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

4 **In The Matter Of**

Case No. 6177-4

5 SOUTH COAST AIR QUALITY
6 MANAGEMENT DISTRICT,

7 Petitioner,

8 vs.

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

11 Respondent.

**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: April 24, 2024
Time: 9:30 am
Place: Hearing Board
South Coast Air Quality
Management District
21865 Copley Drive
Diamond Bar, CA 91765

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15 On April 24, 2024, a hearing to consider modifications to the Stipulated Order for Abatement
16 was held pursuant to notice in accordance with the provisions of California Health and Safety Code
17 §§ 40823 and 42451(a) and District Rule 812. The following members of the Hearing Board were
18 present: Cynthia Verdugo-Peralta, Chair; Robert Pearman, Esq., Vice Chair; Jerry P. Abraham, MD
19 MPH CMQ; Micah Ali; and Mohan Balagopalan. Petitioner South Coast Air Quality Management
20 District ("South Coast AQMD") was represented by Kathryn Roberts, Senior Deputy District
21 Counsel, Mary Reichert, Senior Deputy District Counsel and Ryan Mansell, Senior Deputy District
22 Counsel. Respondent Chiquita Canyon, LLC, was represented by Jacob P. Duginski, attorney at law,
23 Megan L. Morgan, attorney at law, and Leigh S. Barton, attorney at law, of Beveridge & Diamond,
24 P.C. South Coast AQMD and Respondent presented a stipulation on proposed modifications. The
25 declarations of Pablo Sanchez-Soria, Ph.D., CIH, Richard Pleus, Ph.D., M.S., Srividhya
26 Viswanathan, P.E., Steven E. Woodard, Ph.D., P.E., Patrick Sullivan, BCEA, CPP, REPA, Neal
27 Bolton, P.E., and Robert E. Dick, P.E., B.C.E.E. were received as evidence from Respondent.
28 Exhibits marked as Nos. Z through CC were also received as evidence from Respondent. Exhibits

1 marked as Nos. 53 and 54 were received as evidence from South Coast AQMD. Written materials
2 submitted by the public were received as evidence. Mr. Sanchez-Soria, Mr. Pleus, Ms. Viswanathan,
3 Mr. Woodard, Mr. Sullivan, Mr. Bolton, and Mr. Dick testified for Respondent. Mr. Laurence Israel,
4 Mr. Baitong Chen, and Mr. Stephen Dutz, testified for Petitioner. The public was given the
5 opportunity to testify, evidence was received, and the matter was submitted. The Hearing Board
6 finds and decides as follows:

7 FINDINGS OF FACT

8 1. South Coast AQMD is a body corporate and politic established and existing pursuant
9 to Health and Safety Code §§ 40000, *et seq.* and §§ 40400, *et seq.*, and is the sole and exclusive local
10 agency with the responsibility for comprehensive air pollution control in the South Coast Basin.

11 2. Respondent operates a landfill/solid waste disposal facility known as Chiquita
12 Canyon Landfill (“CCL”) located at 29201 Henry Mayo Dr., Castaic, California, 91384, South Coast
13 AQMD Facility ID No. 119219. Respondent operates within the South Coast AQMD’s jurisdiction
14 and is subject to the South Coast AQMD’s rules. The landfill/solid waste disposal site has a footprint
15 of approximately 400 acres pursuant to a Conditional Use Permit issued by the County of Los
16 Angeles. Chiquita was most recently granted a renewed Conditional Use Permit in 2017 to allow
17 continued operations. Under its current use permit, CCL is allowed to accept an average of 6,616
18 tons per day (“TPD”) of solid waste between the hours of 4:00am to 5:00pm Monday through
19 Saturday. CCL may also accept green waste and beneficial reuse materials. CCL may accept a
20 maximum of 2,800,000 tons per year of solid waste and beneficial reuse material combined.

21 3. **South Coast AQMD Rule 402 and California Health and Safety Code (“H&S**
22 **Code”) Section 41700** prohibit the discharge, from any source whatsoever, such quantities of air
23 contaminants or other material which causes injury, detriment, nuisance, or annoyance to any
24 considerable number of persons or the public, or which cause, or have the natural tendency to cause,
25 injury or damage to business or property.

26 4. **South Coast AQMD Rule 102 and H&S Code Section 39013** define “air
27 contaminant,” including as used in Rule 402 and Section 41700, as “any discharge, release, or other
28 propagation into the atmosphere directly or indirectly caused by man and includes, but is not limited

1 to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matters, acids or
2 any combination thereof.”

3 5. **South Coast AQMD Rule 431.1(c)(2)** prohibits burning, in any equipment requiring
4 a permit to operate, landfill gas with sulfur compounds of greater than 150 parts per million by
5 volume (“ppmv”) calculated as hydrogen sulfide (“H₂S”) averaged daily.

6 6. **South Coast AQMD Rule 3002(c)(1)** requires operators to operate all Title V
7 facilities in compliance with all Title V permit conditions at all times.

8 7. **South Coast AQMD Rule 203(b)** requires all facilities to operate in compliance with
9 all conditions in their permit to operate.

10 8. **South Coast AQMD Rule 1150(b)(2)** requires all persons to obtain an Excavation
11 Management Plan approved by the South Coast AQMD prior to initiating excavation of an active or
12 inactive landfill unless the activity which exposes buried waste to the atmosphere is a normal part
13 of the daily operation of an active landfill or is exempted by South Coast AQMD Rule 1150(c),
14 which includes exemption for the maintenance of gas or leachate collection systems and emergency
15 excavations performed by, under the jurisdiction of, or pursuant to the requirements of, an authorized
16 Health Officer, Agricultural Commissioner, or Fire Protection Officer and whenever possible, the
17 Executive Officer shall be notified prior to commencing such excavation.

18 9. **CCL’s Facility-Wide Permit, Condition No. 3** prohibits CCL from using landfill
19 gas that contains sulfur compounds in excess of 150 ppmv calculated as H₂S averaged daily.

20 10. **South Coast AQMD Permit No. G55163, Condition No. 11** requires CCL to have
21 no more than 150 ppmv of total sulfur compounds (calculated as H₂S averaged daily) in its landfill
22 gas.

23 11. **South Coast AQMD Permit No. G73696, Condition No. 16** limits CCL’s Flare No.
24 1 to a maximum of 2.5 lbs/hour of sulfur oxides (“SO_x”) as SO₂.

25 12. **South Coast AQMD Permit No. G73696, Condition No. 17** limits CCL’s Flare No.
26 2 to a maximum of 2.5 lbs/hour of SO_x as SO₂.

27 13. **South Coast AQMD Permit No. A/N 624296, Condition No. 31** limits CCL’s Flare
28 No. 3 to a maximum of 124.08 lbs/day and 2,175.60 lbs/month of SO_x as SO₂. Flare No. 3 is also

1 limited by its permit to a daily average in the inlet of 85 ppmv sulfur as H₂S, and monthly average
2 of 60 ppmv sulfur as H₂S, and a daily average in the inlet of 150 ppm sulfur as H₂S

3 14. Respondent's operation at CCL also includes a landfill gas collection and control
4 system that includes vertical and horizontal gas collection wells and associated piping and trenches,
5 multiple collection headers and blowers for venting landfill gas, a landfill gas treatment system, a
6 condensate/leachate collection system and three flares which combust landfill gas. CCL also has an
7 active permit application for an additional fourth flare which, if permitted, would be incorporated
8 into its landfill gas collection and control system.

9 15. South Coast AQMD alleges Respondent is inadequately containing landfill gas,
10 leachate, and associated surface emissions at CCL, which cause odor and other unlawful emissions
11 from the landfill.

12 16. From January to September 2023, South Coast AQMD received more than 2,100
13 complaints of an odor nuisance from the public, with CCL as the alleged source. Complaints include
14 odor descriptions of both trash and landfill gas, but Petitioner and Respondent believe that all odors
15 complained of related to landfill gas, leachate, and associated surface emissions rather than trash or
16 the working face.

17 17. CCL is currently experiencing a subsurface reaction or elevated temperature landfill
18 event over an inactive portion of the landfill that is causing increased temperatures, increased
19 production of landfill gas, and increased production of leachate, as well as fugitive emissions of
20 landfill gas from the surface of the landfill. The area of the landfill affected by the reaction is located
21 in the northwest corner of the Landfill between approximately 1000 feet and 1500 feet from the
22 nearest resident. South Coast AQMD alleges that the ongoing subsurface reaction is the source of
23 the odor complaints received from the public, and the root cause of an ongoing public nuisance.

24 18. South Coast AQMD Inspectors investigated the complaints and traced some of them
25 back to CCL and confirmed CCL as the source of the odors on numerous occasions, and have
26 consistently traced odors back to the area of the landfill affected by the reaction rather than the
27 working face. Between May and September 5, 2023, South Coast AQMD issued 58 Notices of
28 Violation ("NOVs") against Respondent for violating South Coast AQMD Rule 402 and H&S Code

1 § 41700.

2 19. On September 6, 2023, the Hearing Board held a hearing on South Coast AQMD's
3 Petition for an Order for Abatement. At the conclusion of the hearing, the Hearing Board issued a
4 Stipulated Order for Abatement ("Stipulated Order").

