

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IX

_____)	
IN THE MATTER OF:)	
)	
Chiquita Canyon, LLC)	
)	UNILATERAL ADMINISTRATIVE
)	ORDER
)	
RESPONDENT)	EPA DOCKET NO.
)	RCRA 7003-09-2024-0001 and
Proceeding under Section 7003 of the)	CERCLA 106-09-2024-05
Resource Conservation and Recovery Act,)	
as amended, 42 U.S.C. Section 6900, et seq.,)	
and Section 106(a) of the Comprehensive)	
Environmental Response, Compensation,)	
and Liability Act, 42 U.S.C. Section 9601)	
et seq.)	
_____)	

I. INTRODUCTION

1. This Unilateral Administrative Order (“UAO”) is issued by the United States Environmental Protection Agency, Region IX (“EPA”) to Chiquita Canyon, LLC, dba Chiquita Canyon Landfill (“CCL” or “Respondent”). This UAO provides for the performance of response actions to address off-Site impacts and ongoing subsurface reactions causing off-Site impacts, including any additional work that maybe required by Section XXIV (Additional Work) of this UAO, by Respondent in connection with the property located at 29201 Henry May Drive in Castaic, California (the “Site”). In issuing this UAO, EPA intends for Respondent to identify, investigate, remedy, and/or prevent the potential endangerment to human health or the environment from activities involving solid and hazardous waste, and to ensure that the Work ordered by EPA is designed and implemented to protect human health or the environment. Respondent shall finance and perform the Work in accordance with this UAO, plans, standards, specifications and schedules set forth in this UAO or developed by Respondent and approved by EPA pursuant to this UAO.
2. EPA has determined that Respondent has contributed or is contributing to the past or present handling, storage, treatment, transportation or disposal of solid and hazardous waste that may present an imminent and substantial endangerment to health or the environment.
3. EPA has notified the State of California of this action pursuant to the Resource Conservation and Recovery Act (also known as the Solid Waste Disposal Act), as amended, 42 U.S.C. §§ 6901, *et seq.* (RCRA), Section 7003(a), 42 U.S.C. § 6973(a), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.* (CERCLA), Section 106(a), 42 U.S.C. § 9606(a).

II. JURISDICTION

4. This UAO is issued under the authority vested in the Administrator of EPA by Section 7003 of RCRA, 42 U.S.C. § 6973, which authority has been delegated to the Regional Administrators of EPA by Delegation 8-22 (January 18, 2017), and redelegated to the Director of the Enforcement and Compliance Assurance Division of EPA Region IX by Delegation R9 8-22 (March 8, 2017). This UAO is also issued under the authority vested in the President of the United States by Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), which authority has been delegated to the Administrator of the EPA by Executive Order No. 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987), further delegated to the Regional Administrators of EPA by Delegations 14-14A (January 31, 2017) and 14-14B (January 18, 2017), and redelegated to the Director of the Superfund and Emergency Management Division of EPA Region IX by Delegation R9 14-14A and 14-14B (May 9, 2018 and May 1, 2019).

III. PARTIES BOUND

5. This UAO shall apply to and be binding on Respondent and Respondent's officers, directors, employees, agents, successors, assigns, heirs, trustees, receivers, and on all persons, including, but not limited to, contractors and consultants, acting on behalf of Respondent, as well as on subsequent purchasers of the Site. Any change in the ownership or corporate status of Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter Respondent's responsibilities under this UAO.
6. Respondent shall provide a copy of this UAO to any subsequent owners or successors before a controlling interest in ownership rights, stock, assets or the Site is transferred. Respondent shall be responsible for, and liable for, completing all of the activities required pursuant to this UAO, regardless of whether there has been a transfer of ownership or control of the Site or whether said activities are to be performed by employees, agents, contractors, subcontractors, laboratories, or consultants of Respondent. Respondent shall provide a copy of this UAO within seven (7) days of the Effective Date, or the date that such services are retained, to all contractors, subcontractors, laboratories, and consultants that are retained to conduct or monitor any portion of the Work performed pursuant to this UAO. Respondent shall condition all contracts or agreements with contractors, subcontractors, laboratories or consultants in connection with this UAO, on compliance with the terms of this UAO. Respondent shall ensure that their respective contractors, subcontractors, laboratories, and consultants comply with this UAO.
7. Not later than sixty (60) days prior to any voluntary transfer by Respondent of any interest in the Site or the operation of the facility, Respondent shall notify EPA of the proposed transfer. In the case of a voluntary transfer through a bankruptcy, Respondent shall notify EPA within twenty-four (24) hours of the decision to transfer property. Respondent shall notify EPA of any involuntary transfers immediately on Respondent's initial receipt of notice of any involuntary transfer. Not later than three (3) days after any transfer, Respondent shall submit copies of the transfer documents to EPA.

