture shall be collected using an appropriate
7 method such as South Coast AQMD Method 25.1/25.3 or other
8 methods approved in writing by South Coast AQMD.

9 iii. Samples shall be analyzed by EPA Method TO-3, and EPA
10 Method TO-15/TO-15A or other method approved in writing by
11 South Coast AQMD.

12 iv. All collected samples shall be sent to an appropriate laboratory for
13 analysis, within 24 hours of the sample collection, with expedited
14 analysis requested. All lab results shall be reported to South Coast
15 AQMD [Attention: Baitong Chen, bchen@aqmd.gov; Nathaniel
16 Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov;
17 Steve Dutz, sdutz@aqmd.gov] within 48 hours of receipt from the
18 laboratory.

19 x. During excavation, TOC and speciated TOC ambient air sampling shall be
20 conducted at least once between the hours of 6:00am and 11:00am, and at
21 least once between the hours of 2:00pm and 6:00pm, according to
22 Respondent's Health and Safety Plan and the following requirements:

23 i. Samples shall be collected at the following locations: immediately
24 upwind of the excavation site, immediately downwind of the
25 excavation site, within 3 inches of the exposed excavation
26 workface, safety permitting, and at the downwind property line, or
27 other location(s) approved in writing by South Coast AQMD. If
28 deemed unsafe, Respondent shall document the date and

1 conditions preventing compliance with this condition. Records of
2 such conditions shall be submitted in the following monthly report
3 pursuant to Condition 8.

4 ii. Sampling shall conform to CARB Method 422 or equivalent.
5 Samples with high moisture shall be collected using an appropriate
6 method such as South Coast AQMD Method 25.1/25.3 or other
7 methods approved in writing by South Coast AQMD.

8 iii. Samples shall be analyzed by EPA Method TO-3, and EPA
9 Method TO-15/TO-15A or other method approved in writing by
10 South Coast AQMD.

11 iv. All collected samples shall be sent to an appropriate laboratory for
12 analysis, within 24 hours of the sample collection, with expedited
13 analysis requested. All lab results shall be reported to South Coast
14 AQMD [Attention: Baitong Chen, bchen@aqmd.gov; Nathaniel
15 Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov;
16 Steve Dutz, stdutz@aqmd.gov] within 48 hours of receipt from the
17 laboratory.

18 y. The excavation workface, which exposes refuse or other emission
19 generating material to the atmosphere, shall not exceed 1,000 square feet
20 (unless excavation is occurring pursuant to the west slope excavation
21 project work plan, in which case the working face shall be limited to 3,000
22 square feet), without prior written approval from the South Coast AQMD
23 or except where immediate, unplanned excavation is necessary to prevent
24 or remediate imminent impacts to public health and safety. Estimation of
25 the excavation workface size (square feet) shall be performed every hour
26 during excavation. The daily excavation start date and time, hourly
27 excavation workface size, and time of hourly excavation workface size
28

1 estimations shall be recorded, and shall be provided to South Coast
2 AQMD personnel within 48 hours of request.

3 z. If a South Coast AQMD Rule 402 Nuisance Notice of Violation is
4 received by Respondent during excavation, the approved mitigation
5 measures shall be implemented immediately. Approved mitigation
6 measures:

7 i. Excavation shall be limited to one location at a time.

8 ii. Unless excavation is occurring pursuant to the west slope
9 excavation project work plan, Respondent shall limit the
10 excavation workface, reducing the area by at least 50%, through
11 use of plastic sheeting that is free of tears and defects, 6 inches of
12 clean dirt cover, and/or long duration foam or other suppressant
13 approved in writing by South Coast AQMD. After two hours,
14 Respondent may return to the original size of the excavation
15 workface unless there are Unfavorable Wind Conditions, as
16 defined in the Stipulated Order for Abatement in Case No. 6177-
17 1.

18 iii. Minimizing soil disturbance/transfer.

19 iv. Limiting working hours, reducing the excavation working hours to
20 6 total hours for the day (or the number of working hours at the
21 time of receipt of the NOV, if greater than 6 hours).

22 v. Water and/or odor neutralizing products containing no VOC.

23 vi. Cleaning and covering of haul trucks.

24 vii. Good housekeeping.

25 aa. During excavation, if any ambient air monitoring stations at the fenceline
26 or in the surrounding community (MS-01 through MS-12) reach or exceed
27 applicable OEHHA acute REL concentrations (e.g. benzene acute REL is
28 8 ppb 1-hr average, H2S acute REL is 30 ppb 1-hour average), excavation

1 shall cease and approved mitigation measures per Condition No. 42(z)
2 above shall be implemented. Excavation shall not resume until
3 concentrations return and remain below the REL threshold(s) for the
4 duration of at least one averaging cycle for the respective acute RELs. The
5 approved mitigation measures shall be implemented when 25% or more of
6 the ambient monitoring stations are down for more than one averaging
7 cycle for the respective acute RELs at the same time or when there are no
8 operational realtime monitors downwind of the excavation workface,
9 which includes but is not limited to calibration, maintenance, breakdown
10 and repair.

11 bb. During excavation, other emission generating activities such as well
12 drilling in the reaction area, etc. shall be limited and prioritized outside of
13 excavation hours. If landfill gas collection and/or control equipment is
14 offline due to breakdown or maintenance, resulting in a reduction of gas
15 flow to control devices by 10% or more (compared to the gas flow prior
16 to the downtime of the first device), approved mitigation measures per
17 Condition 42(z) above shall be implemented until the landfill gas
18 collection and/or control equipment is returned to full operation.
19 Respondent shall keep and maintain a log of all non-operation (or
20 downtime) of landfill gas collection and control equipment, with dates,
21 times, duration, and reason for non-operation. This log shall be made
22 available to South Coast AQMD personnel within 24 hours of request.

23 **Other Conditions**

24 43. To ensure that fresh trash odors remain controlled, Respondent shall maintain the following
25 fresh trash-related odor mitigation measures recommended by its landfill operations expert
26 from the Stipulated Order for Abatement in Case No. 6177-1 during Unfavorable Wind
27 Conditions, as defined in the Stipulated Order for Abatement in Case No. 6177-1.
28 Respondent shall not expose more of the working face than is operationally necessary on

any working day and shall additionally maintain the following odor mitigation measures:

- a. Use orchard fans, and tow-and-blow fans as needed, placed and spaced around the working face in accordance with the recommendations of Chiquita's landfill operations expert;
- b. Use equipment equipped with odor neutralizer misting systems in various portions of CCL to neutralize any fresh trash odors. This equipment shall include, but not be limited to, fans and arm tower misters;
- c. Identify and appropriately handle odorous loads at the scale and working face as new waste loads enter CCL;
- d. Haul odorous loads with proper sequencing and cover; and
- e. Regularly train staff on all aspects of landfill operations, employee safety, and odor control.
- f. If Respondent detects trash-based odors at any stops during any odor surveillance conducted pursuant to Condition No. 1(f) during Respondent's operating hours, Respondent shall deploy additional permitted orchard-style fans to the working face and surrounding area. If Respondent is not able to confirm the reduction of trash based odors within 1 hour of deployment of additional fans, Respondent shall reduce its working face by 25% of that day's total size for the remainder of the operating day.

44. Respondent shall obtain, install, and maintain an on-site landfill meteorological station to measure wind speed and direction by October 31, 2023. The meteorological station shall be installed at a location appropriate for determining wind speed and direction on the top deck of the landfill in the Reaction Area (as defined in Condition 9(a)) on a 1-hour average basis, with measurements recorded every 5 minutes. The station shall record and preserve all available readings for three years and the readings shall be made available to the South Coast AQMD upon request.

45. Respondent shall install, maintain in good working order, and operate 1,000 feet or more of Semi-Permanent Vapor Odor Control in the Reaction Area (as defined in Condition 9(a))

1 within 14 days of the approval of this Order. Respondent shall operate the Semi-Permanent
2 Vapor Odor Control system immediately and continuously.