5 20. Following adoption of the Stipulated Order, South Coast AQMD learned that CCL
6 was experiencing leachate seeps, where leachate would be exposed at the landfill surface and to the
7 ambient air rather than being collected subsurface via Respondent's leachate collection system. To
8 address this and related issues which were not covered in the Stipulated Order, South Coast AQMD
9 petitioned for a status modification hearing on November 3, 2023. A hearing was initially set on
10 December 12, 2023. The hearing was continued to January 9, 2024. The Parties later stipulated to
11 combine the continued modification hearing with the pre-set status hearing on January 16, 2024.

12 21. Following the adoption of the Stipulated Order, Respondent worked to implement the
13 Order's conditions. Respondent presented summaries of its implementation of these conditions in
14 declarations submitted on December 1, 2023, January 9, 2024, and January 11, 2024.

15 22. Between September 6, 2023 and January 11, 2024, South Coast AQMD received a
16 total of 4860 complaints alleging CCL as the source of odors. South Coast AQMD consistently
17 responds to and investigates complaints, including verifying the existence of complained-of odors
18 and the source as CCL. Over this time period, Respondent received 47 NOVs for alleged violations
19 of South Coast AQMD Rule 402 and H&S Code § 41700. The total number of NOVs issued for
20 alleged violations of South Coast AQMD Rule 402 and H&S Code § 41700 related to this incident
21 is 107 as of January 17, 2024.

22 23. Prior to the close of the hearing on January 17, 2024, the Parties jointly submitted a
23 set of stipulated proposed modifications to the Stipulated Order. At the close of the hearing on
24 January 17, 2024, the Hearing Board issued a modified Stipulated Order.

25 24. On February 15, 2024, pursuant to Condition 49 of the Stipulated Order, Respondent
26 notified South Coast AQMD of a potential conflict between various provisions of the Stipulated
27 Order related to dewatering and requirements of the Department of Toxic Substances Control. More
28 specifically, recent samples of Respondent's leachate exceeded regulatory thresholds for benzene

1 and/or other potentially hazardous constituents. As a result of these elevated constituents,
2 Respondent could not send this material to its traditional disposal outlets because those outlets were
3 not authorized to accept it. Respondent was forced to shut off some of its leachate collection pumps
4 that would otherwise direct this material to the onsite leachate accumulation tanks because those
5 tanks were running out of capacity. This situation presented a potential conflict with various
6 conditions of the Stipulated Order that require Respondent to remove and dispose of its leachate.
7 Because Respondent could not bring all of its leachate collection pumps back online, or dispose of
8 all of the accumulated leachate, within the three working days allotted by Condition 49 to resolve
9 this conflict, Respondent petitioned for a modification hearing on February 21, 2024. A hearing was
10 set for March 21, 2024. Respondent submitted two declarations in support of its proposed
11 modifications on March 19, 2024.

12 25. The parties jointly submitted a set of stipulated proposed modifications ahead of the
13 March 21, 2024 hearing to address dewatering and other requirements in the Stipulated Order in
14 light of potentially conflicting requirements from another regulatory agency and the accumulation
15 and management of leachate at the Chiquita Canyon Landfill.

16 26. Following the adoption of the modified Stipulated Order, Respondent worked to
17 implement the Order's conditions. Respondent presented summaries of its implementation of these
18 conditions in declarations submitted on April 19, 2024.

19 27. South Coast AQMD received over 6800 total complaints alleging CCL as the source
20 of odors since the beginning of the year, which is similar to the total number of complaints
21 throughout all of the prior calendar year. South Coast AQMD consistently responds to and
22 investigates complaints, including verifying the existence of complained-of odors and the source as
23 CCL. Over this time period, Respondent received 59 NOVs for alleged violations of South Coast
24 AQMD Rule 402 and H&S Code § 41700.

25 28. Prior to the hearing on April 24, 2024, the Parties jointly submitted a set of stipulated
26 proposed modifications to the Stipulated Order. At the close of the hearing on April 24, 2024, the
27 Hearing Board adopted the proposed modifications.

28

1 **CONCLUSIONS**

- 2 1. The Modified Stipulated Order for Abatement set forth hereinafter is likely to
3 mitigate conditions that could contribute to potential odors and potential nuisance.
- 4 2. The issuance of this Modified Stipulated Order for Abatement upon a fully noticed
5 hearing would not constitute a taking of property without due process of law.
- 6 3. There is good cause for adopting the modifications of the Order as stipulated to by
7 the Parties.
- 8 4. This Modified Stipulated Order for Abatement is not intended to be nor does it act as
9 a variance.

10 **ORDER**

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

16 **Odor Surveillance**

- 17 1. Respondent shall conduct odor surveillance in the communities surrounding CCL as
18 follows:
- 19 a. Respondent shall contract with a trained third party to conduct odor surveillance
20 each operating day within thirty (30) days after the issuance of the September 6,
21 2023 Order (the "Initial Order"). Respondent shall conduct odor surveillance each
22 operating day until the trained third party has been contracted. Respondent, or
23 Respondent's contractor, as applicable, shall conduct community odor surveillance
24 at least twice each operating day, once between the hours of 7:00 a.m. and 11:00
25 a.m. and once between the hours of 8:00 p.m. and 12:00 a.m. If a three-week period
26 passes without Respondent receiving a Rule 402 NOV from the South Coast
27 AQMD, or detecting odors at above an intensity of 2 at more than 2 stops during a
28 single surveillance, then Respondent, or Respondent's contractor, as applicable,

may stop conducting the odor surveillances. If Respondent, or Respondent's contractor, as applicable, has stopped conducting the odor surveillances pursuant to this condition and Respondent subsequently receives a Rule 402 NOV from the South Coast AQMD, then Respondent, or Respondent's contractor, as applicable, must resume conducting the odor surveillances until another three-week period 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 Kenningston 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

Stop	Description
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
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

- 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, refuse or refuse contaminated material odors, or landfill liquids/landfill leachate odors exist within a four hours prior to conducting an odor surveillance, (4) the wind speed and direction; (5) a narrative description of any odor detected (including the

1 type of odor, such as trash, landfill gas, chemical, odor neutralizer, as applicable);
2 (6) current weather conditions; and (7) an assessment of the strength of any odor
3 detected using the scale below:

4 0	No odor detected
5 1	Very light odor detected
6 2	Light odor detected
7 3	Moderate odor
8 4	Strong odor
9 5	Very strong odor

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

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

- 11 a. Respondent shall record South Coast AQMD Method 307-91 analysis upon receipt
12 of laboratory analysis report. Each recorded measurement or result shall be
13 documented with the time and date when the measurement or sample collection was
14 conducted, and initialed by the personnel that conducted the measurement or sample
15 collection.
- 16 b. Sulfur compound readings and analysis shall be reported to South Coast AQMD
17 pursuant to Condition No. 8.
 - 18 i. Tedlar bags used for Method 307-91 sampling and analysis shall not contain
19 droplets or debris.
 - 20 ii. Colorimetric tube readings shall be conducted by taking a reading from a
21 Tedlar bag sample using an appropriate colorimetric tube sample collection
22 pump. All sampling shall be performed in accordance with the operational
23 manual for the colorimetric tube sample collection pump.
 - 24 iii. Colorimetric tube readings shall use colorimetric tubes of appropriate
25 concentration range and shall be reported as follows:
 - 26 1. Respondent shall first use the estimated appropriately ranged colorimetric
27 tube.

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2. If the resulting reading reaches the upper concentration of the colorimetric tube concentration range, subsequent reading(s) shall be taken using a colorimetric tube with a concentration range that has a larger upper concentration threshold until the result is not the upper concentration threshold of the concentration range. Report the tube concentration range and tube concentration result for each reading.
 3. If the reading results in the lower concentration of the colorimetric tube concentration range or does not register a result, subsequent reading(s) shall be taken using a colorimetric tube with a concentration range that has a smaller lower concentration threshold, if available, until the colorimetric tubes available to the facility result in:
 - a. A reading that is within the concentration range of the tube,
 - b. A reading is the lower concentration of the colorimetric tube concentration range, or
 - c. The colorimetric tube does not register a result.
 4. When the result is the lower concentration of the colorimetric tube concentration range or does not register a result, the lower concentration of the colorimetric tube concentration shall be considered the concentration result. Report the tube concentration range and tube concentration result for each reading. If a lower range colorimetric tube is not used and the tube concentration result is below the lower range of the colorimetric tube used, Respondent shall report the result as “less than” or “<” the lower range value of the tube. Notwithstanding the forgoing, Respondent shall ensure that the colorimetric tube result is below the upper range of the colorimetric tube used and shall report the precise result of all results above the lowest range of the colorimetric tube used.
6. Respondent shall maintain adequate stock of appropriately ranged colorimetric tubes.

