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

MINUTE ORDER

SOUTH COAST AQMD vs. CHIQUITA CANYON LLC

29201 Henry Mayo Drive

Castaic, CA 91384

Case No: 6177-4

Facility ID: 119219

Hearing Date: 11/13/2024

Hearing Type: Mod. Stipulated O/A

Previous Hearings Dates: 9/6/23, 1/16/24, 1/17/24, 3/21/24, 4/24/24

8/17/24, 8/20/24, and 8/27/24

Next Hearing Dates: 2/5/2025 & 2/6/2025, if needed

HEARING BOARD ACTION

Action: MODIFIED

Starting Date: 11/13/24

Ending Date: 12/31/2025

RULES

203

402

431.1

1150

3002

H&S 41700

EQUIPMENT DESCRIPTION

DEVICE/APPLICATION/PERMIT

Landfill Operations

CONDITIONS

Respondent shall comply with the conditions set forth in the Modified Stipulated Order for Abatement and Findings and Decision of the Hearing Board, attached.

REMINDER

The Hearing Board scheduled a hearing on February 5, 2025 and February 6, 2025 if needed, to receive a status report and/or consider a modification of the Order for Abatement.

Present:

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

Representing the Petitioner:

Ryan Mansell, Senior Deputy District Counsel Mary Reichert, Senior Deputy District Counsel

Representing the Respondent:

Leigh S. Barton, Attorney at Law Jacob Duginski, Attorney at Law Megan Morgan, Attorney at Law

Public Testimony:

Abigail DeSesa

Witnesses for the Petitioner:

Laurance Israel, Supervising Air Quality Inspector Stephen Dutz, Laboratory Manager

Witnesses for the Respondent:

Neal Bolton, P.E. Richard Pleus, Ph.D., M.S. Pablo Sanchez-Soria, Ph.D., CIH Patrick Sullivan, BCEE, CPP, REPA

Petitioner's Exhibits:

#64 – Proposed Modifications to Conditions (Redlined) #65 – Proposed Modifications to Conditions (Clean)

Respondent's Exhibits:

DD- Declaration of Robert E. Dick, P.E., B.C.E.E.

EE- LFG Wellfield Automated Remote Monitoring Plan

FF- Declaration of Srividhya Viswanathan, P.E.

GG- Declaration of Patrick Sullivan, BCES, CPP, REPA

HH- Declaration of Neal Bolton, P.E.

II- Health Impacts Report - Public Summary

JJ- CTEH Chiquita Canyon Landfill Health Impacts

Report

KK- Intertox Odor Impacts Assessment of Chiquita Canyon Landfill Elevated Temperature Landfill

Event

LL- West Toe Drain Installation Work Plan

MM- ETLF Operations Health and Safety Plan

NN- West Slope Toe Drain Health and Safety Plan

OO- Odor Surveillance Data

PP- California Regional Water Quality Control Board, Los Angeles Region, Investigative Order No. R4-2024-0010

QQ— United States Environmental Protection Agency Region IX, Unilateral Administrative Order, EPA Docket No. RCRA 7003-09-2024-0001 and CERCLA 106-09-2024-05

RR- Los Angeles County Department of Public Health
Compliance Order, In the Matter of: Chiquita Canyon

Sanitary Landfill (without attachments)

SS- SCAQMD Public Nuisance Investigation Guidelines

TT- Srividhya Viswanathan, P.E. Testimony Presentation

UU- Robert E. Dick, P.E., B.C.E.E. Testimony Presentation

VV- SCS Engineers and Blue Ridge Services Landfill
Operations Assessment Report for Chiquita Canyon
Landfill

WW- Chiquita Canyon, LLC Standard Operating Procedure: Odor Control Measures

Respond	lent's	Exhibits	(Cont)	
LOSPOIL	10116 3	EVIIIDIES	(OUIIC.)	

- XX— CCL Case No. 6177-1 Stipulated Order for Abatement (12/16/2020)
- YY- CCL Case No. 6177-1 Modified Stipulated Order for Abatement (3/24/2021)
- ZZ- CCL Case No. 6177-1 Modified Stipulated Order for Abatement (8/19/2021)
- AAA- CCL Case No. 6177-1 Modified Stipulated Order for Abatement (10/5/2021)
- BBB- CCL Case No. 6177-1 Modified Stipulated Order for Abatement (11/18/2021)
- CCC- August 19, 2024 Photos from Leachate Tank Farm
- DDD- SCAQMD v. Allied Waste Company and Republic Services dba Sunshine Canyon Landfill, March 24, 2010, Findings and Decision (Case No. 3448-13)
- EEE– SCAQMD v. Browning-Ferris Industries dba Sunshine Canyon Landfill, January 10, 2017, Findings and Decision (Case No. 3448-14)
- FFF- August 1, 2024 Status Update Charts

Comments:

Mr. Pearman provided a summary of the prehearing conference held on November 7, 2024. Respondent's Exhibits DD through FFF and Petitioner's Exhibits 64 and 65 were marked for identification. Public testimony was presented by Abigail DeSesa. Opening statements were made by both parties and the matter submitted. The opening statements from the August 17, August 20, and August 27, 2024 meetings were incorporated by reference. On motion by Mr. Ali and seconded by Dr. Abraham, unanimously passed, the Board granted Petitioner's request, with the parties agreeing, that the Subpoena Duces Tecum dated August 30, 2024 be noted as having been satisfied.

Motion: Ali/Abraham 3-1; Balagopalan Voted No

*Board Member Verdugo-Peralta left the hearing at 12:00 p.m.

Board Review/Approval

Micah Al

Dated January 15, 2025

Prepared by Faye Thomas

Attachment: Modified Stipulated Order for Abatement and Findings and Decision of the Hearing Board

1		NO BO (DD OF THE						
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 MANAGEMENT DISTRICT,							
6 7	Petitioner,	FINDINGS AND DECISION FOR A MODIFIED STIPULATED ORDER FOR ABATEMENT						
8	VS.							
9	CHIQUITA CANYON, LLC a Delaware Corporation, [Facility ID No. 119219]	Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150						
10	Respondent.							
11		Hearing Date: November 13, 2024						
12		Time: 9:30 A.M. Place: Hearing Board South Coast Air Quality						
14		Management District 21865 Copley Drive Diamond Bar, CA 91765						
15	On November 13, 2024, the Hearing Board convened to consider further modifications to							
16 17	the Stipulated Order for Abatement at a continuation of the hearing on August 27, 2024, which was							
18	held pursuant to notice in accordance with the provisions of California Health and Safety Code §§							
19	40823 and 42451(a) and District Rule 812. The following members of the Hearing Board were							
	present: Micah Ali, Chair; Robert Pearman, Esq., Vice Chair; Jerry P. Abraham, MD, MPH, CMQ;							
20	Mohan Balagopalan; and Cynthia Verdugo-Peralta. Petitioner South Coast Air Quality Management District ("South Coast AQMD") was represented by Mary Reichert, Senior Deputy District							
21								
22	Counsel, and Ryan Mansell, Senior Deputy District Counsel. Respondent Chiquita Canyon, LLC,							
23	was represented by Jacob P. Duginski, attorney at law, Megan L. Morgan, attorney at law, and Leigh							
24 25	S. Barton, attorney at law, of Beveridge & Dian	mond, P.C. Further exhibits were submitted by						
	Petitioner and Respondent, and further testimony from both Petitioner's and Respondent's witnesses							
26	was taken. The Hearing Board finds and decides as follows:							
27								
28								

Chiquita Canyon, LLC [Facility ID No. 119219] - Findings and Decision

STIPULATED FINDINGS

- 1. The Hearing Board convened a hearing on November 13, 2024, which was continued from the hearings held August 17, 2024, August 20, 2024, and August 27, 2024. The hearing was held pursuant to notice in accordance with the provisions of California Health and Safety Code §§ 40823 and 42451(a) and South Coast AQMD Rule 812 to consider modifications to the Modified Stipulated Order for Abatement.
 - 2. The public was given the opportunity to testify and evidence was received.
- 3. Petitioner and Respondent stipulated to a further modification of conditions of the Order. As part of the stipulation, Petitioner stipulated to withdrawal of two conditions previously proposed at the August 17, 2024 hearing.
- 4. Petitioner presented evidence of Respondent's compliance status through testimony of Supervising Air Quality Inspector Laurence Israel, who spoke to continuing odors in the affected communities, as well as Notices of Violation issued to Respondent for creation of an odor public nuisance. Petitioner presented evidence of the continuing need for additional air monitoring in the community through testimony of Laboratory Manager Stephen Dutz.
- 5. Respondent presented evidence of Respondent's efforts under the current Stipulated Order for Abatement to address the ongoing reaction through testimony of Neal Bolton, P.E. and Patrick Sullivan, BCEE, CPP, REPA. Respondent presented evidence regarding the findings of the health study completed pursuant to Condition 12(g)(vi) through testimony of Pablo Sanchez-Soria, Ph.D., CIH, and Richard Pleus, Ph.D., M.S..
- 6. At the conclusion of the testimony, Petitioner and Respondent stipulated that there was good cause to adopt the Modified Stipulated Order for Abatement with conditions as presented in Petitioner's Exhibit 65, including that:
 - a. The imposition of the Modified Stipulated Order for Abatement would result in the mitigation of conditions potentially impacting the public.

CONCLUSIONS

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

- 2. The Modified Stipulated Order for Abatement is not intended to be nor does it act as a variance.
- 3. The Hearing Board need not make the findings required by South Coast AQMD Rule 806(a) because the Modified Stipulated Order for Abatement is made pursuant to the stipulation of Petitioner and Respondent.

ORDER

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

Odor Surveillance

- 1. Respondent shall conduct odor surveillance in the communities surrounding CC/L as follows:
 - a. Respondent shall contract with a trained third party to conduct odor surveillance each operating day within thirty (30) days after the issuance of the September 6, 2023 Order (the "Initial Order"). Respondent shall conduct odor surveillance each operating day until the trained third party has been contracted. Respondent, or Respondent's contractor, as applicable, shall conduct community odor surveillance at least twice each operating day, once between the hours of 6:00 a.m. and 11:00 a.m. and once between the hours of 7:00 p.m. and 12:00 a.m. If a three-week period passes without Respondent receiving a Rule 402 NOV from the South Coast AQMD, or detecting odors at above an intensity of 2 at more than 2 stops during a 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 Keningston Road
12.	Intersection of Hunstock Street and Windsor Road
13.	Intersection of Del Valle Road and Silver Street
14.	Intersection of Del Valle Road and Hasley Canyon Road
15.	Intersection of Hasley Canyon Road and Gibraltar Lane
16.	Intersection of Gibraltar Lane and Alton Way
17.	Intersection of Gibraltar Lane and Springvale Lane
18.	Intersection of Castlebury Place and Picadilly Place
19.	Intersection of Gibraltar Lane and Cambridge Avenue
20.	Intersection of Cambridge Avenue and Hasley Canyon Road
21.	Intersection of Creekbed Road and Firebrand Drive
22.	Intersection of The Old Road and Hillcrest Parkway
23.	Intersection of Hillcrest Parkway and Park Vista Drive at Castaid 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

Stop	Description
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
33.	Intersection of Valencia Boulevard at West Ranch High School
34.	Intersection of Magic Mountain Parkway and Commerce Center Drive
35.	Intersection of Commerce Center Drive and Middleton Street
36.	Intersection of Middleton Street and Magic Mountain Parkway
37.	Intersection of Hasley Canyon Road and Valley Glen Street
38.	Intersection of Hasley Canyon Road and Sloan Canyon Road
39.	Intersection of Sloan Canyon Road and Hillcrest Parkway
40.	Intersection of Hillcrest Parkway and The Old Road
41.	Intersection of Hillcrest Parkway at Castaic Middle School
42.	Intersection of Parker Road and The Old Road
43.	Intersection of Parker Road and Cherry Drive
44.	Intersection of Parker Road and Sloan Canyon Road
45.	Intersection of Lake Hughes Road and Castaic Road

- c. Respondent, or Respondent's contractor, as applicable, conducting the odor surveillance shall not have visited the Reaction Area (as defined in Condition 9(a)), working face, or other areas where exposed trash or landfill gas odors exist at CCL within four hours prior to conducting an odor surveillance.
- d. Odor surveillance shall be conducted by proceeding to each Surveillance Location and making an assessment of each parameter listed in Condition No. 1(e). Assessment of each parameter shall be made while standing in ambient air and shall not be made from within a vehicle.
- e. Respondent, or Respondent's contractor, as applicable, shall record odor surveillance results in an "Odor Surveillance Log" before the end of the work day.