3 46. Respondent shall operate and maintain in good working order a landfill perimeter odor
4 control misting system on permanent fencing on the west and northwest of the property.

5 47. The landfill perimeter odor control misting system shall be operated immediately and
6 continuously upon receiving data from the meteorological station, referenced in Condition
7 No. 44 above, that the 1-hour averaged wind direction is blowing in West, Northwest,
8 North, or Northeast directions (270 degrees to 45 degrees). The misting system shall
9 continue to operate until the 1-hour averaged wind direction data demonstrates the wind is
10 no longer blowing in the specified directions. The system shall be operated in such a
11 manner and with sufficient odor neutralizers to mitigate, to the extent possible, transient
12 odors from the landfill into surrounding communities, as determined by the Reaction
13 Committee.

14 48. Respondent shall notify the South Coast AQMD (attn: Kathryn Roberts,
15 kroberts@aqmd.gov; Mary Reichert, mreichert@aqmd.gov; Christina Ojeda,
16 cojeda@aqmd.gov) of any substantial operational changes designed to or anticipated to
17 reduce odors, such as an operational change not contemplated by this Order, within seven
18 days of implementing such changes.

19 49. Equipment and operations at the Facility are subject to the jurisdiction and regulatory
20 requirements of multiple agencies, including but not limited to the District, CalRecycle,
21 Los Angeles County Public Works, Los Angeles County Department of Regional Planning,
22 and Los Angeles County Department of Public Health. The conditions in this Order shall
23 not in any way restrict or expand the scope of jurisdiction of any agency. If any agency that
24 shares jurisdiction over the Facility with the South Coast AQMD requires Respondent to
25 take any action that is inconsistent with this Order, Respondent shall immediately contact
26 the South Coast AQMD by email at [Kathryn Roberts, kroberts@aqmd.gov and Mary
27 Reichert, mreichert@aqmd.gov] and describe the inconsistent provisions, including
28 providing any written directive from any other agency which Respondent considers

1 inconsistent with one or more conditions in this Order. Respondent shall endeavor to
2 resolve the inconsistency with the Executive Officer, while adhering to the Condition(s) in
3 the Order. If the inconsistency is not resolved within 3 working days of the relevant agency,
4 Respondent shall immediately inform the South Coast AQMD and shall petition for a
5 status/modification hearing before the Hearing Board for further proceedings. At such
6 proceeding, only the provision in dispute shall be resolved by the Hearing Board while the
7 other conditions in this Order shall remain in full force and effect.

- 8 a. If Respondent notifies South Coast AQMD per Condition No. 49 above
9 that the inconsistency with one or more Condition and an order of another
10 agency cannot be resolved, compliance with the applicable Condition(s)
11 of this Order shall be waived until further Order of the Hearing Board.
12 Notwithstanding the above, in no instance shall compliance with
13 Condition No. 49 or Condition No. 49(a) be waived.

14 50. Respondent shall follow the direction of EPA to implement the Master Work Plan
15 submitted to EPA under the Unilateral Administrative Order (UAO). Any monthly progress
16 reports submitted to EPA in accordance with the UAO shall also be submitted to the South
17 Coast AQMD (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel,
18 Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
19 Inspector, (cojeda@aqmd.gov)).

20 51. Respondent shall permit South Coast AQMD personnel to conduct all inspections deemed
21 necessary by South Coast AQMD Compliance staff, including, but not limited to, collection
22 of samples. If during any inspection, South Coast AQMD observes uncontrolled liquid
23 which has at least one characteristic (including odor, appearance, etc.) that suggests the
24 liquid may be leachate, South Coast AQMD may require Respondent to collect a sample of
25 the liquid within 24 hours, submit the sample for expedited testing for VOCs, and submit
26 test results to the South Coast AQMD Compliance Inspector within 24 hours of receipt of
27 results, but no later than 96 hours after collection. Notwithstanding the preceding,
28 Respondent may require all visitors, including South Coast AQMD staff, to comply with

the site's Health and Safety Plan. Respondent shall not prohibit South Coast AQMD staff from access to Respondent's facility, including the Reaction Area, if South Coast AQMD staff comply with the Health and Safety Plan. Respondent shall provide South Coast AQMD with any updates to the Health and Safety Plan within 1 business day of going into effect.

a. To the extent Respondent's Health and Safety Plan requires 5-gas monitors for regulatory staff to conduct an on-site inspection, Respondent shall maintain onsite at least two 5-gas monitors (calibrated, sufficient battery, and ready for use) for regulatory personnel to use. Respondent may require any individual utilizing its 5-gas monitors to sign a waiver or release of liability in the form agreed upon by the parties on April 19, 2024.

52. Respondent shall reserve 60 minutes biweekly to host a virtual meeting between South Coast AQMD technical staff and Respondent / Respondent's technical consultants to discuss key updates on Respondent's implementation of this Order and any changes to Landfill conditions or operations. Any instance of the biweekly meeting may be cancelled at South Coast AQMD's sole discretion.

53. Respondent shall, on a weekly basis, report on: (1) number of tanks in each leachate tank group; (2) total number of leachate tanks treated; (3) weekly and year-to-date total quantity of liquid collected; (4) weekly and year-to-date total quantity of liquid treated; and (5) estimated weekly and year-to-date total quantity of seeping, pooling, or ponding leachate collected. By no later than April 3, 2024, Respondent shall submit 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), the first weekly report, and shall submit an additional weekly report every 7 calendar days thereafter.

54. Respondent shall collect, convey, and store any condensate collected after the sulfur treatment carbon absorbers separately from landfill leachate. No combining or mixing of these liquid materials shall occur, to allow for accurate characterization and profiling of each

liquid.

55. Respondent shall immediately cease injection of landfill gas condensate into the landfill gas control flares, unless the condensate injection is initially performed for the purposes of a source test required under this condition. Any injection of condensate collected after the sulfur treatment carbon absorbers to the flares may be allowed if each of the following criteria are fulfilled:

- a. The condensate has been sampled/analyzed and determined as non-hazardous in accordance with hazardous material requirements by respective agencies (U.S. EPA and DTSC), with sampling/analysis results provided to South Coast AQMD along with specified regulatory hazardous waste thresholds;
- b. The condensate tank has not received any additional liquid after the sampling/analysis performed in Condition 55(a) and will not receive any additional liquids prior to or during injection/combustion;
- c. Respondent has submitted a complete source test protocol which has been reviewed and approved by South Coast AQMD in writing, and which includes, at a minimum, procedures for testing of methane, total non-methane organic compounds, speciated organics (including but not limited to Rule 1150.1 Table 1 Carcinogenic and Toxic Air Contaminants), NO_x as NO₂, CO, particulate matter (PM₁₀), oxygen and carbon dioxide, moisture content, temperature, flowrate, total sulfur compounds as H₂S and speciated sulfur compounds, gas BTU value, nitrogen, methane and TNMOC destruction efficiency, and metals;
- d. Respondent has submitted a source test report which has been reviewed and approved in writing by South Coast AQMD;
- e. South Coast AQMD grants written approval to conduct condensate injection and has not withdrawn the approval based on follow-up source test evaluation(s);

- f. Respondent conducts follow-up flare source testing, at a minimum of every 6 calendar months, which includes non-hazardous condensate injection, and following the requirements of sub-item (d) above; and
- g. Respondent maintains records of condensate sampling/analysis results to demonstrate the liquid is non-hazardous, maintains records of daily condensate injection flows (gallons per day), and provides these records in the monthly report pursuant to Condition No. 8.

56. Respondent shall conduct sampling and analysis of vapors in the headspace of leachate tanks located in the Top Deck Tank Farm (Tank Farm #9). Sampling as required below shall be completed no later than April 4, 2024. Samples shall be collected and analyzed from the following equipment/locations:

- a. the vapors in the headspace of at least one untreated leachate storage tank (preferentially containing leachate that is determined to be hazardous or assumed to be hazardous in accordance with hazardous material requirements by respective regulatory agencies, e.g. U.S. EPA and/or DTSC);
- b. the vapors in the headspace of at least one leachate storage tank undergoing treatment at;
- c. the vapors in the headspace of at least one leachate storage tank where treatment is complete.