7. Respondent shall maintain a record of the following information, and provide such records to the South Coast AQMD pursuant to Condition No. 8:
- a. The hourly and daily flow of landfill gas combusted, in standard cubic feet, in each flare (flares No. 1 & No. 2 under Permit G73696, A/N 645450; flare No. 3 under A/N 624296), the thermal oxidizer (under Envent Corporation A/N 645484), the second thermal oxidizer/flare (under Zeeco A/N 648539), and any other equipment used to combust or control landfill gas at the facility, and the total amount of landfill gas combusted at the facility;
 - b. The daily flow of landfill gas not flared, in standard cubic feet, if applicable; and
 - c. The results of the sulfur readings, sampling, and analyses, calculated as H₂S with the time and date when each measurement or sample collection was conducted.
8. Respondent shall submit a monthly written report on the landfill operation, progress of the status of the Landfill Gas Flares (flares No. 1 and No. 2 under Permit G73696, A/N 645450; flare No. 3 under A/N 624296), Landfill Gas Treatment System (under Permit G55163, A/N 603249), and efforts to resolve the total sulfur concentration in the landfill gas exceeding 150 ppmv calculated as H₂S. As of March 21, 2024, monthly reports shall be submitted to South Coast AQMD on the 20th of each subsequent month, or the following business day, not later than 5:00pm via email to Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov). Each monthly report shall contain at a minimum the following information:
- a. The landfill gas sulfur compounds measurements and laboratory analysis with the time and date of each measurement or sample collection, as identified in Condition No. 5.
 - b. The landfill gas records and calculations identified in Condition No. 7, in a 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.
- 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).
- g. All wellhead temperature, temperature probe, and CO concentration readings, lab analysis, and Draeger tube readings for landfill gas from the past month in a Microsoft Excel spreadsheet format.
- h. A graphic map showing location of each well with temperature exceedances (above 145 degrees Fahrenheit), each well with CO exceedances (above 1,000 ppmv and below 1,500 ppmv, and above 1,500 ppmv), and stratification of temperature ranges

1 during that month, which includes a description of any remedial measures taken to
2 address or lower gas well temperatures.

3 i. All vertical liquid impacted landfill gas wells, per Condition No. 17, including a
4 description of any remedial measures taken to address or reduce liquids in landfill
5 gas wells.

6 j. Updates on the investigation into the availability, viability, and utilization, including
7 pilot testing if needed, of an alternative sulfur compound treatment system that
8 controls, treats, or removes dimethyl sulfide (“DMS”) and other sulfur compounds,
9 if any.

10 k. A summary report on Respondent’s implemented improvements to the landfill gas
11 collection system beyond the additions to the landfill gas collection system required
12 pursuant to Condition No. 15 and 8(m).

13 l. An inspection log for landfill cover and geosynthetic cover inspections, pursuant to
14 Condition No. 30.

15 m. Any subsequent additions to the landfill gas collection system, pursuant to
16 Condition No. 15; an updated vertical extraction well map detailing all existing fully
17 functional working vertical extraction wells and the vertical extraction well
18 additions completed within the month; a map showing an overlay of fully
19 operational working wells, landfill surface monitoring grids, and outlines of the two
20 defined areas pursuant to Condition 15(b); and copies of as-built well logs
21 (regarding well depth installations and updates) for vertical extraction wells
22 completed within the month.

23 n. Any subsequent additions to the landfill gas condensate or leachate collection
24 system, such as dewatering sumps/pumps, or other dewatering work performed per
25 the dewatering guidelines and implementation plan pursuant to Condition No. 18.

26 o. Updates on the procurement and installation of the geosynthetic cover(s), pursuant
27 to Condition No. 31, and including changes required or approved by the Local
28 Enforcement Agency.

- 1 p. Updates on landfill excavation work subject to Rule 1150, including excavation
2 location(s) (that are identified on graphic map(s) of the landfill), and
3 excavated/exposed waste characteristics (saturated, semi-dry, dry, odor type and
4 intensity, etc.) Excavation work occurring pursuant to an exemption as listed in
5 South Coast AQMD Rule 1150(c)(3), or Rule 1150(c)(2) that is performed in the
6 Reaction Area, must also be included in these updates.
- 7 q. Updates regarding leachate including:
- 8 i. Leachate temperature recordings pursuant to Condition No. 27(a);
 - 9 ii. Daily log of inspection findings and containment activities
10 pursuant to Condition 27(b);
 - 11 iii. Weekly record of leachate seepage and pooling pursuant to
12 Condition 27(c);
 - 13 iv. Quantity of leachate measured, and associated company name and
14 physical address of the off-site disposal/treatment facility(ies) that
15 receive leachate generated by the landfill, pursuant to Condition
16 27(d); and
 - 17 v. A list of all hazardous and non-hazardous liquid storage and
18 treatment facilities that have been contacted and current status of
19 each facility including available, contracted, and utilized capacity
20 to receive hazardous and non-hazardous landfill liquids.
- 21 9. Respondent shall collect integrated landfill surface samples for analysis across the Reaction
22 Area (as defined in Condition 9(a)) at least every two weeks as specified in Rule 1150.1
23 Attachment A 2.0. In the event Respondent is unable to sample specific landfill surface
24 area(s) or grid(s) due to inaccessibility or dangerous conditions for a technician,
25 Respondent shall document the date and the conditions that do not allow the sampling of
26 the specific area(s) or grid(s). Documentation shall be sufficient to show the inaccessibility
27 or dangerous conditions and may include weather forecasts and actual rainfall
28

1 measurements, or photographs and/or videos that depict the site conditions that prevent
2 such sampling activities for each specific area or grid affected.

3 a. The “Reaction Area” shall be defined initially by the boundary of Cells
4 1/2A, 2B/3, 4, and Module 2B/3/4 P2. The boundary of the Reaction Area
5 shall be modified to include the associated landfill surface area of the cells
6 and modules that experience well temperatures of at least 170 degrees
7 Fahrenheit, settlement, cracks in the landfill cover, presence and quantity
8 of liquids, the presence of hydrogen in the landfill gas, and readings of
9 temperature probes (once data is available). The Reaction Committee
10 (defined in Condition No. 12), shall transmit to the South Coast AQMD
11 [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
12 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov]: 1) the revised
13 map which clearly displays the proposed boundary change(s) and depicts
14 the new Reaction Area; 2) a narrative summary explaining the rationale
15 behind the proposed changes, including memorializing any dissenting
16 view of any member of the Reaction Committee; 3) any supporting data
17 relied upon in the decision to revise the Reaction Area; and 4) locations of
18 each temperature probe, clearly distinguished from the landfill gas wells
19 on the map.

20 b. The Reaction Committee shall review applicable data and shall consider
21 revision to the Reaction Area as frequently as appropriate but shall make
22 a determination about whether to revise the Reaction Area map at least
23 once per month, with the determination and revised Reaction Area map (if
24 applicable) and temperature probe readings (once data is available) in an
25 Excel format, submitted to the South Coast AQMD [attn: Baitong Chen,
26 bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina
27 Ojeda, cojeda@aqmd.gov] no later 7 days following the end of the month.
28

10. Respondent shall conduct instantaneous landfill surface monitoring across the Reaction Area (as defined in Condition 9(a)) at least every two weeks 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

- 1 i. To facilitate each meeting, Respondent shall provide South Coast
2 AQMD (attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
3 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov; Payam
4 Pakbin, ppakbin@aqmd.gov; Kathryn Roberts,
5 kroberts@aqmd.gov; Mary Reichert, mreichert@aqmd.gov) a
6 proposed agenda listing the topics to be discussed, and the
7 presenter, not later than ten (10) calendar days prior to the meeting.
8 South Coast AQMD shall have the option to expand the agenda to
9 include additional topics within the purview of the Reaction
10 Committee. If South Coast AQMD elects to expand the agenda, it
11 shall provide notice to Respondent not later than four (4) calendar
12 days prior to the meeting.
- 13 ii. Respondent shall ensure that all members of the Reaction
14 Committee with responsibility for any topic included on the
15 agenda shall attend that month's meeting. At Respondent's
16 election, additional staff or consultants may also attend. At South
17 Coast AQMD's sole discretion, it may invite any staff or consultant
18 of any regulatory agency with jurisdiction over Respondent,
19 including jurisdiction predicated on the subsurface reaction at the
20 Landfill, to participate in and provide recommendations or
21 feedback on any agenda topics.
- 22 iii. South Coast AQMD, and any personnel invited pursuant to the
23 clause above, may provide feedback or recommendations on any
24 topic on the agenda. Comments noted as "recommendations" shall
25 include suggestions to revise, change, expand, or otherwise alter
26 any aspect of the topic discussed on the agenda. All other
27 comments shall be considered feedback.
28

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

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

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

- 1 ii. An investigation and report on 1) the cause of the alleged chemical
2 reaction(s) resulting in the elevated well temperatures, elevated
3 levels of DMS formation in the landfill gas, and elevated levels of
4 NMOC formation in the landfill gas and 2) solutions to slow and
5 stop the reaction(s) in the landfill. Investigation into the cause of
6 the alleged chemical reaction(s) shall include, but not be limited
7 to, waste characterization study of waste disposed within the
8 Reaction Area, to the extent records of such waste are within
9 Respondent's possession, including (but not limited to) analysis of
10 chemical and physical characteristics, BTU, moisture content,
11 biological methane potential. Respondent shall also conduct drill
12 core sampling in the Reaction Area (as defined in Condition 9(a))
13 to assess waste characterization in areas not affected by elevated
14 temperatures at the time of drilling. Respondent shall submit a
15 report on the findings of the investigation by no later than
16 December 8, 2023 to South Coast AQMD [Baitong Chen, Air
17 Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior
18 Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda,
19 Air Quality Inspector, (cojeda@aqmd.gov)];
- 20 iii. An investigation and report on the feasibility and availability of a
21 continuous community emission monitoring system to conduct
22 continuous monitoring and provide estimates of DMS
23 concentrations at the facility fenceline and within the affected
24 community. By no later than December 1, 2023, Respondent shall
25 submit to the South Coast AQMD [Baitong Chen, Air Quality
26 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air
27 Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air
28 Quality Inspector, (cojeda@aqmd.gov)], the feasibility and