 The Odor Surveillance Log shall contain, but not be limited to: (1) the date and time;

(2) stop number; (3) the name of the person performing the surveillance and written acknowledgement that they did not visit the working face or other on-site areas where exposed trash or landfill odors such as, but not limited to landfill gas odors, 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 type of odor, such as trash, landfill gas, chemical, odor neutralizer, as applicable); (6) current weather conditions; and (7) an assessment of the strength of any odor detected using the scale below:

0	No odor detected
1	Very light odor detected
2	Light odor detected
3	Moderate odor
4_	Strong odor
5	Very strong odor

f. If Respondent, or Respondent's contractor, as applicable, conducting the odor surveillance detects odors at three or more stops that are determined to be of a strength of 3 or higher on the scale above during any surveillance occurring during Respondent's operating hours (between the hours of 4:00am and 5:00pm), that are described as chemical, leachate, landfill gas, or similar non-trash landfill odors, Respondent, or Respondent's contractor, as applicable, shall immediately notify landfill operating staff responsible for the Reaction Area. If such odors are described as trash, Respondent, or Respondent's contractor, shall immediately notify landfill operating staff responsible for the Working Face Area. Respondent shall designate an employee in each of the Reaction Area and the Working Face Area able to receive and direct action related to such notifications promptly. Upon receiving such notification for the Reaction Area, Respondent shall, within 30 minutes of receipt, review and initiate modifications, as appropriate, to fan placement, and conduct a visual inspection of the Reaction Area (as defined in Condition 9(a)) to assess, and address as needed, any cracks in the surface of the

 a.

 area. Upon receiving such notification for the Working Face Area, Respondent shall employ all appropriate trash odor mitigation strategies, including taking action pursuant to Condition No. 43. Respondent shall have trained employee(s) or trained contractor(s) re-perform odor surveillance following deployment of additional mitigation to assess if trash odors have dissipated, and, as applicable, take additional remedial steps pursuant to Condition No. 43(f).

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

Reducing Sulfur in the Landfill Gas to be Flared

- 3. Respondent shall expedite, to the maximum extent feasible, replacement of granular activated carbon media in the Landfill Gas Treatment System (under Permit G55163, A/N 603249), including the execution of contracts, as well as the delivery, replacement, startup, and testing of any operation necessary to replenish and/or replace spent granular activated carbon media in the Landfill Gas Treatment System. Respondent shall ensure adequate stock of all odor control products and supplies are maintained on site.
 - Respondent shall monitor and record the landfill gas temperature at least daily at the inlet of the Landfill Gas Treatment System. The temperature of the landfill gas shall not exceed 145 F.
- 4. Respondent shall maximize landfill gas combustion utilizing all operational flares (excepting periods of maintenance, breakdowns, or automatic shutdown) to limit release of raw landfill gas. Respondent shall prioritize and maximize the use and operation of landfill gas flares No. 2 (under Permit G73696, A/N 645450) and No. 3 (under A/N 624296) over landfill gas flare No. 1 (under Permit G73696, A/N 645450) to the maximum extent feasible when combusting landfill gas at the facility (FID 119219). Once Respondent receives the necessary permits and puts the new landfill gas flare discussed in Condition 21 ("landfill

gas flare No. 4") into operation, Respondent shall prioritize and maximize the use and operation of landfill gas flares Nos. 3 and 4 over landfill gas flares No. 1 and No. 2 (under Permit G73696, A/N 645450) and prioritize and maximize the use and operation of landfill gas flare No. 2 over landfill gas flare No. 1 to the maximum extent feasible when combusting landfill gas at the facility (FID 119219).

- 5. Respondent shall sample, analyze, and record the landfill gas sulfur compounds combusted in each flare (as measured at sampling location FL-150 that is representative of the gas combusted in the flares under Permit G73696, A/N 45450; A/N 624296), in the thermal oxidizer/flare, and in any other landfill gas control equipment operating on site at least once each week using colorimetric tests for H₂S and at least once each day sample for analysis for total sulfur compounds as H₂S using South Coast AQMD Method 307-91. Additionally, Respondent shall sample, analyze, and record the landfill gas sulfur compounds and speciated organic compounds found in the raw, pre-treatment and pre-control, landfill gas collected from the Reaction Area (as defined in Condition 9(a)) at least once each calendar month for total sulfur compounds as H₂S using South Coast AQMD Method 307-91 and for speciated organic compounds using U.S. Environmental Protection Agency (EPA) Method TO-15.
 - a. Respondent shall record South Coast AQMD Method 307-91 analysis upon receipt of laboratory analysis report. Each recorded measurement or result shall be documented with the time and date when the measurement or sample collection was conducted, and initialed by the personnel that conducted the measurement or sample collection.
 - b. Sulfur compound readings and analysis shall be reported to South Coast AQMD pursuant to Condition No. 8.
 - Tedlar bags used for Method 307-91 sampling and analysis shall not contain droplets or debris.
 - ii. Colorimetric tube readings shall be conducted by taking a reading from a

 Tedlar bag sample using an appropriate colorimetric tube sample collection

pump. All sampling shall be performed in accordance with the operational manual for the colorimetric tube sample collection pump.

- iii. Colorimetric tube readings shall use colorimetric tubes of appropriate concentration range and shall be reported as follows:
 - Respondent shall first use the estimated appropriately ranged colorimetric tube.
 - 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

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"<" 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.

- Respondent shall maintain adequate stock of appropriately ranged colorimetric tubes.
- Respondent shall maintain a record of the following information, and provide such records to the South Coast AQMD pursuant to Condition No. 8:
 - 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/flare (under Zeeco A/N 653611), 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
 - The results of the sulfur readings, sampling, and analyses, calculated as H₂S with c. the time and date when each measurement or sample collection was conducted.
- 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 AOMD 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:
 - The landfill gas sulfur compounds measurements and laboratory analysis with the a. 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).

- 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 during that month, which includes a description of any remedial measures taken to
- All vertical liquid impacted landfill gas wells, per Condition No. 17, including a description of any remedial measures taken to address or reduce liquids in landfill
- pilot testing if needed, of an alternative sulfur compound treatment system that controls, treats, or removes dimethyl sulfide ("DMS") and other sulfur compounds,
- A summary report on Respondent's implemented improvements to the landfill gas collection system beyond the additions to the landfill gas collection system required
- An inspection log for landfill cover and geosynthetic cover inspections, pursuant to
 - Any subsequent additions to the landfill gas collection system, pursuant to Condition No. 15; an updated vertical extraction well map detailing all existing fully functional working vertical extraction wells and the vertical extraction well additions completed within the month; a map showing an overlay of fully operational working wells and landfill surface monitoring grids, and outlines of the areas demarcated as exempt in the attached Exhibit A pursuant to Condition 15(b); and copies of as-built well logs (regarding well depth installations and updates) for

- n. Any subsequent additions to the landfill gas condensate or leachate collection system, such as dewatering sumps/pumps, or other dewatering work performed per the dewatering guidelines and implementation plan pursuant to Condition No. 18.
- o. Updates on the procurement and installation of the geosynthetic cover(s), pursuant to Condition No. 31, and including changes required or approved by the Local Enforcement Agency.
- p. Updates on landfill excavation work subject to Rule 1150, including excavation location(s) (that are identified on graphic map(s) of the landfill), and excavated/exposed waste characteristics (saturated, semi-dry, dry, odor type and intensity, etc.) Excavation work occurring pursuant to an exemption as listed in South Coast AQMD Rule 1150(c)(3), or Rule 1150(c)(2) that is performed in the Reaction Area, must also be included in these updates.
- q. Updates regarding leachate including:
 - i. Leachate temperature recordings pursuant to Condition No. 27(a);
 - ii. Daily log of inspection findings and containment activities pursuant to Condition 27(b);
 - iii. Weekly record of leachate seepage and pooling pursuant to Condition 27(c);
 - iv. Quantity of leachate measured, and associated company name and physical address of the off-site disposal/treatment facility(ies) that receive leachate generated by the landfill, pursuant to Condition 27(d); and
 - v. A list of all hazardous and non-hazardous liquid storage and treatment facilities that have been contacted and current status of each facility including available, contracted, and utilized capacity to receive hazardous and non-hazardous landfill liquids.
- r. Daily landfill gas composition analysis, including CH4%, CO concentration (ppm), CO2%, and O2%, as recorded by a real time analyzer and/or sample collected, at

the inlets of the control equipment (TOx, Flares, and any additional control equipment brought on site to combust landfill gas). The analysis shall be conducted by a South Coast AQMD approved analyzer for CH4, CO2, or O2 and analyzed pursuant to U.S. EPA Method 10 or Method ALT-144 for CO. Request for approval shall include submittal of analyzer specifications.

- Updates regarding the procurement of the equipment needed to construct Flare No.4 pursuant to Condition No. 74.
- 9. Respondent shall collect integrated landfill surface samples for analysis across the Reaction Area (as defined in Condition 9(a)) at least three times per month, at intervals no more than once every 7 days (unless conducting additional monitoring events exceeding three per month), and additionally across the remainder of the landfill at least four times per quarter as specified in Rule 1150.1 Attachment A 2.0. In the event Respondent is unable to sample 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 sampling of the specific area(s) or grid(s). Documentation shall be sufficient to show the inaccessibility or dangerous conditions and may include weather forecasts and actual rainfall measurements, or photographs and/or videos that depict the site conditions that prevent such sampling activities for each specific area or grid affected.
 - a. The "Reaction Area" shall be defined initially by the boundary of Cells 1/2A, 2B/3, 4, and Module 2B/3/4 P2. The boundary of the Reaction Area shall be modified to include the associated landfill surface area of the cells and modules that experience well temperatures of at least 170 degrees Fahrenheit, settlement, cracks in the landfill cover, presence and quantity of liquids, the presence of hydrogen in the landfill gas, and readings of temperature probes (once data is available). The Reaction Committee (defined in Condition No. 12), shall transmit to the South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov]: 1) the revised

map which clearly displays the proposed boundary change(s) and depicts the new Reaction Area; 2) a narrative summary explaining the rationale behind the proposed changes, including memorializing any dissenting view of any member of the Reaction Committee; 3) any supporting data relied upon in the decision to revise the Reaction Area; and 4) locations of each temperature probe, clearly distinguished from the landfill gas wells on the map.

- b. The Reaction Committee shall review applicable data and shall consider revision to the Reaction Area as frequently as appropriate but shall make a determination about whether to revise the Reaction Area map at least once per month. The determination, supporting evidence and assumptions and explanation for the determination, revised Reaction Area map (if applicable), isothermal gradient range map consisting of wellhead temperature measurements, wellhead carbon monoxide range map, and vertical temperature profiles for temperature probes shall be submitted to the South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov] no later than 10 days following the end of the month
- 10. Respondent shall conduct instantaneous landfill surface monitoring across the Reaction Area (as defined in Condition 9(a)) at least three times per month, at intervals no more than once every 7 days (unless conducting additional monitoring events exceeding three per month), and additionally across the remainder of the landfill at least four times per quarter as specified in Rule 1150.1, Attachment A 3.0, beginning no later than seven (7) days after the issuance of this Order. In the event Respondent is unable to monitor specific landfill surface area(s) or grid(s) due to inaccessibility or dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the monitoring of the specific area(s) or grid(s).