IV. DEFINITIONS

8. Unless otherwise expressly provided herein, terms used in this UAO that are defined in RCRA or CERCLA shall have the meaning assigned to them in the applicable statute. Whenever the terms listed below are used in this UAO the following definitions apply:

"CalRecycle" shall mean California's Department of Resources Recycling and Recovery.

"CCR" means the California Code of Regulations.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

“Clean Air Act” shall mean the Clean Air Act, as amended, 42 U.S.C. §§ 7401, *et seq.*

“Day” or “day” shall mean a calendar day unless expressly stated otherwise. In computing any period of time under this UAO, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business on the next working day.

“DTSC” shall mean California’s Department of Toxic Substances Control.

“Effective Date” shall be the effective date of this UAO pursuant to Section XXVII (Effective Date).

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“LEA” shall mean the Los Angeles County Department of Public Health, Solid Waste Management Program, certified to act as the Local Enforcement Agency by CalRecycle.

“NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

“Paragraph” shall mean a portion of this UAO identified by an Arabic numeral or an upper or lower case letter.

“Parties” shall mean EPA and Respondent.

“RCRA” shall mean the Resource Conservation and Recovery Act (also known as the Solid Waste Disposal Act), as amended, 42 U.S.C. §§ 6901, *et seq.*

“Regulatory Agencies” shall mean EPA, LEA, CalRecycle, California’s South Coast Air Quality Management District, Los Angeles Regional Water Quality Control Board, DTSC, and any successor departments or agencies of these entities.

“Respondent” shall mean Chiquita Canyon, LLC.

“RWQCB” shall mean the Los Angeles Regional Water Quality Control Board.

“Section” shall mean a portion of this UAO identified by a Roman numeral.

“Site” shall mean the facility located at 29201 Henry May Drive, in Castaic,

California (91384).

“South Coast AQMD” shall mean California’s South Coast Air Quality Management District.

“State” shall mean the State of California.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Waste Material” shall mean (a) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any “hazardous waste” under California Health & Safety Code, Division 20, Chapter 6.5 (Hazardous Waste Control Law), Section 25117 and Title 22 of the California Code of Regulations (22 CCR), Section 66261.3.

“Work” shall mean all the activities and requirements Respondent is required to perform under this UAO, except those required by Section XVI (Record Retention).

“Work Plan(s)” shall mean the Master Work Plan and/or the work plans incorporated therein.

V. FINDINGS OF FACT

9. Operation of the Landfill.

- a. CCL is registered as a limited liability company in the State of Delaware. CCL is a subsidiary of Waste Connections US, Inc., which is registered as a corporation in the State of Delaware. Waste Connections US, Inc. is a subsidiary of Waste Connections, Inc., which is registered as a business corporation in Ontario, Canada.
- b. CCL operates a Class III non-hazardous municipal solid waste landfill (“Landfill”) located on the Site in the northern portion of the County of Los Angeles. The County of Los Angeles Department of Regional Planning regulates the Landfill under a conditional use permit. The 639-acre Landfill property was first approved for waste disposal in 1967. It has been in use as a landfill since 1972. The property has continued to be used and operated as a landfill under a series of conditional use permits issued by the County of Los Angeles. CCL was most recently granted a renewed conditional use permit in 2017 (as renewed and/or amended from time to time, “CUP”) to allow continued operations and expansion of the Landfill.