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

- 20 iv. A study and report on landfill best management practices and
21 alternative methods to minimize the release of fugitive surface gas
22 and minimize odors from fugitive surface gas, including cover
23 practices at the Reaction Area (as defined in Condition 9(a)) and
24 working face, and how best to address related odorous emissions,
25 such as through the use of misting systems, fans, odor neutralizer,
26 or other means. By no later than November 6, 2023, Respondent
27 shall submit a report detailing the findings of this Fugitive Landfill
28 Gas Odor Mitigation Study and the proposals for the minimization

1 of landfill gas release and odors. This report shall be submitted to
2 South Coast AQMD [Baitong Chen, Air Quality Engineer,
3 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
4 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
5 Inspector, (cojeda@aqmd.gov)];

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

16 vi. A report of the health impacts from ongoing and long-term (e.g.
17 greater than one year) exposure to hydrogen sulfide (H₂S), or other
18 speciated sulfur compounds, and any other hazardous air pollutants
19 (HAPs), as defined in the federal Clean Air Act, 42 U.S.C. § 7412.
20 The HAPs evaluated in the report shall include those which are
21 detected: (1) in landfill gas over the past twelve months at the
22 Chiquita Canyon Landfill as documented in the initial or additional
23 flux chamber study (per Condition No. 12(f)) or detected in stack
24 emissions testing; (2) in the liquids and leachate samples collected
25 and analyzed (per Condition No. 37); (3) in air sampling performed
26 to determine emissions from exposed liquids/leachate; and (4) in
27 the community pursuant to the enhanced community air
28 monitoring program in exceedance of recommended toxicity

1 screening values published by the US EPA or other applicable
2 screening values where US EPA toxicity screening values are
3 unavailable. The report shall include, but not be limited to,
4 assessment and analysis of any action levels from other public
5 health or government entities in the United States for any such
6 constituents, recommended actions for persons exposed to such
7 constituents, and recommendations on how to limit any anticipated
8 adverse health impacts. Such report shall also include a summary
9 of all findings, health impacts and recommendations in an easy-to-
10 read format designed for distribution to and use by the public. By
11 no later than August 1, 2024, Respondent shall submit this report
12 to South Coast AQMD [Baitong Chen, Air Quality Engineer,
13 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
14 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
15 Inspector, (cojeda@aqmd.gov)]; and

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

22 viii. The Reaction Committee, on behalf of Respondent, shall conduct
23 an investigation into the existing landfill gas collection and
24 conveyance piping materials (e.g. high-density polyethylene
25 (HDPE)), alternative landfill gas collection and conveyance piping
26 materials, and current landfill conditions to determine whether the
27 existing HDPE piping is appropriate for the current and expected
28 future temperature conditions at the landfill, and to determine

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

1 temperature threshold. Finally, the report shall include a
2 recommendation of the appropriate piping material to use moving
3 forward and when existing piping materials shall be replaced with
4 more robust materials or replaced with existing materials at higher
5 frequencies, at the landfill while the landfill is experiencing
6 elevated temperatures. This report shall be submitted by June 21,
7 2024 to South Coast AQMD [Baitong Chen, Air Quality Engineer,
8 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
9 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
10 Inspector, (cojeda@aqmd.gov)].

- 11 h. Respondent shall make public all reports resulting from investigations and studies
12 done pursuant to this Condition through a link preceded by a brief narrative
13 description on the webpage created pursuant to Condition No. 39.
- 14 i. Respondent has conducted an initial flux chamber study pursuant to the direction of
15 the Los Angeles County Department of Public Health. Respondent shall submit a
16 report documenting the findings of the initial study no later than October 31, 2023
17 to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov);
18 Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina
19 Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. Respondent shall conduct an
20 additional landfill gas flux study for methane, non-methane organic compounds
21 (“NMOC”), toxic air contaminants (TAC), total reduced sulfur (“TRS”), and
22 speciated sulfur compounds to determine the surface flux throughout the landfill.
23 The study shall be conducted through the use of dynamic flux chambers oriented at
24 various locations throughout the landfill site. Respondent shall prepare a proposed
25 protocol for the study based on the results of the initial study and shall submit the
26 protocol to South Coast AQMD [Baitong Chen, Air Quality Engineer,
27 (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
28 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector,

(cojeda@aqmd.gov)] for review and approval by December 31, 2023. A report documenting the differences in the findings between the initial study and the additional study shall be submitted by no later than 90 days after South Coast AQMD approves the protocol 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 documenting the differences in the findings between the initial study and the additional study shall be submitted by June 3, 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)].

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

1 in accordance with 40 CFR 63 Subpart AAAA. Notwithstanding temperature exceedances,
2 Respondent shall continue to operate all wells as necessary to ensure the continued
3 operation of the landfill gas collection system.

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

8 b. Any breakdown or malfunction of the landfill gas collection system
9 resulting in the emission of raw landfill gas as described in Condition 14(a)
10 shall be reported to the South Coast AQMD by phone (1-800-CUT-
11 SMOG) or other District-approved method within one hour after
12 occurrence or within one hour of the time said person knew or reasonably
13 should have known of its occurrence and immediate remedial measures
14 shall be undertaken to correct the problem and prevent further emissions
15 into the atmosphere.

16 15. Respondent shall continue to evaluate and install, as needed, vertical dual extraction wells
17 to collect both landfill gas and leachate. Respondent shall continue to expand the well-field
18 as needed, and notify South Coast AQMD by October 31, 2023 of the number of wells
19 added, attention to Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel
20 Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air
21 Quality Inspector, (cojeda@aqmd.gov). Any subsequent additions to the well-field shall be
22 documented in the monthly reports pursuant to Condition No. 8. In installing any additional
23 wells, Respondent shall ensure it complies with all conditions in Respondent's currently
24 operative landfill gas collection system permit. In installing any additional wells pursuant
25 to this Condition, Respondent shall additionally take the following measures:

26 a. By January 31, 2024, Respondent shall provide to the South Coast AQMD
27 [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel
28 Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina

1 Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] the design and
2 installation schedule for a minimum of an additional seventy (70) wells
3 and their associated piping. The proposed well locations and connecting
4 piping shall be identified on a drawing which shows the entire gas
5 collection system and shall be described in writing. Estimated gas
6 collection volume, well depths, pipe lengths, diameters and layouts shall
7 be supplied to the South Coast AQMD in this advance notification.
8 Updates to the design and schedule shall be provided in the monthly report
9 pursuant to Condition No. 8(m);

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

26 i. By July 1, 2024, installation of 50% of wells necessary to achieve
27 the well installation density; and
28

- 1 ii. By October 1, 2024, installation of 75% of wells necessary to
2 achieve the well installation density.
- 3 c. While installing wells pursuant to Conditions 15(a) and 15(b), Respondent
4 shall notify the South Coast AQMD [attn: Baitong Chen, Air Quality
5 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
6 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
7 Inspector, (cojeda@aqmd.gov)] in writing, by Friday of each week, which
8 wells are scheduled to be installed the following week;
- 9 d. Following installation of all wells pursuant to Conditions 15(a) and 15(b),
10 Respondent shall notify the South Coast AQMD in writing [attn: Baitong
11 Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel,
12 Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda,
13 Air Quality Inspector, (cojeda@aqmd.gov)] at least one (1) week in
14 advance when an additional well or set of wells and their associated piping
15 will be installed. The information required by Condition 15(a) shall be
16 included in the notification. Updates to the design and schedule shall be
17 provided in the monthly report pursuant to Condition No. 8(m);
- 18 e. During any well drilling a landfill gas control box shall be used to prevent
19 the emissions of landfill gas into the atmosphere, and this control box shall
20 be vented to an approved emissions control system;
- 21 f. Each well shall be completed and capped the same day its construction
22 commences, unless the well hole is completely covered (using a minimum
23 8'x 8' at least 0.25" thick steel plate, and 12 inches depth of clean dirt), or
24 the subsequently installed pipe is capped;
- 25 g. Each gas collection well shall be connected to an operating landfill gas
26 header or the ends of the well shall be sealed with blind flanges, glued or
27 fused caps, or other types of seals approved by the South Coast AQMD as
28 soon as the well is installed;

- 1 h. All openings and connections of the landfill gas collection system shall be
2 properly covered and sealed to prevent leaks in accordance with
3 Respondent's Title V Permit and in accordance with all applicable rules
4 and regulations;
- 5 i. Respondent shall install additional stainless steel, carbon steel, or
6 chlorinated polyvinyl chloride (CPVC) wells in the Reaction Area per
7 recommendation of the Reaction Committee. Stainless steel or carbon
8 steel shall be installed for any well which has gas temperatures exceeding
9 170 degrees Fahrenheit;
- 10 j. Following the installation of additional wells per Conditions 15(a) and
11 15(b), Respondent shall replace any wells in the Reaction Area which are
12 damaged, blocked, pinched, or which have gas temperatures exceeding
13 145 degrees Fahrenheit with CPVC wells, carbon steel, and/or stainless
14 steel wells, or add new wells that replace the landfill gas extraction
15 capacity. Within 7 days of discovery of any such well, Respondent shall
16 notify South Coast AQMD in writing [attn: Baitong Chen, Air Quality
17 Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality
18 Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality
19 Inspector, (cojeda@aqmd.gov)] of a proposed installation schedule.
20 Installation shall take place within 7 days of the notification, whenever
21 feasible, but the schedule shall take into account availability of drilling
22 equipment, replacement materials, and weather and safety conditions.
23 Following initial notification, Respondent shall update South Coast
24 AQMD in writing every 7 days until the well installation is complete, with
25 evidence substantiating the delay, and additionally shall provide an
26 updated installation schedule.
- 27 k. Respondent shall, once additional/adequate gas extraction capacity is
28 installed, operate gas extraction wells with less than 3 percent oxygen