Each of the sampled storage tanks shall be filled at least 2/3 full of leachate (approximately 14,000 gallons). Tanks to be sampled shall be preferentially selected to be those not connected/vented to the landfill gas collection system and/or landfill gas control systems. Vapor sampling and analysis of the headspace shall be conducted for total sulfur compounds as H₂S and speciated sulfur compounds pursuant to South Coast AQMD Method 307-91, and for speciated organic compounds pursuant to U.S. EPA Method TO-15. Sampling and analysis shall be performed by a South Coast AQMD Laboratory Approval Program (LAP) approved laboratory(ies), capable of sampling and analysis per South Coast AQMD Method

307-91 and U.S. EPA Method TO-15, respectively. A report detailing the sampling and analysis parameters and complete laboratory analysis results shall be submitted to South Coast AQMD by April 18 , 2024 [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov); Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. The report shall include, at a minimum, identification of the leachate tank(s) sampled, sample location within each leachate tank, vapor/liquid connections, ventilation (if applicable) and configuration of the tank(s) which were sampled, temperature of the leachate at time of sampling, date/time of sampling, treatment status of the tank(s), volume of leachate within the tank(s), and complete laboratory sampling and analysis results.

57. Respondent shall submit, by April 22, 2024, a complete permit modification application to the Landfill Gas Condensate and Leachate Collection/Storage System (under Permit G66132, A/N 613131) to increase the landfill's liquid storage capacity, including tanks and equipment which have not been described in the applications submitted pursuant to Condition 19. 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.

58. Respondent shall submit, by June 21, 2024, a complete permit application for the operation of the thermal oxidizer (pursuant to Condition 29) to include the thermal oxidizer under Respondent's Title V permit. 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.

59. Respondent shall submit, by June 21, 2024, a complete permit application for the Landfill Gas Condensate and Leachate Treatment System, which includes treating hazardous liquid waste. 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.

60. Respondent shall submit, by April 22, 2024, a complete permit modification application to

1 the Landfill Gas Collection System (under Permit G43917, A/N 578102) to include the tie-
2 in of the landfill gas condensate and leachate treatment system vapor vent lines to the
3 Landfill Gas Collection System. The submittal shall be accompanied with a complete Title
4 V Revision application and shall be submitted with an expedited permit processing request
5 and associated required fees, forms, and information.

6 61. Respondent shall submit, by May 21, 2024, a complete permit modification application to
7 the Landfill Gas Flare System (under Permit G73696, A/N 645450) to include the
8 combustion of vapor vented from the hazardous liquid tanks in the landfill gas condensate
9 and leachate collection/storage tank system and landfill gas condensate and leachate
10 treatment system. The submittal shall be accompanied with a complete Title V Revision
11 application and shall be submitted with an expedited permit processing request and
12 associated required fees, forms, and information.

13 62. Respondent shall submit, by May 21, 2024, a complete permit modification application to
14 the Landfill Gas Flare System (under A/N 624296) to include the combustion of vapor
15 vented from the hazardous liquid tanks in the landfill gas condensate and leachate
16 collection/storage tank system and landfill gas condensate and leachate treatment system.
17 The submittal shall be accompanied with a complete Title V Revision application and shall
18 be submitted with an expedited permit processing request and associated required fees,
19 forms, and information.

20 63. By April 22, 2024, Respondent shall provide South Coast AQMD with a schematic of the
21 current leachate treatment and storage system, including connections, flow lines, tank
22 groups, vent lines to flares, lines to and between leachate tanks, and tanks which are
23 connected and not connected to vacuum vent lines.

24 64. Respondent shall follow the direction of the EPA to prepare a Leachate Management Plan
25 in accordance with the Unilateral Administrative Order (UAO). Respondent shall submit the
26 final plan submitted to EPA to South Coast AQMD on or before March 28, 2024. Any
27 updates to the final plan shall be submitted to South Coast AQMD within 24 hours of
28 submittal to EPA.

65. Respondent shall provide notice 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 Friday of each week a summary of leachate dewatering pumps that have been installed and resumed operation the prior week, and the number and location of dewatering pumps anticipated to be installed and placed into operation in the following week , and the location of all dewatering pumps installed and / or in operation.

66. Beginning September 2024, Respondent shall increase the frequency with which it monitors for temperature and pressure at landfill gas collection wells within the Reaction Area to twice monthly.

a. Respondent shall investigate a real-time, remote monitoring system which shall, at minimum, monitor well pressure and landfill gas temperature at the well head. The remote monitoring system may include monitoring of fixed gases, oxygen, methane, and carbon dioxide, as well as wellfield tuning/optimization and well liquid level monitoring. By April 19, 2024, the Reaction Committee shall submit recommendations regarding installation of the remote monitoring system. By no later than September 17, 2024, contracts to install and operate the monitoring system in Condition No. 66(a)(v) shall be finalized.

i. Submit the finalized contract to install and operate the monitoring that was due June 21, 2024 [per Order for Abatement Condition No. 66 in effect April 24, 2024] 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 no later than September 17, 2024.

ii. Submit all known information of design, implementation, installation, and specification issues/concerns by no later than

1 September 17, 2024. This shall include documented
2 correspondence and correspondence reports (for live
3 correspondence prior to August 17, 2024) summarizing results of
4 all communication with system, device, and component
5 vendors/manufacturers and/or contractors identifying the
6 following, including, but not limited to:

- 7 1. the system, device, and component viability and
8 availability, and
- 9 2. the system, device, and component design,
10 implementation, installation, and specification issues, such
11 as compatibility, physical constraints, specifications falling
12 short of operational need, and supply chain timelines.

13 iii. Respondent shall contact at least three reputable
14 vendors/manufacturers/distributors for each of the systems,
15 devices, and components that have identified issues/concerns as
16 described by Condition No. 66(a)(ii) requesting and facilitating in
17 obtaining proposed solutions and recommendations for each of the
18 identified issues/concerns. Documented correspondence of the
19 results of this communication shall be submitted to South Coast
20 AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
21 Nathaniel Dickel, Senior Air Quality Engineer,
22 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,
23 (cojeda@aqmd.gov)] by no later than, October 11, 2024.

24 iv. Respondent shall submit the findings and solutions to issues
25 documented in Condition 66(a)(ii) and (iii), which shall include
26 any additional communication from contacting various vendors,
27 manufacturers, or distributors of systems, components, and devices
28 by no later than October 30, 2024, or unless otherwise approved

1 by South Coast AQMD, to [Baitong Chen, Air Quality Engineer,
2 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
3 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
4 Inspector, (cojeda@aqmd.gov)].

- 5 1. The findings and solutions shall also include an inventory
6 of the vertical wells in the Initial Reaction Area that contain
7 a Lorenz pump capable of measuring liquid levels and
8 down-well temperatures, including the location of the
9 vertical wells and the depth of the down-well temperature
10 probes. The findings and solutions shall also include an
11 inventory and installation timeline of the temperature
12 monitoring probe network approved by the U.S.
13 Environmental Protection Agency under the Unilateral
14 Administrative Order.