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 CAAOS 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.
- Reaction Committee members shall be subject to ongoing oversight by the South b. Coast AQMD. If in the South Coast AQMD's determination one or more members appointed by Respondent to the Reaction Committee is not serving in this capacity satisfactorily, as defined herein, South Coast AQMD may provide written notice to Respondent through Counsel that the applicable person(s) is no longer serving satisfactorily. Failure to serve in a satisfactory capacity is defined as:
 - i. Failure of a Reaction Committee member to attend regularly scheduled meetings of the Reaction Committee and South Coast AQMD technical staff without prior notice;
 - ii. Failure of a Reaction Committee member to meet deadlines imposed on the Reaction Committee for deliverables set forth in this Order;
 - iii. Failure of the Public Health member to include the analyses required by Condition 12(a)(iv); or
 - iv. Failure of a Reaction Committee member to respond in a timely and substantive manner to recommendations provided by South Coast AQMD technical staff, as required by Condition 12(f)(iv)
 - c. If Respondent receives such notice from South Coast AQMD, Respondent may respond in writing within ten (10) days to contest South Coast AQMD's conclusion and explain how the member will remedy the cited unsatisfactory conduct and why

- such conduct does not affect the member's ability to serve in a satisfactory capacity on the Reaction Committee in the future.
- d. If South Coast AQMD receives such a response, South Coast AQMD shall have ten (10) days to determine whether a member of the Reaction Committee may continue to serve on the Reaction Committee. If South Coast AQMD determines that Respondent's written response does not address the alleged unsatisfactory performance, then South Coast AQMD may petition for a status/modification hearing before the Hearing Board, and the Hearing Board shall determine if a member of the Reaction Committee should be removed.
- e. While awaiting a decision from the Hearing Board, a member of the Reaction Committee may continue to serve on the Reaction Committee. If the Hearing Board determines that a member of the Reaction Committee's performance has not been satisfactory, then it may issue an Order directing Respondent to remove and replace that member of the Reaction Committee. Respondent shall remove the applicable person from any further work or service on the Reaction Committee within ten (10) days of receipt of the Order. Respondent shall identify and appoint a replacement member of the Reaction Committee, pursuant to Condition No. 12(a) above, within thirty (30) days of receipt of the Order.
- f. Beginning in March 2024, Respondent shall host a monthly virtual meeting with all members of the Reaction Committee and South Coast AQMD technical staff. The purpose of the monthly meeting shall be to allow Reaction Committee members to provide an update on progress of ongoing and future planned work performed/to be performed pursuant to this Order which is directly related to the subsurface reaction at the Landfill, and allow South Coast AQMD to provide recommendations and/or feedback on such progress.
 - i. To facilitate each meeting, Respondent shall provide South Coast AQMD (attn: Baitong Chen, <u>bchen@aqmd.gov</u>; Nathaniel Dickel, <u>ndickel@aqmd.gov</u>; Christina Ojeda, <u>cojeda@aqmd.gov</u>; Payam Pakbin, <u>ppakbin@aqmd.gov</u>; Kathryn Roberts, <u>kroberts@aqmd.gov</u>; Mary Reichert, <u>mreichert@aqmd.gov</u>) a

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

- ii. Respondent shall ensure that all members of the Reaction Committee with responsibility for any topic included on the agenda shall attend that month's meeting. At Respondent's election, additional staff or consultants may also attend. At South Coast AQMD's sole discretion, it may invite any staff or consultant of any regulatory agency with jurisdiction over Respondent, including jurisdiction predicated on the subsurface reaction at the Landfill, to participate in and provide recommendations or feedback on any agenda topics.
- iii. South Coast AQMD, and any personnel invited pursuant to the clause above, may provide feedback or recommendations on any topic on the agenda. Comments noted as "recommendations" shall include suggestions to revise, change, expand, or otherwise alter any aspect of the topic discussed on the agenda. All other comments shall be considered feedback.
- iv. Following each monthly meeting, Respondent shall prepare a summary of the meeting, including the topics discussed and all recommendations received. Respondent shall include in the

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

- g. Respondent, through the Reaction Committee, shall conduct investigations and studies into the cause of the landfill reaction, the impact of air emissions, interim measures to limit odor transport, and corrective measures to reduce or abate the landfill reaction. Such investigations shall include, at a minimum:
 - i. A study into known and possible methods for effective treatment of DMS and preventative mechanisms for DMS formation in landfill gas, including assessment of other landfills and review of scientific studies. By no later than April 30, 2024, Respondent shall provide a report detailing the findings of this Landfill Gas DMS Treatment Study and the proposals for implementation of the treatment methods. This report shall be submitted to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. Respondent shall submit any required permit applications, with information included, for equipment installations or modifications necessary for implementation of the remedy strategies and/or treatment methods;
 - ii. An investigation and report on 1) the cause of the alleged chemical reaction(s) resulting in the elevated well temperatures, elevated levels of DMS formation in the landfill gas, and elevated levels of

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

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

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

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

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

- v. A report on the known health risks from acute and long-term exposure to DMS, including any action levels from other public health or government entities, and including a summary of recommended actions for persons exposed to DMS for acute and long-term durations. By no later than January 15, 2024, Respondent shall submit this report 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)];
- vi. A report of the health impacts from ongoing and long-term (e.g. greater than one year) exposure to hydrogen sulfide (H2S), or other speciated sulfur compounds, and any other hazardous air pollutants (HAPs), as defined in the federal Clean Air Act, 42 U.S.C. § 7412. The HAPs evaluated in the report shall include those which are detected: (1) in landfill gas over the past twelve months at the Chiquita Canyon Landfill as documented in the initial or additional flux chamber study (per Condition No. 12(f)) or detected in stack emissions testing; (2) in the liquids and leachate samples collected and analyzed (per Condition No. 37); (3) in air sampling performed to determine emissions from exposed liquids/leachate; and (4) in the community pursuant to the enhanced community air monitoring program in exceedance of recommended toxicity screening values published by the US EPA or other applicable screening values where US EPA toxicity screening values are unavailable. The report shall include, but not be limited to,

assessment and analysis of any action levels from other public health or government entities in the United States for any such constituents, recommended actions for persons exposed to such constituents, and recommendations on how to limit any anticipated adverse health impacts. Such report shall also include a summary of all findings, health impacts and recommendations in an easy-to-read format designed for distribution to and use by the public. By no later than August 1, 2024, Respondent shall submit this report 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)]; and

- vii. The development of a model to estimate the rate of liquid generation in the landfill, and total quantity of liquid existing within the landfill waste mass at any given time (including supporting assumptions, references, and calculations). By no later than June 25, 2024, Respondent shall submit to South Coast AQMD a report summarizing the model and results of modeling.
 - 1. Respondent shall update this model and 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 summarizing the updated model and results of modeling on a semi-annual basis beginning on January 7, 2025 and every six calendar months thereafter.
- viii. The Reaction Committee, on behalf of Respondent, shall conduct an investigation into the existing landfill gas collection and

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

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larger conveyance header within the Reaction Area. If applicable, it shall additionally include an analysis on existing landfill gas conveyance piping and future planned piping, and associated piping lengths and diameters, which conveys or will convey landfill gas above the existing HDPE piping's manufacturer rated temperature threshold. Finally, the report shall include a recommendation of the appropriate piping material to use moving forward and when existing piping materials shall be replaced with more robust materials or replaced with existing materials at higher frequencies, at the landfill while the landfill is experiencing elevated temperatures. This report shall be submitted by June 21, 2024 to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)].

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

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

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

- 13. Respondent shall expand its gas well system. Respondent shall continue to operate the two sumps with pumps along the west slope until final design is implemented. Additional landfill gas collection equipment shall be operated as construction is completed. Respondent has installed 18 vertical dual extraction wells, and these 18 vertical dual extraction wells shall be connected to the landfill gas system by September 15, 2023 unless the circumstances outlined in Condition 13(a) apply.
 - a. In the event Respondent is unable to meet these deadlines due to inaccessibility or dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the installation of the wells and/or their connection to the landfill gas system. Respondent shall submit this documentation to the South Coast AQMD and provide the South Coast AQMD with an updated date of completion for the required work.
- 14. Respondent shall continue to monitor each landfill gas collection system well at least monthly for at least temperature pursuant to 40 CFR Part 63 Subpart AAAA. Respondent shall address wells with a temperature reading of at least 170 degrees Fahrenheit or greater in accordance with 40 CFR 63 Subpart AAAA. Notwithstanding temperature exceedances, Respondent shall continue to operate all wells as necessary to ensure the continued operation of the landfill gas collection system.
 - a. Consistent with Respondent's Title V permit and all applicable rules and regulations, Respondent shall ensure the operation of the landfill gas collection system equipment does not result in the release of raw landfill gas or condensate into the atmosphere.
 - b. Any breakdown or malfunction of the landfill gas collection system resulting in the emission of raw landfill gas as described in Condition 14(a)

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

- Respondent shall continue to evaluate and install, as needed, vertical dual extraction wells to collect both landfill gas and leachate. Respondent shall continue to expand the well-field as needed, and notify South Coast AQMD by October 31, 2023 of the number of wells added, attention to Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov). Any subsequent additions to the well-field shall be documented in the monthly reports pursuant to Condition No. 8. In installing any additional wells, Respondent shall ensure it complies with all conditions in Respondent's currently operative landfill gas collection system permit. In installing any additional wells pursuant to this Condition, Respondent shall additionally take the following measures:
 - a. By January 31, 2024, Respondent shall provide to the South Coast AQMD [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] the design and installation schedule for a minimum of an additional seventy (70) wells and their associated piping The proposed well locations and connecting piping shall be identified on a drawing which shows the entire gas collection system and shall be described in writing. Estimated gas collection volume, well depths, pipe lengths, diameters and layouts shall be supplied to the South Coast AQMD in this advance notification. Updates to the design and schedule shall be provided in the monthly report pursuant to Condition No. 8(m);

b.

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

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

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

- iv. If any reading of 500 ppmv TOC or greater is detected during instantaneous surface monitoring required by Condition No. 10, corrective actions shall be taken by the Respondent within 2 calendar days after detecting the exceedance, including, but not limited to the following: cover maintenance or repair, or well vacuum adjustments. The location shall be remonitored no later than 10 calendar days after detecting the exceedance. If the remonitoring of the location shows a second exceedance, the Respondent shall install and operate the new and/or replacement well(s) no later than 30 days after detecting the initial exceedance, or otherwise approved in writing by South Coast AQMD.
- v. If any reading of 25 ppmv TOC or greater is detected during integrated surface sampling required by Condition No. 9, corrective actions shall be taken by Respondent within 2 calendar days after detecting the exceedance, including, but not limited to, the following: the gas collection equipment and the landfill cover shall be serviced in the vicinity of the grid with the exceedance (e.g. cover maintenance or repair, or well vacuum adjustments). The grid shall be resampled no later than 10 calendar days after detecting the exceedance. If the resampling of the grid shows a second exceedance, the Respondent shall install and operate the new and/or replacement well(s) no later than 30 days after

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

- vi. An extension to the well installation timelines under Condition 15(b)(iv and v) above may be requested in writing, submitted to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. The extension request shall be submitted at least 7 days prior to the 30-day well installation deadline, and shall include, at a minimum, the instantaneous surface monitoring and/or integrated surface sampling data, corrective actions performed, date of all monitoring/sampling and corrective actions performed, and detailed reasoning of equipment delays, operational concerns, safety concerns, or other reasons inhibiting the installation of the well(s) according to the 30-day schedule.
- c. While installing wells pursuant to Conditions 15(a) and 15(b), Respondent shall notify the South Coast AQMD [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] in writing, by Friday of each week, which wells are scheduled to be installed the following week;
- d. Following installation of all wells pursuant to Conditions 15(a) and 15(b), Respondent shall notify the South Coast AQMD in writing [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] at least one (1) week in advance when an additional well or set of wells and their associated piping

- will be installed. The information required by Condition 15(a) shall be included in the notification. Updates to the design and schedule shall be provided in the monthly report pursuant to Condition No. 8(m);
- e. During any well drilling a landfill gas control box shall be used to prevent the emissions of landfill gas into the atmosphere, and this control box shall be vented to an approved emissions control system;
- f. Each well shall be completed and capped the same day its construction commences, unless the well hole is completely covered (using a minimum 8'x 8' at least 0.25" thick steel plate, and 12 inches depth of clean dirt), or the subsequently installed pipe is capped;
- g. Each gas collection well shall be connected to an operating landfill gas header or the ends of the well shall be sealed with blind flanges, glued or fused caps, or other types of seals approved by the South Coast AQMD as soon as the well is installed;
- h. All openings and connections of the landfill gas collection system shall be properly covered and sealed to prevent leaks in accordance with Respondent's Title V Permit and in accordance with all applicable rules and regulations;
- Respondent shall install additional stainless steel, carbon steel, or chlorinated polyvinyl chloride (CPVC) wells in the Reaction Area per recommendation of the Reaction Committee. Stainless steel or carbon steel shall be installed for any well which has gas temperatures exceeding 170 degrees Fahrenheit;
- 15(b), Respondent shall replace any wells in the Reaction Area which are damaged, blocked, pinched, or which have gas temperatures exceeding 145 degrees Fahrenheit with CPVC wells, carbon steel, and/or stainless steel wells, or add new wells that replace the landfill gas extraction