1 where feasible, and follow landfill best management practices to keep the
2 oxygen below 5 percent in interior wells;

3 l. Respondent shall install well boots seals on all wells in the Reaction Area
4 in accordance with the installation schedule for the geosynthetic cover that
5 is being installed pursuant to Condition No. 32 and consistent with
6 requirements of the Local Enforcement Agency;

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

13 n. As of April 25, 2024, all new vertical extraction wells installed within the
14 Reaction Area (as defined in Condition 9(a)) shall be dual extraction wells
15 with the ability to extract both landfill gas and liquid/leachate within the
16 well, to maximize landfill gas collection and prevent liquid/leachate build-
17 up within wells and within the landfill. Dewatering pumps and associated
18 infrastructure (pneumatic supply piping, liquid forcemain piping, etc.)
19 shall be installed, allowing the pump at each well to be capable of
20 operation. For 75% of wells, installation of all associated infrastructure
21 shall be completed within 30 days of completion of the vertical extraction
22 well drilling operation. For the remaining 25% of wells, installation of all
23 associated infrastructure shall be completed within 60 days of completion
24 of the vertical extraction well drilling operation. This sub-condition shall
25 supersede the specific language listed in Condition No. 15 allowing
26 Respondent to evaluate and install vertical dual extraction wells as needed.

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

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

8 19. Respondent shall submit, by October 6, 2023, a complete permit modification application
9 to the Landfill Gas Condensate and Leachate Collection/Storage System (under Permit
10 G66132, A/N 613131) to increase the landfill's liquid storage capacity. The submittal shall
11 be accompanied with a complete Title V Revision application and shall be submitted with
12 an expedited permit processing request and associated required fees, forms, and
13 information.

14 20. Respondent shall increase its landfill gas control capacity. Respondent has submitted a
15 permit application for a new 6,000 scfm ultra-low emissions landfill gas flare (Flare No. 3),
16 which is currently in a public comment period. Once the flare is fully permitted and fully
17 operational equipment is received, Respondent shall have forty-five (45) days to finish
18 installation and begin operating the new landfill gas flare unless the circumstances outlined
19 in Condition No. 20(a) apply. Respondent shall notify the South Coast AQMD that the new
20 landfill gas flare is operational within 48 hours of beginning operation (Baitong Chen, Air
21 Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer,
22 (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)).

23 a. In the event Respondent is unable to meet these deadlines due to inaccessibility or
24 dangerous conditions for a technician, Respondent shall document the date and the
25 conditions that do not allow the installation of the new flare. Respondent shall
26 submit this documentation to the South Coast AQMD and provide the South Coast
27 AQMD with an updated date of completion for the required work.
28

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 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 second new 6,000 scfm ultra-low emissions flare (Flare No. 4) referenced in Condition No. 21 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.

28. Respondent shall operate and maintain the landfill gas collection and control system, and condensate/leachate collection system with materials capable of handling gases and/or liquids at the temperatures recorded at landfill gas wells and/or the leachate temperatures measured pursuant to Condition No. 27(a). This shall include, but is not limited to, landfill gas extraction wells, liquid/leachate extraction wells, sumps, pumps, piping, French drain

1 system(s), landfill gas treatment and control equipment, and condensate/leachate storage
2 equipment. Respondent shall utilize casing materials for wells with elevated temperatures
3 as agreed upon with the LEA. Information pertaining to the installed equipment and its
4 specifications, including material/temperature threshold specifications, shall be provided to
5 South Coast AQMD personnel within 48 hours of request. If Respondent is not in
6 possession of this information, it shall be requested from the manufacturer within 24 hours
7 of request by South Coast AQMD personnel and provided to South Coast AQMD personnel
8 within 24 hours of receipt from the manufacturer.

- 9 29. Respondent shall ensure it has proper capacity (based on reporting pursuant to Condition
10 8) to accumulate onsite and/or dispose of collected liquids/leachate at an appropriate facility
11 or facilities.

12 **Landfill Cover**

- 13 30. Respondent shall visually inspect the landfill cover and geosynthetic cover(s) in and around
14 the Reaction Area (as defined in Condition No. 9(a)) each operating day and shall promptly
15 repair any cover issues identified, which may include adding and spreading of clean soil,
16 wetting, retracking any damaged area, and repairing or resealing of the geosynthetic cover.
17 All repair and correction actions to the landfill cover, and interim repair of geosynthetic
18 cover shall be conducted promptly and no later than two hours after identification during
19 inspection, safety permitting. Permanent repair of geosynthetic cover shall be scheduled
20 immediately and shall take place as soon as possible following identification of cover issue.
21 Respondent shall maintain a log demonstrating that it has addressed any damages to the
22 landfill cover or geosynthetic cover, including the date the damage was identified, the action
23 taken to repair the damage, and the time at which the repair was completed. Results of the
24 daily inspection and the repair log required by this condition shall be included in the
25 monthly reports required pursuant to Condition No. 8.

- 26 31. Respondent shall install a geosynthetic cover over western portions of Module 2B/3/4 Phase
27 2, Module 2B/3, and Module 4 to limit the migration of landfill gas from the site.
28 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(d)). 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 weekly benzene and live, real-time H2S and methane concentration data from all monitors and/or 24 hour samples within the Val Verde and surrounding community 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 benzene and real-time H2S and methane concentration, 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 ppb), and (2) the acute 1-hour OEHHA REL for benzene (8 ppb).

- 1 i. Real-time data shall include, but not be limited to, chronological one-hour
2 average H2S concentrations as time series at each monitoring location. Wind
3 speed and direction shall also be included, if currently monitored by
4 Respondent.
- 5 ii. The website shall include a map which clearly marks the location of each air
6 monitoring station.
- 7 b. Within 30 days of this issuance of this Order, weekly data (from Saturday at 12:00
8 am to Friday at 11:59 pm) collected by these monitors shall be made available on the
9 webpage created pursuant to Condition No. 39, in a manner which allows for user
10 defined data download, no later than the following Monday at 5:30 pm. Data from
11 these monitors shall be kept on file and made available to South Coast AQMD
12 personnel upon request.
- 13 i. In the event of unexpected downtime of a monitor, bump tests, maintenance,
14 or other scenario which may result in missing data or test data being recorded,
15 by March 29, 2024, Respondent shall provide flags or other visual indicators
16 on its website (created pursuant to Condition No. 39) for each data point/set
17 that clearly indicate and document the range of dates/times with the missing
18 or affected data, and indicate the reason for the missing or affected data.
- 19 c. Respondent shall, by April 30, 2024, retain a third party to develop and install a
20 system that provides automatic electronic notification via email for any exceedance
21 of the applicable 1-hour NAAQS, CAAQS, or acute 1-hour OEHHA REL, whichever
22 is lower (both in time and concentration) based on a time weighted average for
23 benzene and H2S monitored in real-time by Respondent's monitoring network within
24 the surrounding community (MS-06 through MS-12) by May 30, 2024. Respondent
25 shall be responsible for the third party including in such system a method for members
26 of the public to sign up to receive such notifications without any personally
27 identifying information (including email address) being disclosed to Respondent.
28

Respondent shall be responsible for the third party putting into effect the notification system within three business days of direction from South Coast AQMD.

35. Respondent shall, by January 19, 2024, provide all standard operating procedures (SOPs) and any other Quality Control and Quality Assurance (QA/QC) documents describing the operation and maintenance of all instruments used at the air monitoring stations and/or enhanced monitoring stations specified in Condition No. 34. These QA/QC documents shall include detailed information on the calibration, and maintenance of the monitoring equipment and associated instrumentation, and procedures used for data handling, validation, and analysis. They shall additionally include the frequency/schedule of these actions. Respondent shall provide these QA/QC documents to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov); Christina Ojeda, Air Quality Inspector, Payam Pakbin, Atmospheric Measurements Manager, ppakbin@aqmd.gov)]. Respondent shall provide updates to these QA/QC documents (if any) and a log for calibration, and maintenance activities performed on the monitors in the monthly reports pursuant to Condition No. 8.

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

necessary, and Respondent shall provide access to equipment and accompany South Coast AQMD personnel.

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

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

ii. If Respondent follows the procedures outlined in Condition No 35(b)(i) above, the deadline for implementing the disputed quality control measures shall be delayed until a further deadline is set by South Coast AQMD in a response determination.

iii. If EPA requires Respondent to take any action that is inconsistent with quality control measures specified by South Coast AQMD under this Condition 35(b) with respect to the MicroGCs, Respondent shall immediately contact the South Coast AQMD [attn: Steven Dutz, sdutz@aqmd.gov; Kathryn Roberts, kroberts@aqmd.gov; Mary Reichert, mreichert@aqmd.gov] and describe the inconsistency. Respondent shall endeavor to resolve the inconsistency with the Executive Officer, while adhering to the measures specified by EPA.