- 15 v. A remote monitoring system shall be installed and in operation no
16 later than December 31, 2024, or other date as approved in writing
17 by South Coast AQMD. Temperature shall be measured in at least
18 twenty (20) wellheads operated in the Initial Reaction Area
19 (defined as the boundary of Cells 1/2A, 2B/3, 4, and Module
20 2B/3/4 P2 as specified in Condition No. 9(a)). By October 15,
21 2024, the Reaction Committee shall determine the location for
22 installation of the remote monitoring system equipment and shall
23 submit its determination to South Coast AQMD [Baitong Chen,
24 Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel,
25 Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina
26 Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. Should any of
27 the remote monitoring system equipment fail due to the ETLF
28 conditions at the Landfill, Respondent does not need to replace it.

vi. By January 31, 2025, the Reaction Committee shall submit a proposal to assess the viability and functionality of a remote monitoring system which measures temperature and pressure within a well with a pump located within the Reaction Area, including assessment of multiple depths within the well (e.g. shallow, middle, and deep). The Proposal shall be submitted to Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov] for review. Upon approval by South Coast AQMD, Respondent shall conduct the feasibility assessment. The Reaction Committee shall submit a final report to the South Coast AQMD (to Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]) detailing the results of the feasibility study, and recommendations on further deployment of the remote monitoring system not later than 150 days from the approval of the feasibility proposal.

67. Respondent shall within 2 business days of the issuance of this Order designate an Inspection Liaison responsible for coordinating the exchange of information between Respondent and South Coast AQMD.

68. Respondent shall by June 15, 2024, install appropriately ranged differential pressure gauges, with at least 0.01 inches water column resolution, or pressure gauge otherwise approved in writing by South Coast AQMD, on each leachate storage tank. Respondent shall monitor and record daily the differential pressure of each leachate tank, tank identification number, date and time of the reading, and the personnel that conducted the reading. Pressure readings that indicate the lowest value of the gauge or the highest value of the gauge, shall be reported using significant digits to the hundredths place as “<= [lowest value on gauge] (e.g. <= -0.50 inches water column)” and “>= [highest value on gauge] (e.g. >= 0.50 inches water column)”, respectively. The tanks shall be maintained under negative pressure, as

demonstrated by differential pressure readings. Zero and positive pressure readings do not demonstrate negative pressure. Pressure gauges shall be calibrated according to manufacturer specifications and schedule. Respondent shall report all the recordings in the monthly report pursuant to Condition No. 8.

69. By July 19, 2024, Respondent shall conduct the first of ongoing quarterly inspection and monitoring of HDPE, or other material, landfill gas conveyance piping, landfill gas condensate and leachate conveyance piping, and any associated piping components such as flanges, fittings, valves, connectors, pumps, or other equipment of the landfill gas collection system and landfill gas condensate and leachate collection and storage system within the enclosed piping networks. Monitoring Inspection shall include visual and/or physical inspection of the specified equipment above, which is located aboveground, for buckling, rupturing, cracking, melting, liquid leaks, or other structural concerns which may lead to the release of fugitive landfill gas emissions, liquids, or odorous vapors. Monitoring shall additionally include measurements of total organic compounds (TOC) as methane with a flame ionization detector (FID), that conforms to Rule 1150.1 requirements, an organic vapor analyzer for component leaks at each of the aboveground piping components within the landfill gas collection system and landfill gas condensate and leachate collection and storage system enclosed piping networks. A component will be considered to have a leak if the concentration of methane measured one half an inch or less from a component source exceeds 500 ppmv, other than non-repeatable, momentary readings. Records of this monitoring activity shall include at a minimum:

- a. A plot plan showing the piping networks monitored;
- b. Date(s) when monitoring was performed;
- c. Results of the visual/physical inspection and associated photos of any piping or piping components which had any of the above-mentioned visual and/or physical inspection concerns;
- d. Results of piping component leak measurements;
- e. Location(s) of component/equipment with visual and/or physical

inspection concerns and/or locations(s) where component leaks were measured, which shall include the following:

- i. Location identified on a map;
 - ii. Location identified by the landfill surface grid number and GPS coordinates; and
- f. Work which has been performed, or which is planned to be performed, and associated date(s), to repair, replace, or conduct other actions to resolve issues with the piping or components of concern.

Following four completed quarterly analyses, by July 31, 2025, the Reaction Committee shall submit a recommendation to South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov] as to modifying the frequency of such.

70. Respondent shall, by June 28, 2024, submit a report on the landfill's current landfill gas generation and projected landfill gas generation for the next five calendar years, through the end of calendar year 2029. The current and projected landfill gas generation shall be estimated through use of U.S. EPA's Landfill Gas Emissions Model (LandGEM), and the Reaction Committee's analysis for additional landfill gas generated as a result of the ongoing reaction. The report shall include, at a minimum, the following items:

- a. LandGEM inputs, assumptions, and results;
- b. Reaction Committee analysis and associated rationale and supporting data or information; and
- c. A comparison of the estimated landfill gas generation, both current and projected, with the landfill's flaring capacity, both current and proposed, assuming one or more flares or thermal oxidizers are offline due to maintenance, overhaul, or other unforeseen circumstances.

Based on the report findings, if the landfill gas generation is expected to exceed the landfill's flaring capacity when one or more flares or thermal oxidizers are offline, Respondent shall start the planning and procurement process for the addition of an additional flare, thermal

oxidizer, or other landfill gas combustion/control equipment and ensure sufficient redundant control capacity (meaning at least one additional control unit, equivalent in landfill gas combustion capacity to the largest control unit on site, and whose operational capacity is not required to combust the quantity of gas estimated in the LandGEM) to handle all generated landfill gas, assuming any one or more unit(s) is offline.

a. Respondent shall submit, by October 31, 2024, a complete permit application for the new construction of a Landfill Gas Flare (Flare No. 5), and modifications of Flare 1 & 2 (G73696, A/N 645450), Flare 3 (A/N 624296), and Flare 4 (A/N 647996) to the extent necessary, to increase the landfill gas control capacity. The submittals 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.

71. Respondent shall submit, by May 21, 2024, a complete permit application for the installation and operation of any aboveground surface landfill gas collection system, or underground landfill gas collection system, installed for the purpose of collecting landfill gas under the geosynthetic cover installed per Condition 31 or the cover as required by the Local Enforcement Agency. 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.

72. Respondent shall conduct sampling and analysis, testing, installation, and monitoring of the leachate and landfill gas condensate collection and storage tank system, as specified below:

a. At least quarterly, conduct testing to sample and analyze the vapor flow in the piping used to vent the leachate storage tanks and landfill gas condensate tanks and route the vapors to the landfill gas control system. The testing shall at least include the following items and the results of this testing shall be provided in the monthly report pursuant to Condition No. 8.:

- i. vented leachate tank vapor flowrate,
- ii. vented condensate tank vapor flowrate,

- 1 iii. vapor temperature,
- 2 iv. concentrations of speciated organics (including but not limited to Rule 1150.1
- 3 Table 1 Carcinogenic and Toxic Air Contaminants),
- 4 v. the total sulfur compounds as H₂S and speciated sulfur compounds, and
- 5 vi. testing at each of the locations indicated below:
- 6 1. The tank vents or manifolds which are representative of a set of tanks;
- 7 2. The header/manifold from each leachate tank farm or manifold
- 8 including Tank Farm #7, Tank Farm #9, North Perimeter Manifold,
- 9 New East Perimeter Manifold, LC Manifold, landfill gas condensate
- 10 storage tanks, and any other future tank farms or manifolds, with
- 11 testing performed upstream of the piping connection to the LFG
- 12 Collection and Conveyance System where landfill gas may affect
- 13 results; and
- 14 3. The inlet of the flare(s) prior to combustion.
- 15 b. A source test protocol for this testing shall be submitted to South Coast AQMD by
- 16 May 17, 2024, unless otherwise approved in writing by South Coast AQMD. Testing
- 17 shall be conducted within 45 days of receiving written approval of the source test
- 18 protocol by South Coast AQMD, and the final results in a source test report format
- 19 shall be submitted within 30 days of testing, unless otherwise approved in writing by
- 20 South Coast AQMD.
- 21 c. Within 30 days of the initial source test report, Respondent shall submit a
- 22 recommendation from the Reaction Committee on additional vapor flow testing to the
- 23 South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
- 24 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov]. The Reaction Committee
- 25 may submit further recommendations regarding additional vapor flow testing to the
- 26 South Coast AQMD within 30 days of additional source testing under this condition.
- 27 d. Beginning April 29, 2024, at least daily, conduct pressure testing and monitoring
- 28 within the HDPE header(s) venting the leachate storage tanks to quantify the vacuum

1 from the flare station blowers exerted on the leachate tanks, in inches of Water
2 Column (W.C.). Pressure testing and monitoring as specified in this condition is not
3 required upon complete installation of pressure gauges as specified in Condition 68.