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

- k. Respondent shall, once additional/adequate gas extraction capacity is installed, operate gas extraction wells with less than 3 percent oxygen where feasible, and follow landfill best management practices to keep the oxygen below 5 percent in interior wells;
- Respondent shall install well boots seals on all wells in the Reaction Area
 in accordance with the installation schedule for the geosynthetic cover that
 is being installed pursuant to Condition No. 31 and consistent with
 requirements of the Local Enforcement Agency;
- m. Respondent shall submit semi-annual as-built drawings in duplicate to the South Coast AQMD [attn: Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)]. As-built drawings shall depict all wells constructed to date.
- n. As of April 25, 2024, all new vertical extraction wells installed within the Reaction Area (as defined in Condition 9(a)) shall be dual extraction wells

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

- o. Respondent shall, on a monthly basis determine whether any of the existing landfill gas collection wells in the Reaction Area (as defined in Condition 9(a)), which were not able to be drilled and installed at the desired well depth (generally approximately 30 ft above the bottom liner), can be expanded deeper or drilled to achieve the initially desired depth, or whether new replacement wells can be drilled nearby to achieve the initially desired depth. This determination shall include an evaluation of the landfill gas well/wellbore conditions, landfill liquid/leachate flow data, pressurized liquid/leachate release data, and landfill gas data, wellhead temperature data, temperature probe data, and any additional parameters as necessary. Respondent shall report on the monthly determination, along with any supporting evidence and reasoning for the determination, as part of the monthly report pursuant to Condition No. 8, beginning with the report submitted in October 2024 covering data from September 2024.
- 16. Respondent shall submit, by October 6, 2023, a complete permit modification application for the Landfill Gas Colection 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;

- 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
- 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

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implemented to the maximum extent feasible if Respondent's facility is encountering leachate tank capacity shortages. If any conflict exists between any condition or requirement of this Order and any part of the South Coast AQMD approved Dewatering Guidelines, this Order shall take precedence over the approved Dewatering Guidelines and Respondent shall submit revised Dewatering Guidelines that resolve such a conflict to South Coast AQMD for final written approval. Respondent shall submit, by October 6, 2023, a complete permit modification application

implemented within seven (7) days of South Coast AQMD approval, and shall be

- 19. to the Landfill Gas Condensate and Leachate Collection/Storage System (under Permit G66132, A/N 613131) to increase the landfill's liquid storage capacity. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.
- 20. Respondent shall increase its landfill gas control capacity. Respondent has submitted a permit application for a new 6,000 scfm ultra-low emissions landfill gas flare (Flare No. 3), which is currently in a public comment period. Once the flare is fully permitted and fully operational equipment is received, Respondent shall have forty-five (45) days to finish installation and begin operating the new landfill gas flare unless the circumstances outlined in Condition No. 20(a) apply. Respondent shall notify the South Coast AQMD that the new landfill gas flare is operational within 48 hours of beginning operation (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)).
 - In the event Respondent is unable to meet these deadlines due to inaccessibility or a. dangerous conditions for a technician, Respondent shall document the date and the conditions that do not allow the installation of the new flare. Respondent shall submit this documentation to the South Coast AQMD and provide the South Coast AQMD with an updated date of completion for the required work.

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

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

- 26. Respondent shall investigate and report on the feasibility of temporary containment measures for the purposes of controlling leachate and possible discharges of pressurized leachate when drilling additional holes for wells, liquid pumps, temperature devices, or other purposes. This Discharge of Pressurized Leachate Containment Feasibility Study shall include an analysis on the feasibility of a temporary tenting, containment vessel(s)/dome(s), other enclosure(s), or partial enclosure system designed to collect and contain the leachate flow while limiting the escape of odors produced from drilling/discharges of pressurized leachate, to allow for additional well drilling in the Reaction Area. By no later than March 12, 2024, Respondent shall submit to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)], a report on the findings of this feasibility study.
- 27. Respondent shall conduct the following actions and report them to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] in each monthly report submitted pursuant to Condition No. 8 beginning with the report due on February 19, 2024:
 - a. Measure and record the leachate temperature within all the 6-inch leachate pipes feeding into the onsite frac tanks, and at the piping leading into the tanks at all tank farms. The temperature measurements reported shall include a map clearly indicating temperature monitoring location(s), and the reported results shall clearly state which tank(s) or tank farm(s) are downstream of the monitoring location, receiving the measured leachate;
 - b. Respondent shall have dedicated staff or a contractor conduct and document inspections twice each calendar day, once in the morning,

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

- i. In the event that two weeks of twice daily inspections show no exposed liquid/leachate seepage or pooling, Respondent may reduce the inspection frequency to once daily. If after another two weeks of daily inspections, no exposed liquid/leachate seepage or pooling is observed, Respondent may reduce the inspection frequency to once every other day during the operating week (i.e., three times each operating week). If at any point inspections show exposed liquid/leachate seepage or pooling, inspection frequency shall return to twice daily inspections.
- c. On a weekly basis, compile and report the details of the inspection logs from that calendar week required under Condition 27(b). Respondent shall additionally report on any ongoing leachate seepage and pooling at the

landfill, found to have occurred at a location more than once within the calendar week, including location(s) (identified on graphic map(s) of the landfill), estimated duration of presence of leachate at such locations, characteristics of leachate (estimated quantity, extent of area impacted, odor type and intensity), leachate saturation of surrounding soils (standing free liquid, saturated, semi-dry, dry), and containment systems or measures deployed to route, collect, and contain the exposed leachate and prevent further leachate exposure. By no later than January 23, 2024, Respondent shall submit to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)], the first weekly report, and shall submit an additional weekly report every 7 calendar days thereafter;

- d. Measure and record quantities of leachate sent off-site for disposal/treatment during the previous week for so long as all leachate is transported offsite for disposal. Records shall include the associated company name and physical address of the off-site disposal/treatment facility(ies) that receive leachate generated by the landfill. If Respondent begins onsite treatment, it shall also record on a weekly basis quantities of leachate collected and leachate treated onsite. Respondent shall report this information in the monthly reports pursuant to Condition 8(c). Respondent shall submit copies of the manifests to South Coast AQMD within three weeks of request.
- e. Respondent shall report to South Coast AQMD any leachate leak or spill separately from leachate seeps reports specified in Condition 27(c). The report shall be submitted to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality

Inspector, 8 (cojeda@aqmd.gov)] within 48 hours of discovering the leak or spill. The report shall, at a minimum, include (1) the date and time of the leak or spill; (2) area designation inspected; (3) the name of the person that discovered the leak or spill; (4) written acknowledgement that they did, or did not, take corrective action with rationale for these actions; (5) a root cause analysis on why and how the leak or spill occurred; (6) the estimated quantity of the leak or spill; (7) corrective actions to prevent future recurrence.

- f. Respondent shall develop Standard Operating Procedures (SOPs) for leachate tank operations in accordance with industry standards and best management practices, to prevent leachate tank overflow, failure, and spillage in the tank farm areas. Respondent shall additionally conduct daily inspections of leachate tanks, tank connections, ports, valves, tank hoses, and any other equipment associated with leachate tank filling/emptying operations, to determine equipment condition material integrity, to prevent leaks. The SOPs shall be submitted to South Coast AQMD for review and approval [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)], by no later than September 23, 2024, unless otherwise approved in writing by South Coast AQMD. The SOPs shall be implemented within 7 days of South Coast AQMD approval.
- g. Respondent shall not overfill leachate collection/storage tanks or liquid treatment tanks.
- 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

Landfill Cover

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

29. Respondent shall ensure it has proper landfill leachate and landfill gas condensate capacity (based on liquid production and collection reporting pursuant to Condition 8) to accumulate onsite and/or dispose of collected liquids/leachate at an appropriate facility or facilities. Respondent shall comply with the Leachate Management Plan approved by the EPA and submitted to the South Coast AQMD pursuant to Condition No. 64, which includes contingency measures such as whether it is appropriate to reduce pumping operations in case of an emergency.

the Reaction Area (as defined in Condition No. 9(a)) each operating day and shall promptly repair any cover issues identified, which may include adding and spreading of clean soil, wetting, retracking any damaged area, and repairing or resealing of the geosynthetic cover. All repair and correction actions to the landfill cover, and interim repair of geosynthetic cover shall be conducted promptly and no later than two hours after identification during inspection, safety permitting. Permanent repair of geosynthetic cover shall be scheduled immediately and shall take place as soon as possible following identification of cover issue. Respondent shall maintain a log demonstrating that it has addressed any damages to the landfill cover or geosynthetic cover, including the date the damage was identified, the action taken to repair the damage, and the time at which the repair was completed. Results of the

Respondent shall visually inspect the landfill cover and geosynthetic cover(s) in and around

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daily inspection and the repair log required by this condition shall be included in the monthly reports required pursuant to Condition No. 8.

Respondent shall install a geosynthetic cover over western portions of Module 2B/3/4 Phase 2, Module 2B/3, and Module 4 to limit the migration of landfill gas from the site. Respondent shall submit the completed design for the cover, which will provide greater definition to the cover location, including associated landfill gas extraction infrastructure to be installed underneath the cover, to the South Coast AQMD by September 12, 2023 (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)). Respondent shall then obtain and install the geosynthetic cover material of at least 30 mil thickness. Respondent shall notify South Coast AQMD by October 31, 2023 (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)) on the progress of procuring and installing the geosynthetic cover. Respondent shall include updates on the procurement and installation of the geosynthetic cover in the monthly reports pursuant to Condition No. 8.

Ambient Air, Leachate & Emissions Monitoring

The Reaction Committee shall review air dispersion modeling, smoke release studies, and computational fluid dynamics ("CFD") modeling that have previously been completed for the landfill to assess odor and emissions transport into the nearby community. The Reaction Committee shall use the previous models updated with current datapoints to undertake a study to determine odor and emission transport of odors from the landfill and to identify effective techniques that may be used to remedy potential odor impacts on the nearby community. The study shall include an evaluation of the efficacy of odor control measures, including but not limited to perimeter misting equipment, wind barriers, wind cutter fans, and odor dispersion/misting fans, for purposes of minimizing odors in the surrounding community. The study shall be based on both the landfill's current and projected closure in 2047, topography and configuration. The study shall include, but not be limited to,

identifying transport trajectories and quantifying odor gas concentrations within the surrounding community. Upon completion of the study, a written report documenting the study and the findings, shall be submitted to South Coast AQMD by December 1, 2023. [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov); Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)].

- a. The report shall include a recommendation on whether additional modeling is recommended to fully address the current odor circumstances at the landfill and potential odor impacts on the nearby community.
- b. If such additional modeling is recommended by the Reaction Committee, the Reaction Committee shall, within 45 days of providing the report and recommendation, provide a proposal to the South Coast AQMD that shall, at a minimum, include the following:
 - i. The identification and qualifications of the primary personnel and/or firms proposed to conduct the study, as well as the specific techniques and location(s) where the study will be conducted;
 - ii. A timeline for completion of the study and submittal of the final written reports to South Coast AQMD no later than 150 days after South Coast AQMD approval of the study proposal.
- c. Since the Reaction Committee recommended additional modeling, Respondent shall, within 14 calendar days of approval of this Order, revise the air modeling study proposal according to the comments received by email on March 28, 2024, and re-submit the revised proposal to South Coast AQMD for approval. Respondent shall submit a final written report on the additional modeling to South Coast AQMD by September 2, 2024 or 90 days following approval of the air modeling study proposal by South Coast AQMD, whichever is later.
- 33. Respondent shall follow the direction of DPH to expand and enhance its current ambient air monitoring program to include DMS and other constituents of landfill gas, sampling at

residential locals where recent odor complaints have been reported and at on-site locations where odors are most pronounced, and to conduct a flux chamber study (the "initial" flux chamber study discussed in Condition No. 12(i)). Any reports submitted to DPH related to these studies shall also be submitted to the South Coast AQMD (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)).