36. Respondent shall, by May 1, 2024, install and maintain instrumentation within the nearby residential community, at sites MS-10 and MS-12, as defined in Respondent's existing

1 Community Air Monitoring Program. These instruments shall be capable of measuring
2 hourly concentrations of benzene, toluene, ethylbenzene, xylenes, and other relevant
3 volatile organic compounds (VOC) with site surface emissions greater than 1 ton/year, as
4 indicated in Table 5.5 of the Chiquita Canyon Landfill Assessment of Air Emissions from
5 Landfill Surfaces Report dated October 2023. While long-term solutions for permanent
6 power are implemented and any necessary permits and approvals by regulatory agencies
7 for permanent power are obtained, these instruments will be installed and put into operation
8 using temporary power to allow for continuous measurements of all volatile organic
9 compounds required. It is recognized that the use of temporary power may not guarantee
10 the uninterrupted operation of these instruments. Respondent shall develop a monitoring
11 plan that utilizes reliable and field-proven instrumentation, such as a micro gas
12 chromatograph (MicroGC) with pre-concentration, and seek approval from South Coast
13 AQMD. Respondent shall request and pay for expedited processing of all permits and
14 procurement of the instruments, if available. To ensure Respondent is on schedule to
15 complete installation within the 75 days, Respondent shall provide the South Coast AQMD
16 (attn: Kathryn Roberts, [kroberts@aqmd.gov](mailto: kroberts@aqmd.gov); Mary Reichert, [mreichert@aqmd.gov](mailto: mreichert@aqmd.gov)) an
17 update at intervals of 30 days and 60 days from the issuance of the Order. Respondent shall
18 specifically address whether it believes an extension is necessary and provide supporting
19 documentation if it is seeking such extension. The AQMD may grant an extension of up to
20 60 days as appropriate based on the evidence submitted.

- 21 a. Upon installation, data from these instruments shall be made available to
22 the public via the publicly accessible webpage detailed in Condition No.
23 34. The display shall additionally reference and display the acute 1-hour
24 Reference Exposure Levels (RELs) for any compounds with established
25 acute exposure limits by California Office of Environmental Health
26 Hazard Assessment (OEHHA).
- 27 b. Until installation of the additional instrumentation is complete,
28 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.

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)).

1 Community Outreach

2 39. Respondent shall continue to maintain and update regularly (on a weekly basis) a dedicated
3 page of its website with a highly visible link on its homepage (the “odor mitigation section”)
4 for presenting information discussing odor mitigation at CCL. Such webpage shall include
5 all information in English and Spanish. Subsequent reports posted on the webpage shall be
6 sent to a translation service within 2 business days of posting on the webpage, and shall be
7 translated and uploaded to the webpage within 2 business days of receipt from translation
8 service. Such webpage shall also meet the following requirements:

- 9 a. The odor mitigation webpage shall be accessible via a direct hyperlink included on
10 the homepage of CCL’s website (<https://chiquitacanyon.com>), via a clickable link
11 with text stating “Odor Mitigation;”
- 12 b. The odor mitigation webpage shall display prominently at the top of the page a
13 notification that complaints of any odors believed to be caused by CCL can be made
14 to CCL (24-Hour Hotline) at (661) 253-5155;
- 15 c. The odor mitigation webpage shall display prominently at the top of the page a
16 notification that complaints may also be submitted to the South Coast Air Quality
17 Management District via telephone at 1 (800) CUT-SMOG or 1 (800) 288-7664 or
18 online on South Coast AQMD’s website (which shall hyperlink to the following:
19 <http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx>);
- 20 d. The odor mitigation webpage shall include a “Recent Updates” section which shall
21 provide a narrative description of Respondent’s understanding of the reaction and
22 DMS;
- 23 e. The odor mitigation webpage shall include an “Odor Mitigation Efforts” section
24 which shall describe the efforts Respondent is taking to mitigate potential odors;
- 25 f. The odor mitigation webpage shall include an “Odor and Maintenance Logs”
26 section which shall include via hyperlink any logs created pursuant to this Order,
27 preceded by a brief narrative description;
28

- 1 g. The odor mitigation webpage shall include a “Reports, Permits, and Other
2 Documents” section which shall include via hyperlink, preceded by a brief narrative
3 description:
- 4 i. This Order;
- 5 ii. Safety Data Sheets for odor neutralizer used at the facility and compounds
6 used in the Semi-Permanent Vapor Odor Control system referenced in
7 Condition No. 45;
- 8 iii. A copy of Respondent’s current Conditional Use Permit (No. 2004-00052-
9 (5));
- 10 iv. Any reports relating to odor or odor mitigation required by Respondent’s
11 Conditional Use Permit (No. 2004-00052-(5)) to be submitted to any
12 government agency, including any responses or discussion of remedial actions
13 to odor violations or complaints required by any government agency; and
- 14 v. All reports created by the Reaction Committee pursuant to this Order.
- 15 vi. Any other reports or correspondence requested by the County of Los Angeles
16 agencies related to the reaction, odor, and Respondent’s mitigation efforts.
- 17 h. The odor mitigation webpage shall include an “Air Quality” Section which shall
18 include a brief narrative describing the current status of air quality monitoring
19 required under Condition 68 of Respondent’s Conditional Use Permit (No. 2004-
20 00052-(5)). The “Air Quality” Section shall also include, via hyperlink, preceded
21 by a brief narrative description:
- 22 i. Any consultant reports submitted to the Community Advisory Committee
23 (“CAC”), TAC, or any government agency under Condition 68 of
24 Respondent’s Conditional Use Permit (No. 2004-00052-(5)).
- 25 ii. Any quarterly or annual reports submitted to the Los Angeles County
26 Department of Public Health or South Coast AQMD under Condition 68 of
27 Respondent’s Conditional Use Permit (No. 2004-00052-(5)).
- 28

- 1 i. The odor mitigation webpage shall include an “Upcoming Public Meetings”
2 Section, which shall display the title/subject, date, time, location and/or virtual
3 access information (including videoconference link or teleconference number as
4 applicable), and a note of whether public comment will be received for the following
5 meetings:
- 6 i. Any noticed hearing of the South Coast AQMD Hearing Board in Case No.
7 6177-4;
- 8 ii. Any meeting of the CAC where odor mitigation and/or violations are included
9 as an agenda item or anticipated to be discussed;
- 10 iii. Any meeting of the TAC where odor mitigation and/or violations are included
11 as an agenda item or anticipated to be discussed; and
- 12 iv. Any other meeting open to the public at which CCL is a scheduled host and/or
13 participant where odor mitigation and/or violation are included as an agenda
14 item or anticipated to be discussed.
- 15 40. Respondent shall host a public one-hour community meeting once each calendar month
16 following a month in which Respondent receives three or more Rule 402 NOVs from the
17 South Coast AQMD. If Respondent does not receive three or more Rule 402 NOVs from
18 the South Coast AQMD in a calendar month, Respondent does not need to host a
19 community meeting during the following month. During each meeting, Respondent shall
20 provide updates with regards to implementation of this Order and make time available for
21 public comment on matters related to CCL. The meeting date and time and format (in-
22 person or virtual) shall be announced via Respondent’s website and shall also be sent via
23 email to everyone who has signed up for email notifications on Respondent’s website. The
24 announcement shall include a link and dial-in information to the virtual platform used to
25 conduct the meeting, or if the meeting is in-person, the location of the meeting. All meetings
26 held in person shall adhere to all applicable public health guidelines and shall take place
27 within the Val Verde community. Any presentation, meeting materials, or other media
28 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 associated required fees, forms, and information. A generic Rule 1150 plan application and Title V Revision application shall include the following:

- a. A signed and completed Form 400-A.
- b. A signed and completed Form 400-CEQA.
- c. Reason for excavation.
- d. A site summary indicating the site history.
- e. A list of materials buried or suspected materials buried in the site based on available records.
- f. Results of any boring tests done to characterize the disposal site.
- g. Results of recent landfill gas analysis or soil vapor phase analysis including the concentrations of methane, sulfur compounds, and speciated non-methane hydrocarbons.
- h. A plot plan indicating the location of the excavation, staging areas, vehicle route(s), vehicle cleaning area, and any nearby buildings, roadways, or other site identifying features, and including any schools, residential area or other sensitive receptors such as hospitals or locations where children or elderly people live or work up to 2,500 feet away.
- i. Operating schedule for excavation and removal (hours/day, days/week, weeks/year, or equivalent).
- j. Scheduled excavation starting and completion dates, and number of working days required for the excavation.