4 i. Daily pressure readings, pressure testing location, indication of the tank farm
5 represented by the test results, and indication of each tank within the tank farm
6 represented by the test results shall be submitted in the monthly report per
7 Condition No. 8.

8 e. By June 28, 2024, unless otherwise approved in writing by South Coast AQMD,
9 install flow meters within the HDPE piping headers for associated leachate tank farms
10 to accurately measure and record the flow rate (scfm) and total daily volume of vented
11 leachate tank vapors being sent to the flare station for combustion. The flow meters
12 shall be installed according to manufacturer specifications and recommendations to
13 ensure accurate flow readings.

14 i. Daily flow rate (scf/day), flow meter location, indication of the tank farm
15 whose flow is being measured, and indication of each tank within the tank
16 farm vented and represented in the flow rate shall be submitted in the monthly
17 report per Condition No. 8.

18 73. Respondent shall prepare an inventory of all internal combustion engine equipment rated
19 greater than 50 HP onsite as of April 25, 2024 and shall submit this inventory to South Coast
20 AQMD by May 21, 2024. Respondent shall submit a permit application for internal
21 combustion engine equipment rated greater than 50 HP that is not already permitted through
22 South Coast AQMD by June 30, 2024, accompanied with a complete Title V Revision
23 application(s) and shall be submitted with an expedited permit processing request and
24 associated required fees, forms, and information. Going forward, Respondent shall submit a
25 permit application, accompanied with a complete Title V Revision application(s), for any
26 internal combustion engines greater than 50 HP brought on site that does not already have a
27 valid permit under Respondent's Title V Facility Permit or that does not already have a
28 complete application submitted to South Coast AQMD for the engine to be included in

Respondent's Title V Facility Permit.

74. Respondent shall expedite the procurement of the equipment needed to construct Flare No. 4 to the maximum extent feasible such that Flare No. 4 is ready to be constructed and put into operation as soon as possible after Respondent receives all necessary permits or other approvals. Respondent shall provide updates on the procurement of this equipment in the monthly report pursuant to Condition 8(s).

75. Respondent shall expand the real-time, remote monitoring system installed in accordance with Condition 66(a) and 66(a)(v) to include a minimum of 21 remote monitoring units mounted on wellheads located around the outside perimeter of the data determined Reaction boundary as specified in Condition 9(b), and a minimum of 5 remote monitoring units mounted on landfill gas headers conveying gas from the Condition 9(b) Reaction boundary.

a. Respondent shall procure, install and begin operation of 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, (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.

b. The wellhead units shall include 19 permanent units, to be located on a particular wellhead for at least 12 months, and shall include 2 mobile units which may be relocated on site as necessary.

c. The 19 permanent 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 and shall include rationale and justification for installing the unit(s) on any alternative wells.

- 1 d. The 5 header units shall be installed on primary header lines conveying gas from the
2 Condition 9(b) Reaction boundary and surrounding areas. The header unit locations
3 shall be for strategic monitoring of the gas collection system to allow for maximum
4 gas extraction, and to allow for quick actions to be taken to resolve issues noticed
5 upstream or downstream of the units. Two header units shall be installed on the
6 following header lines: 24-inch header piping running near CV-1426, 12-inch header
7 piping running near CV-24098, unless otherwise approved in writing by South Coast
8 AQMD.
- 9 e. All units shall be capable of monitoring temperature, pressure, and vacuum. The units
10 installed on wells without dewatering pumps shall also be capable of monitoring
11 liquid levels.
- 12 f. By August 29, 2025, the Reaction Committee shall submit a proposal to assess the
13 viability and functionality of adding gas flow rate and composition as monitoring
14 parameters to at least five (5) units installed on the wells listed in this condition. The
15 Proposal shall be submitted to Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel
16 [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]. Respondent shall
17 conduct the feasibility assessment. The Reaction Committee shall submit a final
18 report to the South Coast AQMD (to Baitong Chen [bchen@aqmd.gov]; Nathaniel
19 Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]) detailing the
20 results of the feasibility study, and recommendations on further deployment of the
21 remote monitoring system not later than 210 days from submittal of the feasibility
22 proposal with a minimum of 3 months of data collection.
- 23 g. Data collected by the monitor units shall be immediately recorded and uploaded as to
24 be available to review in the vendor/distributor's provided graphical user interface.
25 The graphical user interface shall include historical data, and shall be continuously
26 updated with newly gathered data. Additionally, the graphical user interface shall
27 allow for simple filtering and review of wellhead pressure, system pressure, landfill
28 gas temperature, landfill gas flowrates, and landfill gas composition measurements

and trends for each monitor unit. South Coast AQMD shall be granted read and download access to this graphical user interface, to review historical and real-time data.

h. Records documenting actions performed to resolve issues, and dates and times for discovering and resolving issues as a result of the RMS shall be kept and maintained daily on site, and shall be provided to South Coast AQMD upon request.

i. Records documenting the inspection and maintenance activities performed on the monitoring units required by this condition shall be kept and maintained on site, and shall be provided to South Coast AQMD upon request.

j. Records documenting any periods of Condition 75 RMS equipment downtime, 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.

76. Respondent shall install sample ports on all equipment on site that requires sampling, to prevent unnecessary fugitive emissions from sampling activities. By December 2, 2024, Respondent shall install sampling ports on all subject equipment and collect samples from the sampling ports thereafter, unless otherwise approved in writing by South Coast AQMD. For new equipment brought on site that requires sampling, sample ports shall be installed within 30 days of bringing the equipment on site, or within 15 days of starting operation of the equipment, whichever is sooner, unless otherwise approved in writing by South Coast AQMD.

77. 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 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 < 5,000 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).

78. Respondent, or Respondent's contractor, as applicable, shall install a liner of 60 mil polyethylene sheeting (or other equivalent flexible membrane cover) overlaying two feet of compacted soil lining the bottom and 5 feet off the sides of the perimeter of each leachate tanks and/or tank farms, except for driving lanes required for trucks to access leachate tanks for leachate disposal or other routine operations or maintenance, to limit spills affecting the ground, water, and potential for re-entrained air emissions. The sheeting/membrane liner shall be inspected at least twice-daily, at the beginning and end of day, and shall be maintained free of tears, rips, etc. The inspection and maintenance records shall be recorded

1 daily and shall contain, but not be limited to: (1) the date and time; (2) tank area designation
2 inspected; (3) the name of the person performing the inspection and written
3 acknowledgement that they did, or did not, take corrective action to maintain or replace the
4 liner; (4) specific notation as to the liner maintenance performed, including but not limited
5 to: liner repair or replacement, cleanup of spills on the liner, including volume of spill, etc.
6 Installation shall be completed as part of new installation of any tank or tank farm onsite
7 installed on or after April 16, 2025. For existing tank farms, installation shall be completed
8 not later than September 30, 2025.

9 79. Respondent shall submit any permit applications, source test protocols, source test reports,
10 and any other submittal requiring South Coast AQMD review and approval, with an
11 expedited processing/review requested, along with any associated fees, forms, and
12 information required.

13 80. Whenever South Coast AQMD permitted Various Location equipment or CARB Statewide
14 Portable Equipment Registration (PERP) permitted equipment is brought or operated on site,
15 the Respondent shall:

16 a. Notify South Coast AQMD in writing of the date and time that the equipment is
17 brought to the facility in the corresponding monthly report per Condition No. 8 and
18 include a copy of the various locations permit(s) and/or PERP permit(s) in the
19 corresponding monthly report per Condition No. 8.