- 34. By January 19, 2024, Respondent shall provide South Coast AQMD with access to all real-time continuous monitoring data for PM2.5, PM10, and H2S recorded at all monitoring stations (MS-01 through MS-12, and any subsequent additional monitoring stations). Respondent shall by January 19, 2024 or within 5 calendar days after enhanced monitors are brought online, provide South Coast AQMD with access to all real-time continuous monitoring data for total reduced sulfur (TRS) and toxic air contaminants (TAC) recorded by the enhanced monitors (MS-04, MS-12, and any additional enhanced monitors thereafter, including additional monitors as required by Condition No. 36.).
 - a. Within 30 days of this issuance of this Modified Order, Respondent shall ensure that the weekly 24-hour time-integrated canister samples for benzene, continuous H2S, and methane, and all hourly microGC DMS and VOC concentration data from current and future fenceline and community monitoring sites are posted to and accessible at the webpage created pursuant to Condition 39 for public access, displayed in an easy to read graphical format plot with compound concentration (y-axis) in parts per billion volume (ppbV) vs. time (x-axis) in DD/MM/YYYY HH:MM format, which is simple to review and understand. The compounds concentration data displayed in the graphical plot in ppbV shall be plotted based on the finalized data as reported by the testing laboratory or monitoring device ensuring all significant figures are preserved and without rounding. The display shall allow the public to determine the 24-hour time-integrated canister samples for benzene, continuous H2S and methane, and hourly microGC DMS and VOC concentrations, and the geographic location where the concentration is monitored. The graphical format plot shall additionally reference

and display a horizontal dotted or dashed line for each compound's respective Reference Exposure Level (REL) (as applicable) established by California Office of Environmental Health Hazard Assessment (OEHHA): (1) the acute 1-hour OEHHA REL for H2S, which is the same as the state-level standard for this compound (30 ppb), and (2) the acute 1-hour OEHHA REL for benzene (8 ppb). An intuitive mechanism (e.g., a link) to download historical data (for each data source) in a compiled, usable format (such as .csv) should be provided and made publicly accessible on the webpage created pursuant to condition 39 – including full analytical results of the 24-hour time-integrated canister samples, continuous monitoring data for H2S and methane (including meteorological data), and the hourly DMS and VOC results for all microGC instruments.

- i. Real-time data shall include, but not be limited to, chronological one-hour average H2S concentrations as time series at each monitoring location. Wind speed and direction shall also be included, if currently monitored by Respondent.
- ii. The website shall include a map which clearly marks the location of each air monitoring station.
- b. Within 30 days of this issuance of this Order, weekly data (from Saturday at 12:00 am to Friday at 11:59 pm) collected by these monitors shall be made available on the webpage created pursuant to Condition No. 39, in a manner which allows for user defined data download, no later than the following Monday at 5:30 pm. Data from these monitors shall be kept on file and made available to South Coast AQMD personnel upon request.
 - i. In the event of unexpected downtime of a monitor, bump tests, maintenance, or other scenario which may result in missing data or test data being recorded, by March 29, 2024, Respondent shall provide flags or other visual indicators on its website (created pursuant to Condition No. 39) for each data point/set

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that clearly indicate and document the range of dates/times with the missing or affected data, and indicate the reason for the missing or affected data.

- c. Respondent shall, by April 30, 2024, retain a third party to develop and install a system that provides automatic electronic notification via email for any exceedance of the applicable 1-hour NAAQS, CAAQS, or acute 1-hour OEHHA REL, whichever is lower (both in time and concentration) based on a time weighted average for benzene and H2S monitored in real-time by Respondent's monitoring network within the surrounding community (MS-06 through MS-12) by May 30, 2024. Additionally, by September 23, 2024, Respondent, through its retained contractor, shall develop and install a system allowing identical electronic notification via email for any exceedance of the applicable 1-hour NAAQS, CAAQS, or acute 1-hour OEHHA REL, whichever is lower (both in time and concentration) based on a time weighted average for benzene and H2S monitored in real-time by Respondent's monitoring network surrounding the Landfill (MS-01 through MS-05). Such systems shall also provide an automatic electronic notification once the applicable time weighted average falls below the applicable REL. Respondent shall be responsible for the third party including in such system a method for members of the public to sign up to receive such notifications without any personally identifying information (including email address) being disclosed to Respondent. 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

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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.
- 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 Community Air Monitoring Program. These instruments shall be capable of measuring hourly concentrations of benzene, toluene, ethylbenzene, xylenes, and other relevant volatile organic compounds (VOC) with site surface emissions greater than 1 ton/year, as indicated in Table 5.5 of the Chiquita Canyon Landfill Assessment of Air Emissions from Landfill Surfaces Report dated October 2023. While long-term solutions for permanent power are implemented and any necessary permits and approvals by regulatory agencies for permanent power are obtained, these instruments will be installed and put into operation using temporary power to allow for continuous measurements of all volatile organic compounds required. It is recognized that the use of temporary power may not guarantee the uninterrupted operation of these instruments. Respondent shall develop a monitoring,

plan that utilizes reliable and field-proven instrumentation, such as a micro gas chromatograph (MicroGC) with pre-concentration, and seek approval from South Coast AQMD. Respondent shall request and pay for expedited processing of all permits and procurement of the instruments, if available. To ensure Respondent is on schedule to complete installation within the 75 days, Respondent shall provide the South Coast AQMD (attn: Kathryn Roberts, kroberts@aqmd.gov; Mary Reichert, mreichert@aqmd.gov) an update at intervals of 30 days and 60 days from the issuance of the Order. Respondent shall specifically address whether it believes an extension is necessary and provide supporting documentation if it is seeking such extension. The AQMD may grant an extension of up to 60 days as appropriate based on the evidence submitted.

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

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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.

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

Community Outreach

- 39. Respondent shall continue to maintain and update regularly (on a weekly basis) a dedicated page of its website with a highly visible link on its homepage (the "odor mitigation section") for presenting information discussing odor mitigation at CCL. Such webpage shall include all information in English and Spanish. Subsequent reports posted on the webpage shall be sent to a translation service within 2 business days of posting on the webpage, and shall be translated and uploaded to the webpage within 2 business days of receipt from translation service. Such webpage shall also meet the following requirements:
 - a. The odor mitigation webpage shall be accessible via a direct hyperlink included on the homepage of CCL's website (https://chiquitacanyon.com), via a clickable link with text stating "Odor Mitigation;"
 - b. The odor mitigation webpage shall display prominently at the top of the page a notification that complaints of any odors believed to be caused by CCL can be made to CCL (24-Hour Hotline) at (661) 253-5155;
 - c. The odor mitigation webpage shall display prominently at the top of the page a notification that complaints may also be submitted to the South Coast Air Quality Management District via telephone at 1 (800) CUT-SMOG or 1 (800) 288-7664 or online on South Coast AQMD's website (which shall hyperlink to the following: http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx);
 - d. The odor mitigation webpage shall include a "Recent Updates" section which shall provide a narrative description of Respondent's understanding of the reaction and DMS;
 - e. The odor mitigation webpage shall include an "Odor Mitigation Efforts" section which shall describe the efforts Respondent is taking to mitigate potential odors;
 - f. The odor mitigation webpage shall include an "Odor and Maintenance Logs" section which shall include via hyperlink any logs created pursuant to this Order, preceded by a brief narrative description;

- g. The odor mitigation webpage shall include a "Reports, Permits, and Other Documents" section which shall include via hyperlink, preceded by a brief narrative description:
 - i. This Order;
 - Safety Data Sheets for odor neutralizer used at the facility and compounds used in the Semi-Permanent Vapor Odor Control system referenced in Condition No. 45;
 - iii. A copy of Respondent's current Conditional Use Permit (No. 2004-00052-(5));
 - iv. Any reports relating to odor or odor mitigation required by Respondent's Conditional Use Permit (No. 2004-00052-(5)) to be submitted to any government agency, including any responses or discussion of remedial actions to odor violations or complaints required by any government agency; and
 - v. All reports created by the Reaction Committee pursuant to this Order.
 - vi. Any other reports or correspondence requested by the County of Los Angeles agencies related to the reaction, odor, and Respondent's mitigation efforts.
- h. The odor mitigation webpage shall include an "Air Quality" Section which shall include a brief narrative describing the current status of air quality monitoring required under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)). The "Air Quality" Section shall also include, via hyperlink, preceded by a brief narrative description:
 - Any consultant reports submitted to the Community Advisory Committee ("CAC"), TAC, or any government agency under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)).
 - Any quarterly or annual reports submitted to the Los Angeles County Department of Public Health or South Coast AQMD under Condition 68 of Respondent's Conditional Use Permit (No. 2004-00052-(5)).

- i. The odor mitigation webpage shall include an "Upcoming Public Meetings" Section, which shall display the title/subject, date, time, location and/or virtual access information (including videoconference link or teleconference number as applicable), and a note of whether public comment will be received for the following meetings:
 - i. Any noticed hearing of the South Coast AQMD Hearing Board in Case No.
 6177-4;
 - ii. Any meeting of the CAC where odor mitigation and/or violations are included as an agenda item or anticipated to be discussed;
 - iii. Any meeting of the TAC where odor mitigation and/or violations are included as an agenda item or anticipated to be discussed; and
 - iv. Any other meeting open to the public at which CCL is a scheduled host and/or participant where odor mitigation and/or violation are included as an agenda item or anticipated to be discussed.
- 40. Respondent shall host a public one-hour community meeting once each calendar month following a month in which Respondent receives three or more Rule 402 NOVs from the South Coast AQMD. If Respondent does not receive three or more Rule 402 NOVs from the South Coast AQMD in a calendar month, Respondent does not need to host a community meeting during the following month. During each meeting, Respondent shall provide updates with regards to implementation of this Order and make time available for public comment on matters related to CCL. The meeting date and time and format (inperson or virtual) shall be announced via Respondent's website and shall also be sent via email to everyone who has signed up for email notifications on Respondent's website. The announcement shall include a link and dial-in information to the virtual platform used to conduct the meeting, or if the meeting is in-person, the location of the meeting. All meetings held in person shall adhere to all applicable public health guidelines and shall take place within the Val Verde community. Any presentation, meeting materials, or other media created or shared by Respondent at such community meeting shall be posted to

Respondent's Odor Mitigation webpage via hyperlink, including a brief narrative description of the materials.

Rule 1150 Landfill Excavation

- 41. Respondent shall submit, by January 30, 2024, a complete plan application for a Rule 1150 Landfill Excavation Plan. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited processing request and 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.
 - 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.
 - 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.
- 1. 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

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

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

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

- When refuse loading is completed and during transport, no material shall extend above the sides or rear of the truck or trailer which will haul the excavated material. Excavated material shall be completely covered with automated vinyl tarps, with the cover tied down.
- m. Respondent shall ensure that there is no track-out from the excavation area. Respondent shall ensure that all trucks used for excavation in Reaction Area go through a rumble strip before exiting the excavation area, and Respondent shall ensure that all trucks shall, following the conclusion of excavation, but not less than once per day, be free of excavation materials. The rumble strip(s) shall be adequately sized consistent with South Coast AQMD Rule 403 and maintained as to prevent saturation/caking of soils that would cause the unit to become ineffective in removing soil from tires.
- n. Landfill materials and refuse which have been exposed to the atmosphere as a result of the excavation, which have not been excavated and relocated for burial or transported off site, shall be immediately, not to exceed 30 minutes, safety permitting or unless otherwise approved in writing by South Coast AQMD, covered (with a minimum of 6 inches of clean soil, secured plastic sheeting that is at least 10 mil, or other South Coast AQMD approved cover) whenever excavation is not actively in progress, and at the end of each working day so that no portion of landfill material and refuse is exposed to the atmosphere. Foam by itself shall not be used as a night cover if it is raining or rain is predicted by the National Weather Service prior to the next scheduled day of excavation. For the west slope excavation project, Respondent shall follow the timing and cover procedures set forth in the west slope excavation project work plan. If Respondent follows the work plan, it is otherwise exempt from this Condition 42(n).
- o. Daily inspections shall be conducted of any covered excavation area (per Conditions 42(i), 42(j), and 42(n) above) to ensure the integrity of the cover(s) is maintained and secured so that no portion of the soil is exposed to atmosphere. If

the cover material is not completely covering the landfill materials and refuse generating emissions, or if the integrity of the cover has been compromised, immediate corrective action shall be taken to add and secure a new cover, or additional cover, on the area requiring corrective action. An inspection log shall be maintained to record the time of the inspections and any corrective action performed.

- p. All materials that are listed as hazardous by a federal or state agency shall be considered "hazardous materials" for the purpose of this Order.
 - i. All excavated hazardous material shall be transported in such a manner as to prevent any emissions of hazardous materials.
 - ii. All hazardous materials shall be transported in containers clearly marked as to the type of material contained and what procedures should be followed in case of accidental spills.
 - iii. Excavated liquid hazardous materials with the potential to cause air emissions shall be encapsulated or enclosed in containers with sealed lids before loading into the transport vehicles.
- q. Excavation, handling and stockpiling activities shall comply with the applicable requirements of Rule 403.
- r. All records required to demonstrate compliance with Condition No. 42 shall be kept and maintained for at least 5 years.
- s. Landfill excavation mitigation measures, other than those listed in this Condition No. 42, which South Coast AQMD personnel determine are necessary to protect the health and safety of the public, shall be implemented upon request.
- t. During excavation, odor neutralizer and/or odor suppressant (e.g. clay binder polymer spray-applied crusting cover material), shall be applied to the excavation working face and excavated materials to minimize emissions and odor without creating a safety hazard condition. Odor neutralizer applying equipment may include but not be limited to, fans and arm tower misters.