- k. Description of how the excavation will be conducted, including excavation equipment and vehicles hauling the excavated material.
 - l. Description of mitigation measures for dust, odors, and hydrocarbons.
 - m. Description of monitoring to be conducted, including monitoring equipment and techniques.
 - n. Total amount of material to be excavated in cubic yards under this project.
 - 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

1 the email shall contain "Rule 1150 Notification." The body of the email shall
2 contain the following information:

- 3 i. Company Name and Company ID
- 4 ii. Site Address
- 5 iii. Notification Type (2 days prior or 5 days after)
- 6 iv. Estimated Excavation Start Date and Completion Date
- 7 v. A Map of the Facility with Excavation Location Indicated
- 8 b. Excavation shall not be conducted between the hours of 6:00 p.m. and 6:00 a.m. or
9 on weekends and legal holidays unless excavation is occurring to comply with
10 Condition 24, or otherwise approved in writing by the South Coast AQMD.
- 11 c. Excavation shall not be conducted on days when South Coast AQMD forecasts
12 first, second, or third stage episodes for area number 13 or when South Coast
13 AQMD requires companies in area number 13 to implement their first, second or
14 third stage episode plans. Episode forecasts for the following day can be obtained
15 by calling (800) 288-7664.
- 16 d. During excavation, continuous monitoring and recording of the wind speed and
17 directions shall be conducted at an appropriate site or, through the meteorological
18 station if present at the site.
- 19 e. Excavation shall not be conducted, except in the Reaction Area, when the wind
20 speed is greater than 15 mph (averaged over 15 minutes) or the wind speed
21 instantaneously exceeds 25 mph. If Respondent receives either any NOV for
22 violation of Section 41700 / Rule 402 or any complaints for dust, Respondent shall
23 stop excavation in the Reaction Area during such wind conditions.
- 24 f. During excavation, all working excavation areas, excavated material and unpaved
25 roadways shall be watered down until the surface is moist and then maintained in a
26 moist condition to minimize dust and emissions without creating a safety hazard
27 condition.
- 28

- 1 g. VOC contaminated soil (as defined by Rule 1166) shall not be spread onsite or
2 offsite, nor stockpiled, if it results in uncontrolled evaporation of VOC to the
3 atmosphere. VOC contaminated soil shall not be used for landfill cover.
- 4 h. During excavation, monitoring for Total Organic Compounds as methane using an
5 Organic Vapor Analyzer (OVA) or other monitor approved by the South Coast
6 AQMD shall be conducted continuously at the working face of the excavation and
7 at the downwind property line or other approved locations. The maximum sustained
8 readings (greater than 15 seconds) shall be recorded every 15 minutes. The OVA
9 or other approved monitor shall be calibrated each day in accordance with
10 manufacturers' specifications.
- 11 i. If the OVA or other approved organic monitor shows a sustained reading (greater
12 than 15 seconds) of 2,000 ppmv Total Organic Compounds as methane or greater
13 at the working face of the excavation, the excavation shall cease and the area
14 generating the emissions shall immediately be completely covered with a minimum
15 of 6 inches of clean dirt, plastic sheet, or other South Coast AQMD approved cover.
16 Excavation shall not resume until the readings return to the pre-excavation level.
- 17 j. If the OVA or other approved organic monitor shows a sustained reading (greater
18 than 15 seconds) of 200 ppmv Total Organic Compounds as methane or greater
19 downwind from the site at the property line (or other approved locations), the
20 excavation shall cease and the area generating the emissions shall immediately be
21 completely covered with a minimum of 6 inches of clean dirt, plastic sheet, or other
22 South Coast AQMD approved cover. Excavation shall not resume until the readings
23 return to the pre-excavation level.
- 24 k. Excavated landfill material and refuse shall be immediately, not to exceed 2 hours,
25 relocated for burial onsite, immediately deposited into trucks/trailers for off-site
26 transport and completely covered with automated vinyl tarps, with such covers tied
27 down, except for during active loading/unloading of refuse.
- 28

- 1 l. When refuse loading is completed and during transport, no material shall extend
2 above the sides or rear of the truck or trailer which will haul the excavated material.
3 Excavated material shall be completely covered with automated vinyl tarps, with
4 the cover tied down.
- 5 m. Respondent shall ensure that there is no track-out from the excavation area.
6 Respondent shall ensure that all trucks used for excavation in Reaction Area go
7 through a rumble strip before exiting the excavation area, and Respondent shall
8 ensure that all trucks shall, following the conclusion of excavation, but not less than
9 once per day, be free of excavation materials.
- 10 n. Landfill materials and refuse which have been exposed to the atmosphere as a result
11 of the excavation, which have not been excavated and relocated for burial or
12 transported off site, shall be immediately, not to exceed 2 hours, covered (with a
13 minimum of 6 inches of clean soil, secured plastic sheeting that is at least 10 mil,
14 or other South Coast AQMD approved cover) whenever excavation is not actively
15 in progress, and at the end of each working day so that no portion of landfill material
16 and refuse is exposed to the atmosphere. Foam by itself shall not be used as a night
17 cover if it is raining or rain is predicted by the National Weather Service prior to
18 the next scheduled day of excavation.
- 19 o. Daily inspections shall be conducted of any covered excavation area (per
20 Conditions 41(i), 41(j), and 41(n) above) to ensure the integrity of the cover(s) is
21 maintained and secured so that no portion of the soil is exposed to atmosphere. If
22 the cover material is not completely covering the landfill materials and refuse
23 generating emissions, or if the integrity of the cover has been compromised,
24 immediate corrective action shall be taken to add and secure a new cover, or
25 additional cover, on the area requiring corrective action. An inspection log shall be
26 maintained to record the time of the inspections and any corrective action
27 performed.
- 28

- 1 p. All materials that are listed as hazardous by a federal or state agency shall be
2 considered “hazardous materials” for the purpose of this Order.
- 3 i. All excavated hazardous material shall be transported in such a
4 manner as to prevent any emissions of hazardous materials.
- 5 ii. All hazardous materials shall be transported in containers clearly
6 marked as to the type of material contained and what procedures
7 should be followed in case of accidental spills.
- 8 iii. Excavated liquid hazardous materials with the potential to cause air
9 emissions shall be encapsulated or enclosed in containers with sealed
10 lids before loading into the transport vehicles.
- 11 q. Excavation, handling and stockpiling activities shall comply with the applicable
12 requirements of Rule 403.
- 13 r. All records required to demonstrate compliance with Condition No. 42 shall be kept
14 and maintained for at least 5 years.
- 15 s. Landfill excavation mitigation measures, other than those listed in this Condition
16 No. 42, which South Coast AQMD personnel determine are necessary to protect the
17 health and safety of the public, shall be implemented upon request.

18 **Other Conditions**

- 19 43. To ensure that fresh trash odors remain controlled, Respondent shall maintain the following
20 fresh trash-related odor mitigation measures recommended by its landfill operations expert
21 from the Stipulated Order for Abatement in Case No. 6177-1 during Unfavorable Wind
22 Conditions, as defined in the Stipulated Order for Abatement in Case No. 6177-1.
23 Respondent shall not expose more of the working face than is operationally necessary on
24 any working day and shall additionally maintain the following odor mitigation measures:
- 25 a. Use orchard fans, and tow-and-blow fans as needed, placed and spaced around the
26 working face in accordance with the recommendations of Chiquita’s landfill
27 operations expert;
28

- 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)) within 14 days of the approval of this Order. Respondent shall operate the Semi-Permanent Vapor Odor Control system immediately and continuously.
46. Respondent shall operate and maintain in good working order a landfill perimeter odor control misting system on permanent fencing on the west and northwest of the property.

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

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

15 49. Equipment and operations at the Facility are subject to the jurisdiction and regulatory
16 requirements of multiple agencies, including but not limited to the District, CalRecycle,
17 Los Angeles County Public Works, Los Angeles County Department of Regional Planning,
18 and Los Angeles County Department of Public Health. The conditions in this Order shall
19 not in any way restrict or expand the scope of jurisdiction of any agency. If any agency that
20 shares jurisdiction over the Facility with the South Coast AQMD requires Respondent to
21 take any action that is inconsistent with this Order, Respondent shall immediately contact
22 the South Coast AQMD by email at [Kathryn Roberts, kroberts@aqmd.gov and Mary
23 Reichert, mreichert@aqmd.gov] and describe the inconsistent provisions, including
24 providing any written directive from any other agency which Respondent considers
25 inconsistent with one or more conditions in this Order. Respondent shall endeavor to
26 resolve the inconsistency with the Executive Officer, while adhering to the Condition(s) in
27 the Order. If the inconsistency is not resolved within 3 working days of the relevant agency,
28 Respondent shall immediately inform the South Coast AQMD and shall petition for a

1 status/modification hearing before the Hearing Board for further proceedings. At such
2 proceeding, only the provision in dispute shall be resolved by the Hearing Board while the
3 other conditions in this Order shall remain in full force and effect.

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

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

16 51. Respondent shall permit South Coast AQMD personnel to conduct all inspections deemed
17 necessary by South Coast AQMD Compliance staff, including, but not limited to, collection
18 of samples. If during any inspection, South Coast AQMD observes uncontrolled liquid
19 which has at least one characteristic (including odor, appearance, etc.) that suggests the
20 liquid may be leachate, South Coast AQMD may require Respondent to collect a sample of
21 the liquid within 24 hours, submit the sample for expedited testing for VOCs, and submit
22 test results to the South Coast AQMD Compliance Inspector within 24 hours of receipt of
23 results, but no later than 96 hours after collection. Notwithstanding the preceding,
24 Respondent may require all visitors, including South Coast AQMD staff, to comply with
25 the site's Health and Safety Plan. Respondent shall not prohibit South Coast AQMD staff
26 from access to Respondent's facility, including the Reaction Area, if South Coast AQMD
27 staff comply with the Health and Safety Plan. Respondent shall provide South Coast
28 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 30 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

1 source test required under this condition. Any injection of condensate collected after the
2 sulfur treatment carbon absorbers to the flares may be allowed if each of the following
3 criteria are fulfilled:

- 4 a. The condensate has been sampled/analyzed and determined as non-
5 hazardous in accordance with hazardous material requirements by
6 respective agencies (U.S. EPA and DTSC), with sampling/analysis results
7 provided to South Coast AQMD along with specified regulatory
8 hazardous waste thresholds;
- 9 b. The condensate tank has not received any additional liquid after the
10 sampling/analysis performed in Condition 37(a) and will not receive any
11 additional liquids prior to or during injection/combustion;
- 12 c. Respondent has submitted a complete source test protocol which has been
13 reviewed and approved by South Coast AQMD in writing, and which
14 includes, at a minimum, procedures for testing of methane, total non-
15 methane organic compounds, speciated organics (including but not limited
16 to Rule 1150.1 Table 1 Carcinogenic and Toxic Air Contaminants), NO_x
17 as NO₂, CO, particulate matter (PM₁₀), oxygen and carbon dioxide,
18 moisture content, temperature, flowrate, total sulfur compounds as H₂S
19 and speciated sulfur compounds, gas BTU value, nitrogen, methane and
20 TNMOC destruction efficiency, and metals;
- 21 d. Respondent has submitted a source test report which has been reviewed
22 and approved in writing by South Coast AQMD;
- 23 e. South Coast AQMD grants written approval to conduct condensate
24 injection and has not withdrawn the approval based on follow-up source
25 test evaluation(s);
- 26 f. Respondent conducts follow-up flare source testing, at a minimum of
27 every 6 calendar months, which includes non-hazardous condensate
28 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 the Landfill Gas Collection System (under Permit G43917, A/N 578102) to include the tie-in of the landfill gas condensate and leachate treatment system vapor vent lines to the Landfill Gas Collection System. 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.