20 b. Maintain a daily log including the following information for each permit unit: permit
21 number and/or registration number, application number (if applicable), equipment
22 location, and start and end time of equipment operation (as applicable). Respondent
23 shall submit the daily log in the in the corresponding monthly report per Condition
24 No. 8.

25 c. Notify South Coast AQMD in writing of the date and time that the equipment is
26 removed from the facility in the corresponding monthly report per Condition No. 8.

27 81. Respondent shall provide notification, by posting an alert on the front page of its website
28 (<https://chiquitacanyon.com>) for the purposes of notifying to the surrounding affected

community, whenever any landfill gas collection and control equipment (i.e. gas collection wells/trenches, headers, flares, thermal oxidizer(s), blowers, etc.) has planned or unplanned downtime anticipated to last 30 minutes or more, or once any downtime has a duration of 30 minutes or longer, according to the following:

a. Downtime of 30 Minutes or Longer:

i. Respondent shall provide the notification required by this Condition 81 for any individual control device that has downtime which is anticipated to last 30 minutes or more, or once any downtime for an individual control device reaches 30 minutes of downtime.

ii. If the downtime of any combination of landfill gas collection equipment results or is planned to result in a reduction of gas flow to control devices by 10% or more (compared to the gas flow prior to the downtime of the first device), Respondent shall provide the notification required by this Condition 81 for any such control devices that have downtime which is anticipated to last 30 minutes or more, or once any downtime for such devices reaches 30 minutes of downtime.

b. This notification shall be posted online at least 48 hours prior to a planned downtime event, unless the event is planned less than 48 hours before the planned downtime. If there is less than 48 hours before the planned downtime, Respondent shall provide the notification as soon as possible, within 1-hour of finalizing plans for the downtime. For unplanned downtime, notification shall occur within 1-hour of reasonable discovery of any collection or control equipment issue resulting in unplanned downtime. The notification shall inform the public of the control equipment downtime, expected extent (in days/hours) of the downtime, and the possibility of increased odors in the community during the indicated period.

c. Respondent shall, by November 18, 2024, develop a system allowing members of the public to sign-up for notifications of such outages or downtime via email or text message. Respondent shall develop the system such that any personally identifying

1 information (including but not limited to name, phone number or email address) shall
2 not be received nor retained directly by Respondent, any subsidiary or parent
3 company of Respondent, or any direct employee of Respondent. Respondent shall
4 deploy this system within three (3) business days of receiving notice to deploy from
5 South Coast AQMD.

6 82. Respondent shall provide notification to South Coast AQMD [attn: Baitong Chen,
7 bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda,
8 cojeda@aqmd.gov; Larry Israel, lisrael@aqmd.gov] whenever any landfill gas collection or
9 control equipment (i.e. gas collection wells/trenches, headers, flares, thermal oxidizer(s),
10 blowers, etc.) has scheduled and/or unplanned downtime. Downtime refers to cessation of
11 operation lasting 30 minutes or longer, according to the following:

12 a. Downtime of 30 Minutes or Longer:

13 i. Respondent shall provide the notification required by this Condition 82 for
14 any individual control device that has downtime which is anticipated to last
15 30 minutes or more, or once any downtime for an individual control device
16 reaches 30 minutes of downtime.

17 ii. If the downtime of any combination of landfill gas collection equipment
18 results or is planned to result in a reduction of gas flow to control devices by
19 10% or more (compared to the gas flow prior to the downtime of the first
20 device), Respondent shall provide the notification required by this Condition
21 82 for any such control devices that have downtime which is anticipated to
22 last 30 minutes or more, or once any downtime for such devices reaches 30
23 minutes of downtime.

24 b. This notification shall include an initial notification 24 hours prior to the planned
25 shutdown event, unless the event is planned less than 24 hours before the planned
26 downtime, Respondent shall provide the notification as soon as possible, within 1-
27 hour of finalizing plans for the downtime. For unplanned downtime, notification shall
28 occur within 1-hour of reasonable discovery of any control equipment issue resulting

1 in unplanned downtime. Respondent shall also provide a subsequent additional
2 notification and follow-up written report within 48 hours of startup and operation of
3 the equipment after the downtime event is corrected. The initial notification, and
4 subsequent notifications/follow-up report shall include the following items, unless
5 otherwise noted below:

- 6 i. Reason(s) for the downtime,
- 7 ii. Specification of whether the event was planned or unplanned event,
- 8 iii. Estimated (initial notification) and actual (subsequent notification/follow-up
9 report) start and end dates and times of the downtime event,
- 10 iv. Meteorological data (15-minute averaged), including wind direction(s) and
11 wind speed(s), starting from 48 hours prior to the downtime event, and
12 extending until 24 hours after associated equipment start-up and resumed
13 operation during the period of downtime (subsequent notification/follow-up
14 report only),
- 15 v. Facility-wide minute by minute landfill gas flow data, in Microsoft Excel
16 format, starting from 48 hours prior to the downtime event, and extending until
17 24 hours after associated equipment start-up and resumed operation
18 (subsequent notification/follow-up report only),
- 19 vi. A running log of all combustion equipment downtime events reported
20 pursuant to Condition 82, including the equipment name (e.g., Flares 1, 2, 3,
21 or Zeeco unit), planned or unplanned event, estimated (initial notification) and
22 actual (subsequent notification/follow-up report) start date and time of each
23 event, estimated (initial notification) and actual (subsequent
24 notification/follow-up report) end date and time of each event, estimated
25 (initial notification) and actual (subsequent notification/follow-up report)
26 duration of downtime in minutes, and reason(s) for downtime in an Excel
27 format. The information shall be clearly displayed for all downtime events and
28 combustion equipment in rows within one Excel sheet, allowing quick

determination of the downtime details for any equipment or combination of equipment, including simultaneous downtime events.

- c. The notifications specified in this condition are additional notifications and do not replace Title V and/or breakdown notifications required by South Coast AQMD or Federal Regulations, or by the Title V permit.

83. Respondent shall conduct a study and analysis of specific landfill operational events and their potential emission impacts to the surrounding community, as determined from an analysis of the air quality data recorded at monitoring stations MS-01 through MS-12. The study shall consider various landfill operational events which may result in increased release of emissions, including but not limited to, landfill excavations, downtime or decreased operation of any landfill gas collection or control equipment resulting in a reduction of landfill gas flow rate to an instantaneous value of a landfill-wide total of 11,000 scfm, or a reduction of 10% or more of current operational flows, and leachate exposure to atmosphere from spills/seeps/pressurized discharges. The 10% reduction in flow rate shall be determined based on total landfill gas flow rate data trends by comparing the current total landfill gas flow rate, averaged hourly, to the prior week's average landfill gas flow rate and the prior day's average landfill gas flowrate. A 10% reduction in comparison to the weekly or daily average value shall be analyzed as an operational event. The date, time, and duration of the operational events shall be used, in conjunction with meteorological data and air monitoring station data for all compounds monitored using continuous instrumentation, to the extent such data is available, to determine the effects at downwind receptors. This study shall be conducted for a period of 7 months, from June 1, 2024 through December 31, 2024, with a report detailing the landfill operational events, meteorological data, air monitoring station data, general findings of the study, and the landfill gas flow rate trend comparison used to determine a 10% reduction. The report shall be submitted by March 31, 2025 to South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov]. The report shall also include a proposed scope for a continuation of the study for up to an additional 6 months, subject to review and approval

by SCAQMD. The continuation of the study shall proceed upon written approval by the South Coast AQMD.