- u. During excavation in the Reaction Area as defined in Condition 9(a), Respondent shall employ fresh, new (unused) bed liners in trucks for each load during loading and transport. Respondent shall change out the existing bed liners in the trucks with fresh, new bed liners for each subsequent load in each truck.
- v. Respondent shall post a notice on the front page of its website (chiquitacanyon.com), and notify in writing all addresses located within 5,280 feet (1 mile) of the excavation area, at least 48 hours in advance of planned excavation commencement with a short description of the proposed excavation work, the estimated times of day excavation is proposed to occur, the estimated excavation start date, and estimated excavation end date. For unplanned excavation, or excavation where there is insufficient time to provide written notice at least 48 hours in advance of commencement, and where such excavation is expected to last more than one day, Respondent shall post a notice on the front page of its website as soon as possible upon learning such excavation is necessary, not to exceed 2 business hours. A copy of this notification shall be submitted to South Coast AQMD [Attention: bchen@aqmd.gov; Nathaniel Baitong Chen, Dickel. ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov].
- w. If a South Coast AQMD Rule 402 Nuisance Notice of Violation is received by the Respondent during excavation, or a distinct odor (level 3 or greater per below Odor Scale) resulting from the excavation is detected at or beyond the property line, then the Respondent shall, in accordance with its Health and Safety Plan, conduct ambient air quality sampling within 2 hours of receipt of Rule 402 Nuisance Notice of Violation or of when a distinct odor (level 3 or greater) is detected at or beyond the property line and analyze for TOC and speciated TOCs as follows:

Odor Scale Description of Odor Intensity

- 0 No odor detected
- l Very light odor detected
- 2 Light odor detected, distinguishable

Chiquita Canyon, LLC [Facility ID No. 119219] - Findings and Decision

least once between the hours of 2:00pm and 6:00pm, according to Respondent's Health and Safety Plan and the following requirements:

- i. Samples shall be collected at the following locations: immediately upwind of the excavation site, immediately downwind of the excavation site, within 3 inches of the exposed excavation workface, safety permitting, and at the downwind property line, or other location(s) approved in writing by South Coast AQMD. If deemed unsafe, Respondent shall document the date and conditions preventing compliance with this condition. Records of such conditions shall be submitted in the following monthly report pursuant to Condition 8.
- ii. Sampling shall conform to CARB Method 422 or equivalent. Samples with high moisture shall be collected using an appropriate method such as South Coast AQMD Method 25.1/25.3 or other methods approved in writing by South Coast AQMD.
- iii. Samples shall be analyzed by EPA Method TO-3, and EPA Method TO-15/TO-15A or other method approved in writing by South Coast AQMD.
- iv. All collected samples shall be sent to an appropriate laboratory for analysis, within 24 hours of the sample collection, with expedited analysis requested. All lab results shall be reported to South Coast AQMD [Attention: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov; Steve Dutz, stdutz@aqmd.gov] within 48 hours of receipt from the laboratory.
- y. The excavation workface, which exposes refuse or other emission generating material to the atmosphere, shall not exceed 1,000 square feet (unless excavation is occurring pursuant to the west slope excavation

project work plan, in which case the working face shall be limited to 3,000 square feet), without prior written approval from the South Coast AQMD or except where immediate, unplanned excavation is necessary to prevent or remediate imminent impacts to public health and safety. Estimation of the excavation workface size (square feet) shall be performed every hour during excavation. The daily excavation start date and time, hourly excavation workface size, and time of hourly excavation workface size estimations shall be recorded, and shall be provided to South Coast AQMD personnel within 48 hours of request.

- z. If a South Coast AQMD Rule 402 Nuisance Notice of Violation is received by Respondent during excavation, the approved mitigation measures shall be implemented immediately. Approved mitigation measures:
 - i. Excavation shall be limited to one location at a time.
 - ii. Unless excavation is occurring pursuant to the west slope excavation project work plan, Respondent shall limit the excavation workface, reducing the area by at least 50%, through use of plastic sheeting that is free of tears and defects, 6 inches of clean dirt cover, and/or long duration foam or other suppressant approved in writing by South Coast AQMD. After two hours, Respondent may return to the original size of the excavation workface unless there are Unfavorable Wind Conditions, as defined in the Stipulated Order for Abatement in Case No. 6177-1.
 - iii. Minimizing soil disturbance/transfer.
 - iv. Limiting working hours, reducing the excavation working hours to 6 total hours for the day (or the number of working hours at the time of receipt of the NOV, if greater than 6 hours).

- v. Water and/or odor neutralizing products containing no VOC.
- vi. Cleaning and covering of haul trucks.
- vii. Good housekeeping.
- aa. During excavation, if any ambient air monitoring stations at the fenceline or in the surrounding community (MS-01 through MS-12) reach or exceed applicable OEHHA acute REL concentrations (e.g. benzene acute REL is 8 ppb 1-hr average, H2S acute REL is 30 ppb 1-hour average), excavation shall cease and approved mitigation measures per Condition No. 42(z) above shall be implemented. Excavation shall not resume until concentrations return and remain below the REL threshold(s) for the duration of at least one averaging cycle for the respective acute RELs. The approved mitigation measures shall be implemented when 25% or more of the ambient monitoring stations are down for more than one averaging cycle for the respective acute RELs at the same time or when there are no operational realtime monitors downwind of the excavation workface, which includes but is not limited to calibration, maintenance, breakdown and repair.
- bb. During excavation, other emission generating activities such as well drilling in the reaction area, etc. shall be limited and prioritized outside of excavation hours. If landfill gas collection and/or control equipment is offline due to breakdown or maintenance, resulting in a reduction of gas flow to control devices by 10% or more (compared to the gas flow prior to the downtime of the first device), approved mitigation measures per Condition 42(z) above shall be implemented until the landfill gas collection and/or control equipment is returned to full operation. Respondent shall keep and maintain a log of all non-operation (or downtime) of landfill gas collection and control equipment, with dates,

times, duration, and reason for non-operation. This log shall be made available to South Coast AQMD personnel within 24 hours of request.

Other Conditions

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

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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.
- 47. The landfill perimeter odor control misting system shall be operated immediately and continuously upon receiving data from the meteorological station, referenced in Condition No. 44 above, that the 1-hour averaged wind direction is blowing in West, Northwest, North, or Northeast directions (270 degrees to 45 degrees). The misting system shall continue to operate until the 1-hour averaged wind direction data demonstrates the wind is no longer blowing in the specified directions. The system shall be operated in such a manner and with sufficient odor neutralizers to mitigate, to the extent possible, transient odors from the landfill into surrounding communities, as determined by the Reaction Committee.
- 48. Respondent shall South AQMD Kathryn Roberts, notify the Coast (attn: kroberts@aqmd.gov; Reichert, mreichert@aqmd.gov; Christina Ojeda, Mary cojeda@aqmd.gov) of any substantial operational changes designed to or anticipated to reduce odors, such as an operational change not contemplated by this Order, within seven days of implementing such changes.
- 49. Equipment and operations at the Facility are subject to the jurisdiction and regulatory requirements of multiple agencies, including but not limited to the District, CalRecycle,

Los Angeles County Public Works, Los Angeles County Department of Regional Planning, and Los Angeles County Department of Public Health. The conditions in this Order shall not in any way restrict or expand the scope of jurisdiction of any agency. If any agency that shares jurisdiction over the Facility with the South Coast AQMD requires Respondent to take any action that is inconsistent with this Order, Respondent shall immediately contact the South Coast AQMD by email at [Kathryn Roberts, kroberts@aqmd.gov and Mary Reichert, mreichert@aqmd.gov] and describe the inconsistent provisions, including providing any written directive from any other agency which Respondent considers inconsistent with one or more conditions in this Order. Respondent shall endeavor to resolve the inconsistency with the Executive Officer, while adhering to the Condition(s) in the Order. If the inconsistency is not resolved within 3 working days of the relevant agency, Respondent shall immediately inform the South Coast AQMD and shall petition for a status/modification hearing before the Hearing Board for further proceedings. At such proceeding, only the provision in dispute shall be resolved by the Hearing Board while the other conditions in this Order shall remain in full force and effect.

- a. If Respondent notifies South Coast AQMD per Condition No. 49 above that the inconsistency with one or more Condition and an order of another agency cannot be resolved, compliance with the applicable Condition(s) of this Order shall be waived until further Order of the Hearing Board. Notwithstanding the above, in no instance shall compliance with Condition No. 49 or Condition No. 49(a) be waived.
- Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)).
- 51. Respondent shall permit South Coast AQMD personnel to conduct all inspections deemed

necessary by South Coast AQMD Compliance staff, including, but not limited to, collection of samples. If during any inspection, South Coast AQMD observes uncontrolled liquid which has at least one characteristic (including odor, appearance, etc.) that suggests the liquid may be leachate, South Coast AQMD may require Respondent to collect a sample of the liquid within 24 hours, submit the sample for expedited testing for VOCs, and submit test results to the South Coast AQMD Compliance Inspector within 24 hours of receipt of results, but no later than 96 hours after collection. Notwithstanding the preceding, Respondent may require all visitors, including South Coast AQMD staff, to comply with the site's Health and Safety Plan. Respondent shall not prohibit South Coast AQMD staff from access to Respondent's facility, including the Reaction Area, if South Coast AQMD staff comply with the Health and Safety Plan. Respondent shall provide South Coast AQMD with any updates to the Health and Safety Plan within 1 business day of going into effect.

- a. To the extent Respondent's Health and Safety Plan requires 5-gas monitors for regulatory staff to conduct an on-site inspection, Respondent shall maintain onsite at least two 5-gas monitors (calibrated, sufficient battery, and ready for use) for regulatory personnel to use. Respondent may require any individual utilizing its 5-gas monitors to sign a waiver or release of liability in the form agreed upon by the parties on April 19, 2024.
- 52. Respondent shall reserve 60 minutes biweekly to host a virtual meeting between South Coast AQMD technical staff and Respondent / Respondent's technical consultants to discuss key updates on Respondent's implementation of this Order and any changes to Landfill conditions or operations. Any instance of the biweekly meeting may be cancelled at South Coast AQMD's sole discretion.
- 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)

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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.