61. Respondent shall submit, by May 21, 2024, a complete permit modification application to the Landfill Gas Flare System (under Permit G73696, A/N 645450) to include the combustion of vapor vented from the hazardous liquid tanks in the landfill gas condensate and leachate collection/storage tank system and landfill gas condensate and leachate treatment system. 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.

62. Respondent shall submit, by May 21, 2024, a complete permit modification application to the Landfill Gas Flare System (under A/N 624296) to include the combustion of vapor vented from the hazardous liquid tanks in the landfill gas condensate and leachate collection/storage tank system and landfill gas condensate and leachate treatment system. 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.

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

64. Respondent shall follow the direction of the EPA to prepare a Leachate Management Plan in accordance with the Unilateral Administrative Order (UAO). Respondent shall submit the final plan submitted to EPA to South Coast AQMD on or before March 28, 2024. Any updates to the final plan shall be submitted to South Coast AQMD within 24 hours of 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. Respondent shall install and operate a real-time, remote monitoring system which shall, at minimum, monitor well pressure and landfill gas temperature at different well depths (shallow, middle, deep). 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 June 21, 2024, contracts to install and operate the monitoring shall be finalized. The remote monitoring system shall be installed and in operation no later than October 22, 2024, on all wells operated in the Initial Reaction Area (defined as the boundary of Cells 1/2A, 2B/3, 4, and Module 2B/3/4 P2 as specified in Condition No. 9(a)).

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 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

1 system and landfill gas condensate and leachate collection and storage system within the
2 enclosed piping networks. Monitoring Inspection shall include visual and/or physical
3 inspection of the specified equipment above, which is located aboveground, for buckling,
4 rupturing, cracking, melting, liquid leaks, or other structural concerns which may lead to the
5 release of fugitive landfill gas emissions, liquids, or odorous vapors. Monitoring shall
6 additionally include measurements of total organic compounds (TOC) as methane with a
7 flame ionization detector (FID), that conforms to Rule 1150.1 requirements, an organic
8 vapor analyzer for component leaks at each of the aboveground piping components within
9 the landfill gas collection system and landfill gas condensate and leachate collection and
10 storage system enclosed piping networks. A component will be considered to have a leak if
11 the concentration of methane measured one half an inch or less from a component source
12 exceeds 500 ppmv, other than non-repeatable, momentary readings. Records of this
13 monitoring activity shall include at a minimum:

- 14 a. A plot plan showing the piping networks monitored;
- 15 b. Date(s) when monitoring was performed;
- 16 c. Results of the visual/physical inspection and associated photos of any
17 piping or piping components which had any of the above-mentioned visual
18 and/or physical inspection concerns;
- 19 d. Results of piping component leak measurements;
- 20 e. Location(s) of component/equipment with visual and/or physical
21 inspection concerns and/or locations(s) where component leaks were
22 measured, which shall include the following:
 - 23 i. Location identified on a map;
 - 24 ii. Location identified by the landfill surface grid number and GPS
25 coordinates; and
- 26 f. Work which has been performed, or which is planned to be performed, and
27 associated date(s), to repair, replace, or conduct other actions to resolve
28 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 to handle all generated landfill gas, assuming any one or more unit(s) is offline. Respondent shall submit, by January 7, 2025, a complete permit application for the new construction of proposed landfill gas combustion/control equipment to ensure sufficient redundant control capacity of the landfill gas control systems. 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.

71. Respondent shall submit, by May 21, 2024, a complete permit application for the installation

1 and operation of any aboveground surface landfill gas collection system, or underground
2 landfill gas collection system, installed for the purpose of collecting landfill gas under the
3 geosynthetic cover installed per Condition 31 or the cover as required by the Local
4 Enforcement Agency. The submittal shall be accompanied with a complete Title V Revision
5 application and shall be submitted with an expedited permit processing request and
6 associated required fees, forms, and information.

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

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

- 14 i. vented leachate tank vapor flowrate,
- 15 ii. vented condensate tank vapor flowrate,
- 16 iii. vapor temperature,
- 17 iv. concentrations of speciated organics (including but not limited to Rule 1150.1
18 Table 1 Carcinogenic and Toxic Air Contaminants),
- 19 v. the total sulfur compounds as H₂S and speciated sulfur compounds, and
- 20 vi. testing at each of the locations indicated below:

- 21 1. The tank vents or manifolds which are representative of a set of tanks;
- 22 2. The header/manifold from each leachate tank farm or manifold
23 including Tank Farm #7, Tank Farm #9, North Perimeter Manifold,
24 New East Perimeter Manifold, LC Manifold, landfill gas condensate
25 storage tanks, and any other future tank farms or manifolds, with
26 testing performed upstream of the piping connection to the LFG
27 Collection and Conveyance System where landfill gas may affect
28 results; and

- 1 3. The inlet of the flare(s) prior to combustion.
- 2 b. A source test protocol for this testing shall be submitted to South Coast AQMD by
- 3 May 17, 2024, unless otherwise approved in writing by South Coast AQMD. Testing
- 4 shall be conducted within 45 days of receiving written approval of the source test
- 5 protocol by South Coast AQMD, and the final results in a source test report format
- 6 shall be submitted within 30 days of testing, unless otherwise approved in writing by
- 7 South Coast AQMD.
- 8 c. Within 30 days of submission of the source test report, Respondent shall submit a
- 9 recommendation from the Reaction Committee on additional vapor flow testing to the
- 10 South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel,
- 11 ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov].
- 12 d. Beginning April 29, 2024, at least daily, conduct pressure testing and monitoring
- 13 within the HDPE header(s) venting the leachate storage tanks to quantify the vacuum
- 14 from the flare station blowers exerted on the leachate tanks, in inches of Water
- 15 Column (W.C.). Pressure testing and monitoring as specified in this condition is not
- 16 required upon complete installation of pressure gauges as specified in Condition 68.
- 17 i. Daily pressure readings, pressure testing location, indication of the tank farm
- 18 represented by the test results, and indication of each tank within the tank farm
- 19 represented by the test results shall be submitted in the monthly report per
- 20 Condition No. 8.
- 21 e. By June 28, 2024, unless otherwise approved in writing by South Coast AQMD,
- 22 install flow meters within the HDPE piping headers for associated leachate tank farms
- 23 to accurately measure and record the flow rate (scfm) and total daily volume of vented
- 24 leachate tank vapors being sent to the flare station for combustion. The flow meters
- 25 shall be installed according to manufacturer specifications and recommendations to
- 26 ensure accurate flow readings.
- 27 i. Daily flow rate (scf/day), flow meter location, indication of the tank farm
- 28 whose flow is being measured, and indication of each tank within the tank

1 farm vented and represented in the flow rate shall be submitted in the monthly
2 report per Condition No. 8.

3 73. Respondent shall prepare an inventory of all internal combustion engine equipment rated
4 greater than 50 HP onsite as of April 25, 2024 and shall submit this inventory to South Coast
5 AQMD by May 21, 2024. Respondent shall submit a permit application for internal
6 combustion engine equipment rated greater than 50 HP that is not already permitted through
7 South Coast AQMD by June 30, 2024, accompanied with a complete Title V Revision
8 application(s) and shall be submitted with an expedited permit processing request and
9 associated required fees, forms, and information. Going forward, Respondent shall submit a
10 permit application, accompanied with a complete Title V Revision application(s), for any
11 internal combustion engines greater than 50 HP brought on site that does not already have a
12 valid permit under Respondent's Title V Facility Permit or that does not already have a
13 complete application submitted to South Coast AQMD for the engine to be included in
14 Respondent's Title V Facility Permit.

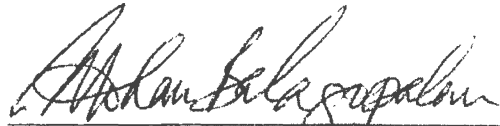
15 74. Respondent shall return for a status hearing in August 2024 (exact dates to be determined by
16 the parties and the Hearing Board, tentatively August 17 or August 24), or as soon thereafter
17 as the Hearing Board can schedule the status hearing, to report on the status of
18 implementation of this Stipulated Order, and consider modification or dissolution of this
19 Order, as appropriate.

20 75. 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 76. The Hearing Board shall retain jurisdiction over this matter until **December 31, 2025** 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

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

7
8
9 BOARD MEMBER:


Mohan Balagopalan

10
11
12 DATED:

6-13-24