84. Respondent shall evaluate the installation of windbreaks and/or wind flow disruptors along the western and northern borders of the facility, and/or ridgeline, such that there are not any distinguishable gaps in the border and/or ridgeline which may result in an odor channeling affect into the Val Verde community, to enhance the dispersion of odors from the facility. By no later than November 15, 2024, Respondent shall submit a report detailing the findings of the evaluation to South Coast AQMD (attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov). The report detailing the findings of the evaluation shall include the following:

- a. The viability and advantages and disadvantages of the different windbreaks and/or wind flow disruptors.
- b. The estimated duration and timeline of the steps necessary to implement and install each of the windbreaks and/or wind flow disruptors evaluated, including any regulatory approvals and any associated environmental analysis and public notification/outreach required, contractor procurement, contracts, bidding, contract execution, equipment procurement, and equipment installation.

If installation of windbreaks and/or wind flow disruptors is deemed technically feasible and viable, Respondent shall complete the installation of windbreaks and/or wind flow disruptors. In the November 15, 2024 report, the Reaction Committee shall determine technical feasibility and provide recommendations to the South Coast AQMD regarding viability. Viability shall be determined by South Coast AQMD. If deemed technically feasible and viable, installation shall take place within 180 days after receipt of written approval by South Coast AQMD or 180 days after required regulatory approvals have been procured, whichever is later.

85. Respondent shall comply with the following requirements in addition to the requirements listed under Condition 42(a)-(bb) while conducting the west slope excavation project and the toe drain termination project:

- 1 a. Landfill perimeter odor control misters shall be operated along the west slope
2 excavation area and toe drain termination project area while excavation is conducted
3 and while any waste, waste contaminated material, or odiferous material is exposed
4 to atmosphere.
- 5 b. By September 10, 2024 for the west slope excavation project, and by November 15,
6 2024 or upon commencement (whichever is later) of the toe drain termination project,
7 a Semi-Permanent Vapor Odor Control System shall be operated along the excavation
8 area while excavation is conducted and while any waste, waste contaminated material,
9 or odiferous material is exposed to atmosphere.
- 10 c. A weekly report shall be submitted to South Coast AQMD [Attention: Baitong Chen,
11 bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda,
12 cojeda@aqmd.gov] each Tuesday by 8am PST reporting on the preceding week. The
13 weekly report shall report the west slope excavation activities and excavation
14 activities, if any, related to the toe drain termination project commenced, completed,
15 and yet to be completed with estimated timeline and amount (in cubic yards) of
16 soil/refuse to be excavated for completion. The report shall also identify any change
17 in daily excavation schedules, obstacles or unexpected corrective actions that
18 transpired. The first report for the west slope excavation project shall be due on
19 September 3, 2024. The first report for the toe drain termination project shall be due
20 on November 19, 2024, and shall also identify:
- 21 i. mitigation measures implemented per Condition No. 42(z), (aa) and/or
22 excavation cessation per Condition No. 42(aa) (as applicable);
- 23 ii. the corresponding reason for mitigation measures implemented per Condition
24 42(z) and/or (aa) and/or excavation cessation (as applicable);
- 25 iii. for excavation cessation and mitigation measures implemented per Condition
26 42(z) and/or (aa):
- 27 1. the corresponding start and end times of such cessation and mitigation
28 measures (as applicable);

2. the associated compound and compound concentration that reached or exceeded the applicable acute REL (as applicable);
3. date and time of reaching or exceeding the applicable acute REL that resulted in implementation of mitigation measures and/or excavation cessation (as applicable), and
4. air monitor(s) which were down and associated wind direction data (as applicable).

86. Respondent shall comply with the following requirements until the final approval of liquid/condensate/leachate treatment and/or storage permits, for all liquid treatment and storage equipment operating on site, unless otherwise approved in writing by South Coast AQMD.

- a. The equipment shall be properly maintained and kept in good operating condition at all times in accordance with manufacturer's recommendations and industry best management practices.
- b. The equipment shall be operated and maintained by personnel properly trained in its operation. Training certifications and/or detailed qualifications for these personnel shall be maintained on site, and provided to South Coast AQMD personnel upon request.
- c. The operation of the equipment shall not result in the release of any raw landfill gas, or discharge of odorous liquid vapors into the atmosphere, except for when collecting samples from leachate treatment equipment. By November 1, 2024, Respondent shall install sampling ports on all leachate tanks for which leachate sampling would occur and would otherwise result in leachate exposure to open air during sampling, and thereafter shall collect samples from such sampling ports. By November 1, 2024, Respondent shall also prepare and submit to South Coast AQMD (Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]) a schematic of the leachate treatment equipment, showing where the sampling ports are located.

- 1 d. The liquid treatment system, leachate tanks, sludge/solids handling equipment and
2 tanks, and any other equipment associated with the treatment or storage processes
3 shall be fully enclosed, under vacuum, and vented to appropriate control (i.e. flare
4 station). This does not include the liquid treatment granular activated carbon
5 adsorbers, or liquid filtration equipment which operate under positive pressure.
6 Storage tanks with vapor headspace shall not be excluded from the requirements of
7 Condition No. 86(d).
- 8 e. Respondent shall inspect any liquid treatment system equipment under positive
9 pressure for vapor leaks at least once every week, as follows:
- 10 i. Leak inspections of liquid treatment connection points or joints shall be
11 conducted by monitoring for volatile organic compound emissions using a
12 calibrated photoionization detector (PID) and observing potential leak site(s)
13 to determine if any leaks are observed (e.g. concentrations of 100 ppmv or
14 greater are detected directly at the connection point or joint), or other
15 alternative method approved by South Coast AQMD.
- 16 ii. All leaks shall be repaired within one calendar day of detection, unless
17 otherwise approved in writing by South Coast AQMD.
- 18 iii. Respondent shall keep records of all vapor leak inspections in a log, recording,
19 at a minimum, the date and time of the leak inspection, the name of personnel
20 conducting the leak inspection, the inspection method, observations during the
21 leak inspection (visual, audible, tactile, odor, etc.), any leaks detected, and the
22 date, time, and manner by which leaks were subsequently repaired. Records
23 shall be kept and maintained for a minimum of five (5) years and shall be made
24 available to South Coast AQMD personnel upon request.
- 25 f. Dedicated piping connected to the liquid treatment system, leachate tanks, solid
26 handling tanks, and any other equipment associated with the treatment or storage
27 process shall be used for the sole purpose of providing vacuum to the leachate
28 treatment equipment.

- 1 g. Sample ports shall be installed at the locations of the five flow meters on the dedicated
2 headers connected to the liquid treatment system, leachate tanks, solid handling tanks
3 installed pursuant to Condition No. 72(e), and any other equipment associated with
4 the treatment or storage process and shall be monitored at least daily. Monitoring data
5 shall include, but not be limited to, CH₄%, CO concentration (ppmv), CO₂%, and
6 O₂%, flowrates, and pressures.
- 7 87. Respondent is prohibited from conducting planned landfill gas combustion/control
8 equipment downtime for three (3) or more landfill gas combustion/control units (Flares,
9 Zeeco unit) at any one time, unless approved in writing by South Coast AQMD or where
10 Respondent is conducting work under any of the following scenarios that requires the gas
11 flow to be cut off from the flares:
- 12 a. Installing a new flare under an approved authority to construct;
 - 13 b. Installing or replacing the blowers to the landfill gas flares;
 - 14 c. Performing installation or maintenance activities;
 - 15 d. Performing installation or maintenance activities that require Respondent to remove
16 the piping coming into the flare station; or
 - 17 e. Performing installation or maintenance activities on the flares or flare station that
18 require the use of a crane.
- 19 88. Respondent shall install equipment and implement operational procedures to prevent
20 unplanned landfill gas combustion/control equipment downtime (Flares, Zeeco unit) to the
21 maximum extent feasible. The operator shall operate in accordance with the following
22 requirements:
- 23 a. Respondent shall expedite and complete the connection of permanent grid power to
24 the flare station by December 31, 2024, unless otherwise approved in writing by South
25 Coast AQMD.
 - 26 b. Once the flare station is connected to permanent grid power, Respondent shall
27 maintain the existing flare station generators for the purpose of backup power at the
28 flare station. Respondent shall also install backup power at the Zeeco unit by

December 5, 2024. Once the flare station is connected to permanent grid power and backup power connection safety disconnect is installed at the Zeeco thermal oxidizer, Respondent shall minimize combustion/control equipment downtime as a result of power failure. Unless there are documented inaccessibility or dangerous conditions for the required technician, or South Coast AQMD approval, Respondent shall complete the first start up cycle of the combustion/control equipment in the following time frames:

- i. If the Zeeco unit experiences downtime: 1.5 hours when the required technician is onsite. If the required technician is not onsite, they will arrive at the site as promptly as possible, safety permitting, but not to exceed 2 hours.
- ii. If the flares at the flare station experience downtime: the flare(s) associated with the first generator shall complete their initial start up cycle within the time frames listed above, and the flare(s) associated with the second generator may take up to an additional hour to complete their initial start up cycle.