- Respondent shall collect, convey, and store any condensate collected after the sulfur 54. treatment carbon absorbers separately from landfill leachate. No combining or mixing of these liquid materials shall occur, to allow for accurate characterization and profiling of each liquid.
- 55. Respondent shall immediately cease injection of landfill gas condensate into the landfill gas control flares, unless the condensate injection is initially performed for the purposes of a source test required under this condition. Any injection of condensate collected after the sulfur treatment carbon absorbers to the flares may be allowed if each of the following criteria are fulfilled:
 - The condensate has been sampled/analyzed and determined as nonhazardous in accordance with hazardous material requirements by respective agencies (U.S. EPA and DTSC), with sampling/analysis results provided to South Coast AQMD along with specified regulatory hazardous waste thresholds;
 - b. The condensate tank has not received any additional liquid after the sampling/analysis performed in Condition 55(a) and will not receive any additional liquids prior to or during injection/combustion;
 - c. Respondent has submitted a complete source test protocol which has been reviewed and approved by South Coast AQMD in writing, and which includes, at a minimum, procedures for testing of methane, total nonmethane organic compounds, speciated organics (including but not limited to Rule 1150.1 Table 1 Carcinogenic and Toxic Air Contaminants), NOx

as NO2, CO, particulate matter (PM10), oxygen and carbon dioxide, moisture content, temperature, flowrate, total sulfur compounds as H2S and speciated sulfur compounds, gas BTU value, nitrogen, methane and TNMOC destruction efficiency, and metals;

- d. Respondent has submitted a source test report which has been reviewed and approved in writing by South Coast AQMD;
- e. South Coast AQMD grants written approval to conduct condensate injection and has not withdrawn the approval based on follow-up source test evaluation(s);
- f. Respondent conducts follow-up flare source testing, at a minimum of every 6 calendar months, which includes non-hazardous condensate injection, and following the requirements of sub-item (d) above; and
- g. Respondent maintains records of condensate sampling/analysis results to demonstrate the liquid is non-hazardous, maintains records of daily condensate injection flows (gallons per day), and provides these records in the monthly report pursuant to Condition No. 8.
- 56. Respondent shall conduct sampling and analysis of vapors in the headspace of leachate tanks located in the Top Deck Tank Farm (Tank Farm #9). Sampling as required below shall be completed no later than April 4, 2024. Samples shall be collected and analyzed from the following equipment/locations:
 - a. the vapors in the headspace of at least one untreated leachate storage tank
 (preferentially containing leachate that is determined to be hazardous or
 assumed to be hazardous in accordance with hazardous material
 requirements by respective regulatory agencies, e.g. U.S. EPA and/or
 DTSC);
 - b. the vapors in the headspace of at least one leachate storage tank undergoing treatment at;
 - c. the vapors in the headspace of at least one leachate storage tank where

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

- i. Submit the finalized contract to install and operate the monitoring that was due June 21, 2024 [per Order for Abatement Condition No. 66 in effect April 24, 2024] to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by no later than September 17, 2024.
- ii. Submit all known information of design, implementation, installation, and specification issues/concerns by no later than September 17, 2024. This shall include documented correspondence and correspondence reports (for live correspondence prior to August 17, 2024) summarizing results of all communication with system, device, and component vendors/manufacturers and/or identifying contractors the following, including, but not limited to:
 - 1. the system, device, and component viability and availability, and
 - the system, device, and component design, implementation, installation, and specification issues, such as compatibility, physical constraints, specifications falling short of operational need, and supply chain timelines.
- iii. Respondent shall contact at least three reputable vendors/manufacturers/distributors for each of the systems, devices, and components that have identified issues/concerns as described by Condition No. 66(a)(ii) requesting and facilitating in obtaining proposed solutions and recommendations for each of the identified issues/concerns. Documented correspondence of the results of this communication shall be submitted to South Coast

AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] by no later than, October 11, 2024.

- iv. Respondent shall submit the findings and solutions to issues documented in Condition 66(a)(ii) and (iii), which shall include any additional communication from contacting various vendors, manufacturers, or distributors of systems, components, and devices by no later than October 30, 2024, or unless otherwise approved by South Coast AQMD, 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)].
 - 1. The findings and solutions shall also include an inventory of the vertical wells in the Initial Reaction Area that contain a Lorenz pump capable of measuring liquid levels and down-well temperatures, including the location of the vertical wells and the depth of the down-well temperature probes. The findings and solutions shall also include an inventory and installation timeline of the temperature monitoring probe network approved by the U.S. Environmental Protection Agency under the Unilateral Administrative Order.
- v. A remote monitoring system shall be installed and in operation no later than December 31, 2024, or other date as approved in writing by South Coast AQMD. Temperature shall be measured in at least twenty (20) wellheads 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)). By October 15, 2024, the Reaction Committee shall determine the location for installation of the remote monitoring system equipment and shall submit its determination 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)]. Should any of the remote monitoring system equipment fail due to the ETLF conditions at the Landfill, Respondent does not need to replace it.

- vi. By January 31, 2025, the Reaction Committee shall submit a proposal to assess the viability and functionality of a remote monitoring system which measures temperature and pressure within a well with a pump located within the Reaction Area, including assessment of multiple depths within the well (e.g. shallow, middle, and deep). The Proposal shall be submitted to Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov] for review. Upon approval by South Coast AQMD, Respondent shall conduct the feasibility assessment. The Reaction Committee shall submit a final report to the South Coast AQMD (to Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]) detailing the results of the feasibility study, and recommendations on further deployment of the remote monitoring system not later than 150 days from the approval of the feasibility proposal.
- 67. Respondent shall within 2 business days of the issuance of this Order designate an Inspection Liaison responsible for coordinating the exchange of information between Respondent and South Coast AOMD.

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68. Respondent shall by June 15, 2024, install appropriately ranged differential pressure gauges, with at least 0.01 inches water column resolution, or pressure gauge otherwise approved in writing by South Coast AQMD, on each leachate storage tank. Respondent shall monitor and record daily the differential pressure of each leachate tank, tank identification number, date and time of the reading, and the personnel that conducted the reading. Pressure readings that indicate the lowest value of the gauge or the highest value of the gauge, shall be reported using significant digits to the hundredths place as "<= [lowest value on gauge] (e.g. <= -0.50 inches water column)" and ">= [highest value on gauge] (e.g. >= 0.50 inches water column)", respectively. The tanks shall be maintained under negative pressure, as demonstrated by differential pressure readings. Zero and positive pressure readings do not demonstrate negative pressure. Pressure gauges shall be calibrated according to manufacturer specifications and schedule. Respondent shall report all the recordings in the monthly report pursuant to Condition No. 8.

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

exceeds 500 ppmv, other than non-repeatable, momentary readings. Records of this monitoring activity shall include at a minimum:

- a. A plot plan showing the piping networks monitored;
- b. Date(s) when monitoring was performed;
- Results of the visual/physical inspection and associated photos of any piping or piping components which had any of the above-mentioned visual and/or physical inspection concerns;
- d. Results of piping component leak measurements;
- e. Location(s) of component/equipment with visual and/or physical inspection concerns and/or locations(s) where component leaks were measured, which shall include the following:
 - i. Location identified on a map;
 - ii. Location identified by the landfill surface grid number and GPS coordinates; and
- f. Work which has been performed, or which is planned to be performed, and associated date(s), to repair, replace, or conduct other actions to resolve issues with the piping or components of concern.

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

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

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

Based on the report findings, if the landfill gas generation is expected to exceed the landfill's flaring capacity when one or more flares or thermal oxidizers are offline, Respondent shall start the planning and procurement process for the addition of an additional flare, thermal oxidizer, or other landfill gas combustion/control equipment and ensure sufficient redundant control capacity (meaning at least one additional control unit, equivalent in landfill gas combustion capacity to the largest control unit on site, and whose operational capacity is not required to combust the quantity of gas estimated in the LandGEM) to handle all generated landfill gas, assuming any one or more unit(s) is offline.

- a. Respondent shall submit, by October 31, 2024, a complete permit application for the new construction of a Landfill Gas Flare (Flare No. 5), and modifications of Flare 1 & 2 (G73696, A/N 645450), Flare 3 (A/N 624296), and Flare 4 (A/N 647996) to the extent necessary, to increase the landfill gas control capacity. The submittals shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.
- Respondent shall submit, by May 21, 2024, a complete permit application for the installation 71. and operation of any aboveground surface landfill gas collection system, or underground landfill gas collection system, installed for the purpose of collecting landfill gas under the geosynthetic cover installed per Condition 31 or the cover as required by the Local Enforcement Agency. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited permit processing request and associated required fees, forms, and information.

- 72. Respondent shall conduct sampling and analysis, testing, installation, and monitoring of the leachate and landfill gas condensate collection and storage tank system, as specified below:
 - a. At least quarterly, conduct testing to sample and analyze the vapor flow in the piping used to vent the leachate storage tanks and landfill gas condensate tanks and route the vapors to the landfill gas control system. The testing shall at least include the following items and the results of this testing shall be provided in the monthly report pursuant to Condition No. 8.:
 - i. vented leachate tank vapor flowrate,
 - ii. vented condensate tank vapor flowrate,
 - iii. vapor temperature,
 - iv. concentrations of speciated organics (including but not limited to Rule 1150.1Table 1 Carcinogenic and Toxic Air Contaminants),
 - v. the total sulfur compounds as H2S and speciated sulfur compounds, and
 - vi. testing at each of the locations indicated below:
 - 1. The tank vents or manifolds which are representative of a set of tanks;
 - 2. The header/manifold from each leachate tank farm or manifold including Tank Farm #7, Tank Farm #9, North Perimeter Manifold, New East Perimeter Manifold, LC Manifold, landfill gas condensate storage tanks, and any other future tank farms or manifolds, with testing performed upstream of the piping connection to the LFG Collection and Conveyance System where landfill gas may affect results; and
 - 3. The inlet of the flare(s) prior to combustion.
 - b. A source test protocol for this testing shall be submitted to South Coast AQMD by May 17, 2024, unless otherwise approved in writing by South Coast AQMD. Testing shall be conducted within 45 days of receiving written approval of the source test protocol by South Coast AQMD, and the final results in a source test report format shall be submitted within 30 days of testing, unless otherwise approved in writing by

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- c. Within 30 days of submission of the source test report, Respondent shall submit a recommendation from the Reaction Committee on additional vapor flow testing to the South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov].
- d. Beginning April 29, 2024, at least daily, conduct pressure testing and monitoring within the HDPE header(s) venting the leachate storage tanks to quantify the vacuum from the flare station blowers exerted on the leachate tanks, in inches of Water Column (W.C.). Pressure testing and monitoring as specified in this condition is not required upon complete installation of pressure gauges as specified in Condition 68.
 - i. Daily pressure readings, pressure testing location, indication of the tank farm represented by the test results, and indication of each tank within the tank farm represented by the test results shall be submitted in the monthly report per Condition No. 8.
- e. By June 28, 2024, unless otherwise approved in writing by South Coast AQMD, install flow meters within the HDPE piping headers for associated leachate tank farms to accurately measure and record the flow rate (scfm) and total daily volume of vented leachate tank vapors being sent to the flare station for combustion. The flow meters shall be installed according to manufacturer specifications and recommendations to ensure accurate flow readings.
 - i. Daily flow rate (scf/day), flow meter location, indication of the tank farm whose flow is being measured, and indication of each tank within the tank farm vented and represented in the flow rate shall be submitted in the monthly report per Condition No. 8.
- 73. Respondent shall prepare an inventory of all internal combustion engine equipment rated greater than 50 HP onsite as of April 25, 2024 and shall submit this inventory to South Coast AQMD by May 21, 2024. Respondent shall submit a permit application for internal combustion engine equipment rated greater than 50 HP that is not already permitted through

South Coast AQMD by June 30, 2024, accompanied with a complete Title V Revision application(s) and shall be submitted with an expedited permit processing request and associated required fees, forms, and information. Going forward, Respondent shall submit a permit application, accompanied with a complete Title V Revision application(s), for any internal combustion engines greater than 50 HP brought on site that does not already have a valid permit under Respondent's Title V Facility Permit or that does not already have a complete application submitted to South Coast AQMD for the engine to be included in Respondent's Title V Facility Permit.

- 74. Respondent shall expedite the procurement of the equipment needed to construct Flare No. 4 to the maximum extent feasible such that Flare No. 4 is ready to be constructed and put into operation as soon as possible after Respondent receives all necessary permits or other approvals. Respondent shall provide updates on the procurement of this equipment in the monthly report pursuant to Condition 8(s).
- 75. [Reserved]
- Respondent shall install sample ports on all equipment on site that requires sampling, to prevent unnecessary fugitive emissions from sampling activities. By December 2, 2024, Respondent shall install sampling ports on all subject equipment and collect samples from the sampling ports thereafter, unless otherwise approved in writing by South Coast AQMD. For new equipment brought on site that requires sampling, sample ports shall be installed within 30 days of bringing the equipment on site, or within 15 days of starting operation of the equipment, whichever is sooner, unless otherwise approved in writing by South Coast AQMD.
- 77. [Reserved]
- 78. Respondent, or Respondent's contractor, as applicable, shall install a liner of 60 mil polyethylene sheeting (or other equivalent flexible membrane cover) overlaying two feet of compacted soil lining the bottom and 5 feet off the sides of the perimeter of each leachate tanks and/or tank farms, except for driving lanes required for trucks to access leachate tanks for leachate disposal or other routine operations or maintenance, to limit spills affecting the

ground, water, and potential for re-entrained air emissions. The sheeting/membrane liner shall be inspected at least twice-daily, at the beginning and end of day, and shall be maintained free of tears, rips, etc. The inspection and maintenance records shall be recorded daily and shall contain, but not be limited to: (1) the date and time; (2) tank area designation inspected; (3) the name of the person performing the inspection and written acknowledgement that they did, or did not, take corrective action to maintain or replace the liner; (4) specific notation as to the liner maintenance performed, including but not limited to: liner repair or replacement, cleanup of spills on the liner, including volume of spill, etc. Installation shall be completed within 120 days of this Order.