In the event that the first complete start up cycle is unsuccessful, Respondent shall successfully restart the combustion/control equipment within 30 additional minutes.

In the event Respondent is unable to complete the necessary work to correct the power failure and restart the combustion/control equipment within the timeframes listed above due to inaccessibility or dangerous conditions for the technician, Respondent shall document the conditions that do not allow for the work to be completed within the required timeframe.

Permit applications for the engine(s) providing power and/or backup power shall be submitted in accordance with Condition Nos. 73 and 79.

89. For any equipment for which Respondent has submitted a permit application to South Coast AQMD that is not covered under Condition No. 86, and for any equipment for which Respondent is required to submit a permit application to South Coast AQMD, Respondent shall comply with the following requirements until the final approval of such permit application, unless otherwise approved in writing by South Coast AQMD.

- 1 a. The equipment and associated ancillary parts shall be properly maintained and kept
2 in good operating condition at all times, which includes, where applicable, following
3 the manufacturer's recommendations and industry best management practices.
- 4 b. The equipment shall be operated and maintained by personnel properly trained in its
5 operation.
- 6 90. Within 30 days of the Department of Toxic Substances Control's (DTSC) final approval of
7 the written workplan for the relocated tank farm, Respondent shall submit to South Coast
8 AQMD a complete permit modification application to the Landfill Gas Condensate and
9 Leachate Collection/Storage System (under Permit G66132, A/N 613131). The application
10 shall include the revised tank location(s), revised number of tanks/storage capacity, and the
11 updated site-wide configuration of the system. The submittal shall be accompanied with a
12 complete Title V Revision application and shall be submitted with an expedited permit
13 processing request and associated required fees, forms, and information.
- 14 91. Within 30 days of DTSC's final approval of the written workplan for the relocated tank farm,
15 Respondent shall submit to South Coast AQMD a complete permit application for each
16 hazardous and non-hazardous liquid treatment system. The submittal shall be accompanied
17 with a complete Title V Revision application and shall be submitted with an expedited permit
18 processing request with associated required fees, forms, and shall include, but not limited to,
19 the applicable information listed in South Coast AQMD Reg. II and below:
- 20 a. Separate permit applications for each treatment system.
- 21 b. Process flow diagram for each treatment system illustrating the pathway(s) the liquid
22 is conveyed throughout the system and identifying which tanks the liquid is
23 transferred to and from, including identification of all potential emission release
24 points, the connections to the leachate storage tanks, safety components and the
25 associated specifications, if applicable), monitoring components (if applicable), and
26 identify which components are under vacuum or positive pressure.
- 27 c. Specify the capacity, dimensions, and number of tanks and vessels in each system.
28 Identify, for each component (e.g. tanks and/or vessels) in each system, whether they

- 1 have headspaces.
- 2 d. Standard operating procedures for each system to safeguard from overflow of leachate
- 3 and ensure minimal fugitive emission release points.
- 4 e. Leachate flow rates, material usage rates, and process parameters affecting air
- 5 pollution emissions or needed to determine potential emissions of air pollutants.
- 6 92. Respondent shall send any file(s) with a cumulative size larger than 35 MB via a shared link,
- 7 by email, which allows South Coast AQMD personnel to be able to download the file(s).
- 8 93. Respondent shall ensure hydrostatic liquid level transmitters are installed in all leachate
- 9 storage tanks capable of having such transmitters installed in them to measure the level of
- 10 liquids within the tanks by June 30, 2025, and shall ensure such transmitters are installed as
- 11 part of installation of any new tanks capable of having such transmitters installed in them.
- 12 The transmitters shall be capable of uploading the liquid level readings to the cloud such
- 13 that the readings are accessible within 2 hours. The tank level information shall be
- 14 monitored by Respondent's personnel and communicated to necessary personnel involved
- 15 before and during tank filling operations.
- 16 94. Respondent shall submit, by May 30, 2025, a complete permit application for the additional
- 17 landfill gas combustion/control unit brought on-site in February 2025. The submittal shall
- 18 be accompanied with a complete Title V Revision application and shall be submitted with
- 19 an expedited permit processing request and associated required fees, forms, and
- 20 information.
- 21 95. Respondent shall submit, by April 30, 2025, a complete permit modification application for
- 22 the Landfill Gas Condensate and Leachate Collection/Storage System (under Permit
- 23 G66132, A/N 613131) to increase the landfill's liquid storage capacity and include the new
- 24 temporary tank farm located in Canyon D as part of the facility's leachate collection/storage
- 25 system. The submittal shall be accompanied with a complete Title V Revision application
- 26 and shall be submitted with an expedited permit processing request and associated required
- 27 fees, forms, and information.
- 28

- 1 96. By April 30, 2025, update the prior estimates of current and projected landfill gas generation
2 prepared pursuant to Condition No. 70 based on the Landfill ceasing to accept external waste
3 for disposal as of December 31, 2024, including any internal degradable waste disposed of
4 since that date, and submit an updated report on the landfill's current and projected landfill
5 gas generation through the end of calendar year 2029. Landfill gas generation shall be
6 estimated through use of U.S. EPA's LandGEM, and the Reaction Committee's analysis for
7 additional landfill gas generated as a result of the ongoing reaction. The report shall include
8 the items listed in Condition No. 70(a)-(c).
- 9 97. Respondent shall visually inspect all connection points, seams, and seals of the geosynthetic
10 cover(s) in and around the Reaction Area (as defined in Condition No. 9(a)) at least once
11 every seven (7) calendar days, and shall promptly repair any cover issues identified,
12 Respondent shall maintain a log demonstrating that it has completed each inspection and
13 addressed any issues with any connection points, seams, or seals of the geosynthetic cover,
14 including the date the issue was identified, the action taken to repair the damage, and the
15 time at which the repair was completed. Results of the inspection and the repair log required
16 by this condition shall be included in the monthly reports required pursuant to Condition
17 No. 8.
- 18 98. Respondent shall return for a status and modification hearing on October 29, 2025, and
19 November 12, 2025, or as soon thereafter as the Hearing Board can schedule a hearing.
- 20 99. The Hearing Board may modify this Order for Abatement without the stipulation of the
21 parties upon a showing of good cause therefore, and upon making the findings required by
22 Health and Safety Code Section 42451(a) and District Rule 806(a). Any modification of the
23 Order shall be made only at a public hearing held upon 10 days published notice and
24 appropriate written notice to the Respondent.
- 25 100. The Hearing Board shall retain jurisdiction over this matter until **October 31, 2026**, and at
26 that time this Order shall no longer be of any force or effect, unless this Order is amended,
27 modified, or dissolved before then.
28

101. This Order for Abatement is not intended to be nor does it act as a variance. Respondent is subject to all rules and regulations of the District and to all applicable provisions of California law. Nothing herein shall be deemed or construed to limit the authority of the District to issue Notices of Violation, to seek civil penalties or injunctive relief, or to seek further Orders for Abatement or other administrative or legal relief. The Findings of Fact are based on evidence presented by Petitioner and Respondent as of the date of this Order.

BOARD MEMBER:



Micah Ali, Chair

DATED:

September 19, 2025