- 79. Respondent shall submit any permit applications, source test protocols, source test reports, and any other submittal requiring South Coast AQMD review and approval, with an expedited processing/review requested, along with any associated fees, forms, and information required.
- 80. Whenever South Coast AQMD permitted Various Location equipment or CARB Statewide Portable Equipment Registration (PERP) permitted equipment is brought or operated on site, the Respondent shall:
 - a. Notify South Coast AQMD in writing of the date and time that the equipment is brought to the facility in the corresponding monthly report per Condition No. 8 and include a copy of the various locations permit(s) and/or PERP permit(s) in the corresponding monthly report per Condition No. 8.
 - b. Maintain a daily log including the following information for each permit unit: permit number and/or registration number, application number (if applicable), equipment location, and start and end time of equipment operation (as applicable). Respondent shall submit the daily log in the in the corresponding monthly report per Condition No. 8.
 - c. Notify South Coast AQMD in writing of the date and time that the equipment is removed from the facility in the corresponding monthly report per Condition No. 8.
- 81. Respondent shall provide notification, by posting an alert on the front page of its website

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

- a. Downtime of 30 Minutes or Longer:
 - Respondent shall provide the notification required by this Condition 81 for any individual control device that has downtime which is anticipated to last 30 minutes or more, or once any downtime for an individual control device reaches 30 minutes of downtime.
 - ii. If the downtime of any combination of landfill gas collection equipment results or is planned to result in a reduction of gas flow to control devices by 10% or more (compared to the gas flow prior to the downtime of the first device), Respondent shall provide the notification required by this Condition 81 for any such control devices that have downtime which is anticipated to last 30 minutes or more, or once any downtime for such devices reaches 30 minutes of downtime.
- b. This notification shall be posted online at least 48 hours prior to a planned downtime event, unless the event is planned less than 48 hours before the planned downtime. If there is less than 48 hours before the planned downtime, Respondent shall provide the notification as soon as possible, within 1-hour of finalizing plans for the downtime. For unplanned downtime, notification shall occur within 1-hour of reasonable discovery of any collection or control equipment issue resulting in unplanned downtime. The notification shall inform the public of the control equipment downtime, expected extent (in days/hours) of the downtime, and the possibility of increased odors in the community during the indicated period.
- c. Respondent shall, by November 18, 2024, develop a system allowing members of the public to sign-up for notifications of such outages or downtime via email or text

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

- 82. Respondent shall provide notification to South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov; Larry Israel, lisrael@aqmd.gov] whenever any landfill gas collection or control equipment (i.e. gas collection wells/trenches, headers, flares, thermal oxidizer(s), blowers, etc.) has scheduled and/or unplanned downtime. Downtime refers to cessation of operation lasting 30 minutes or longer, according to the following:
 - a. Downtime of 30 Minutes or Longer:
 - Respondent shall provide the notification required by this Condition 82 for any individual control device that has downtime which is anticipated to last 30 minutes or more, or once any downtime for an individual control device reaches 30 minutes of downtime.
 - ii. If the downtime of any combination of landfill gas collection equipment results or is planned to result in a reduction of gas flow to control devices by 10% or more (compared to the gas flow prior to the downtime of the first device), Respondent shall provide the notification required by this Condition 82 for any such control devices that have downtime which is anticipated to last 30 minutes or more, or once any downtime for such devices reaches 30 minutes of downtime.
 - b. This notification shall include an initial notification 24 hours prior to the planned shutdown event, unless the event is planned less than 24 hours before the planned downtime, Respondent shall provide the notification as soon as possible, within 1-hour of finalizing plans for the downtime. For unplanned downtime, notification shall

occur within 1-hour of reasonable discovery of any control equipment issue resulting in unplanned downtime. Respondent shall also provide a subsequent additional notification and follow-up written report within 48 hours of startup and operation of the equipment after the downtime event is corrected. The initial notification, and subsequent notifications/follow-up report shall include the following items, unless otherwise noted below:

- i. Reason(s) for the downtime,
- ii. Specification of whether the event was planned or unplanned event,
- iii. Estimated (initial notification) and actual (subsequent notification/follow-up report) start and end dates and times of the downtime event,
- iv. Meteorological data (15-minute averaged), including wind direction(s) and wind speed(s), starting from 48 hours prior to the downtime event, and extending until 24 hours after associated equipment start-up and resumed operation during the period of downtime (subsequent notification/follow-up report only),
- v. Facility-wide minute by minute landfill gas flow data, in Microsoft Excel format, starting from 48 hours prior to the downtime event, and extending until 24 hours after associated equipment start-up and resumed operation (subsequent notification/follow-up report only),
- vi. A running log of all combustion equipment downtime events reported pursuant to Condition 82, including the equipment name (e.g., Flares 1, 2, 3, or Zeeco unit), planned or unplanned event, estimated (initial notification) and actual (subsequent notification/follow-up report) start date and time of each event, estimated (initial notification) and actual (subsequent notification/follow-up report) end date and time of each event, estimated (initial notification) and actual (subsequent notification/follow-up report) duration of downtime in minutes, and reason(s) for downtime in an Excel format. The information shall be clearly displayed for all downtime events and

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combustion equipment in rows within one Excel sheet, allowing quick determination of the downtime details for any equipment or combination of equipment, including simultaneous downtime events.

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

continuation of the study for up to an additional 6 months, subject to review and approval by SCAQMD. The continuation of the study shall proceed upon written approval by the South Coast AQMD.

- Respondent shall evaluate the installation of windbreaks and/or wind flow disrupters along the western and northern borders of the facility, and/or ridgeline, such that there are not any distinguishable gaps in the border and/or ridgeline which may result in an odor channeling affect into the Val Verde community, to enhance the dispersion of odors from the facility. By no later than November 15, 2024, Respondent shall submit a report detailing the findings of the evaluation to South Coast AQMD (attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov). The report detailing the findings of the evaluation shall include the following:
 - a. The viability and advantages and disadvantages of the different windbreaks and/or wind flow disruptors.
 - b. The estimated duration and timeline of the steps necessary to implement and install each of the windbreaks and/or wind flow disruptors evaluated, including any regulatory approvals and any associated environmental analysis and public notification/outreach required, contractor procurement, contracts, bidding, contract execution, equipment procurement, and equipment installation.

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

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

the toe drain termination project:

- a. Landfill perimeter odor control misters shall be operated along the west slope excavation area and toe drain termination project area while excavation is conducted and while any waste, waste contaminated material, or odiferous material is exposed to atmosphere.
- b. By September 10, 2024 for the west slope excavation project, and by November 15, 2024 or upon commencement (whichever is later) of the toe drain termination project, a Semi-Permanent Vapor Odor Control System shall be operated along the excavation area while excavation is conducted and while any waste, waste contaminated material, or odiferous material is exposed to atmosphere.
- c. A weekly report shall be submitted to South Coast AQMD [Attention: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov] each Tuesday by 8am PST reporting on the preceding week. The weekly report shall report the west slope excavation activities and excavation activities, if any, related to the toe drain termination project commenced, completed, and yet to be completed with estimated timeline and amount (in cubic yards) of soil/refuse to be excavated for completion. The report shall also identify any change in daily excavation schedules, obstacles or unexpected corrective actions that transpired. The first report for the west slope excavation project shall be due on September 3, 2024. The first report for the toe drain termination project shall be due on November 19, 2024, and shall also identify:
 - i. mitigation measures implemented per Condition No. 42(z), (aa) and/or excavation cessation per Condition No. 42(aa) (as applicable);
 - ii. the corresponding reason for mitigation measures implemented per Condition
 42(z) and/or (aa) and/or excavation cessation (as applicable);
 - iii. for excavation cessation and mitigation measures implemented per Condition42(z) and/or (aa):
 - 1. the corresponding start and end times of such cessation and mi gation

measures (as applicable);

- the associated compound and compound concentration that reached or exceeded the applicable acute REL (as applicable);
- date and time of reaching or exceeding the applicable acute REL that
 resulted in implementation of mitigation measures and/or excavation
 cessation (as applicable), and
- air monitor(s) which were down and associated wind direction data (as applicable).
- 86. Respondent shall comply with the following requirements until the final approval of liquid/condensate/leachate treatment and/or storage permits, for all liquid treatment and storage equipment operating on site, unless otherwise approved in writing by South Coast AQMD.
 - a. The equipment shall be properly maintained and kept in good operating condition at all times in accordance with manufacturer's recommendations and industry best management practices.
 - b. The equipment shall be operated and maintained by personnel properly trained in its operation. Training certifications and/or detailed qualifications for these personnel shall be maintained on site, and provided to South Coast AQMD personnel upon request.
 - c. The operation of the equipment shall not result in the release of any raw landfill gas, or discharge of odorous liquid vapors into the atmosphere, except for when collecting samples from leachate treatment equipment. By November 1, 2024, Respondent shall install sampling ports on all leachate tanks for which leachate sampling would occur and would otherwise result in leachate exposure to open air during sampling, and thereafter shall collect samples from such sampling ports. By November 1, 2024, Respondent shall also prepare and submit to South Coast AQMD (Baitong Chen [bchen@aqmd.gov]; Nathaniel Dickel [ndickel@aqmd.gov]; Christina Ojeda [cojeda@aqmd.gov]) a schematic of the leachate treatment equipment, showing

where the sampling ports are located.

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

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

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

In the event that the first complete start up cycle is unsuccessful, Respondent shall successfully restart the combustion/control equipment within 30 additional minutes. In the event Respondent is unable to complete the necessary work to correct the power failure and restart the combustion/control equipment within the timeframes listed above due to inaccessibility or dangerous conditions for the technician, Respondent shall document the conditions that do not allow for the work to be completed within the required timeframe.

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

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

application, unless otherwise approved in writing by South Coast AQMD.

- a. The equipment and associated ancillary parts shall be properly maintained and kept in good operating condition at all times, which includes, where applicable, following the manufacturer's recommendations and industry best management practices.
- The equipment shall be operated and maintained by personnel properly trained in its operation.
- 90. Respondent shall submit to South Coast AQMD, by January 31, 2025, 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 or Condition 57. 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.
- 91. Respondent shall submit to South Coast AQMD, by January 31, 2025, a complete permit application for each hazardous and non-hazardous liquid treatment systems. The submittal shall be accompanied with a complete Title V Revision application and shall be submitted with an expedited permit processing request with associated required fees, forms, and shall include, but not limited to, the applicable information listed in South Coast AQMD Reg. II and below:
 - a. Separate permit applications for each treatment system.
 - b. Process flow diagram for each treatment system illustrating the pathway(s) the liquid is conveyed throughout the system and identifying which tanks the liquid is transferred to and from, including identification of all potential emission release points, the connections to the leachate storage tanks, safety components and the associated specifications, if applicable), monitoring components (if applicable), and identify which components are under vacuum or positive pressure.
 - c. Specify the capacity, dimensions, and number of tanks and vessels in each system.

 Identify, for each component (e.g. tanks and/or vessels) in each system, whether they

have headspaces.

- d. Standard operating procedures for each system to safeguard from overflow of leachate and ensure minimal fugitive emission release points.
- e. Leachate flow rates, material usage rates, and process parameters affecting air pollution emissions or needed to determine potential emissions of air pollutants.
- 92. Respondent shall send any file(s) with a cumulative size larger than 35 MB via a shared link, by email, which allows South Coast AQMD personnel to be able to download the file(s).
- 93. Respondent shall return for a status and modification hearing on February 5 and 6, 2025, or as soon thereafter as the Hearing Board can schedule a hearing.
- 94. The Hearing Board may modify this Order for Abatement without the stipulation of the parties upon a showing of good cause therefore, and upon making the findings required by Health and Safety Code Section 42451(a) and District Rule 806(a). Any modification of the Order shall be made only at a public hearing held upon 10 days published notice and appropriate written notice to the Respondent.
- 95. The Hearing Board shall retain jurisdiction over this matter until <u>December 31, 2025</u> and at that time this Order shall no longer be of any force or effect, unless this Order is amended, modified, or dissolved before then.
- 96. This Order for Abatement is not intended to be nor does it act as a variance. Respondent is subject to all rules and regulations of the District and to all applicable provisions of California law. Nothing herein shall be deemed or construed to limit the authority of the District to issue Notices of Violation, to seek civil penalties or injunctive relief, or to seek further Orders for Abatement or other administrative or legal relief. The Findings of Fact are based on evidence presented by Petitioner and Respondent as of the date of this Order.

FOR THE BOARD:

Micah Al

DATED:

January 15, 2025

I VOTE NO:

Mohan Balagopalan

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