- c. CCL is permitted to accept non-hazardous solid waste for disposal, including municipal solid waste, green waste for composting or recycling, construction and demolition debris, and e-waste for recycling. CCL is prohibited from accepting hazardous waste that is ignitable, corrosive, reactive, or toxic. CCL is also prohibited from accepting biohazardous waste, household hazardous waste, radioactive materials, incinerator ash, sludge, automobile shredder waste, and liquid waste.
- d. Per the CUP, CCL is permitted to dispose of up to 12,000 tons of municipal solid waste per day at the Landfill. Under a Solid Waste Facility Permit issued on October 19, 2018, by the LEA with CalRecycle's concurrence, non-hazardous mixed organics material for composting shall not exceed 560 tons per day and any combination of non-hazardous waste, beneficial reuse material and composting green material shall not exceed 12,000 tons per day or 60,000 tons per week. The CUP permits disposal of a maximum of 2,800,000 tons of municipal solid waste per year through December 2024, at which time the Landfill's maximum annual capacity will reduce to 1,800,000 tons. The average daily tonnage of municipal solid waste disposed in the Landfill in 2021 was reported to be 6,412 tons.
- e. At the Landfill, CCL operates a landfill gas collection and control system that includes vertical and horizontal gas collection wells and associated piping and trenches, multiple collection headers and blowers for venting landfill gas, a landfill gas treatment system, a condensate/leachate collection and storage system and flares that combust landfill gas. South Coast AQMD has issued permits for CCL's operation pursuant to South Coast AQMD Rules 201, 203, 1150.1, and 3002, including permits for CCL's landfill gas collection system, landfill gas treatment system, landfill gas condensate/leachate collection and storage system, two (2) portable diesel engines driving tippers, nine (9) portable diesel engines driving fans, and the landfill gas flare systems. South Coast AQMD permits also require CCL to comply with the federal rules and regulations, including the National Emissions Standards for Hazardous Air Pollutants at 40 C.F.R. Part 63, Subpart AAAA, the New Source Performance Standards at 40 C.F.R. Part 60, Subpart XXX and the Clean Air Act Title V permitting program. The Title V permitting program is a comprehensive stationary source operating permit program that implements Title V of the federal Clean Air Act by issuance of operating permits pursuant to 40 C.F.R. Parts 70 and 71.

10. Reaction Event and Effects.

- a. In May 2022, conditions at the Landfill began deteriorating in an area approximately thirty (30) acres in size, located in the north-western portion of the Landfill (the "Reaction Area"). See Attachment A, Map of Landfill.

- b. Based on CalRecycle’s review of the Landfill data, the Landfill sustained the following conditions from around May 2022 through mid-October 2023:¹
- (1) Landfill cover integrity issues;
 - (2) Increased temperatures and pressures in the landfill gas control systems and waste mass;
 - (3) Oxygen intrusion above 5% by volume;
 - (4) Landfill gas temperatures over 170°F;
 - (5) Landfill subsurface temperatures over 195°F;
 - (6) Decreased methane production;
 - (7) Elevated carbon monoxide concentrations exceeding 1000 parts per million volume;
 - (8) Unusual landfill settlement;
 - (9) Damaged gas wells;
 - (10) Poor gas well performance in and around the Reaction Area; and
 - (11) The heating/smoldering event expanding in size and intensity.
- c. On October 16, 2023, CalRecycle concluded, “The conditions at the [L]andfill are causing additional gas pressure, noxious odors, elevated well and leachate temperatures, and damage to the gas extraction system at the [L]andfill.”²
- d. EPA also confirmed from its review of the Landfill data provided by CCL on January 26, 2024, in response to EPA’s December 28, 2023, request for information, that the Landfill has sustained the following conditions:
- (1) Landfill gas collection system well temperatures above 145°F at multiple wells, from January 2022 through December 2023, and likely ongoing; and
 - (2) Increased leachate production at the Site from 151,187 gallons per week in January 2022 to 1,014,532 gallons per week in December 2023.

¹ Letter from CalRecycle to LEA, dated October 16, 2023, regarding Review of the Odor Incident at Chiquita Canyon Landfill (19-AA-0052) (the “CalRecycle October 2023 Letter.”)

² CalRecycle October 2023 Letter at 17.

- e. During on-Site visits on November 2, 2023, November 8, 2023, January 9, 2024, and January 18, 2024, EPA observed the following ongoing conditions at the Landfill:
- (1) Sour odors throughout the Reaction Area;
 - (2) Settlement of the Landfill surface about twenty (20) to thirty (30) feet below the previous grade;
 - (3) Leachate flowing out of the base of the Landfill on the northwestern side of the Reaction Area;
 - (4) Leachate bubbling out of the surface of the Landfill on the northern base of the Landfill next to the perimeter road;
 - (5) Leachate seeping out of the northside of the Landfill at a different location;
 - (6) Repairs to a Landfill well system to prevent imminent failure of the well and pressurized leachate condensate and steam ejecting from the well during such repairs;
 - (7) Cover integrity issues creating areas of exposed trash and exceedances measured during surface emissions monitoring;
 - (8) Standing liquid, appearing dark and with small, discrete bubbling, ponding above the scrim on the French drain; and
 - (9) Landfill gas pockets, or ballooning, and gas bubbles occurring underneath and above the scrim, respectively.
- f. During on-Site monitoring on November 8, 2023, and January 9, 2024, EPA conducted surface emissions monitoring s under EPA Method 21, “Determination of Volatile Organic Compound Leaks” (2017), using hydrocarbon detection instruments to measure methane as a surrogate for hazardous air pollutants to evaluate compliance with the National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, § 63.1958, which requires operators of municipal solid waste landfills to operate a gas collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. The surface emissions monitoring detected exceedances of the limit of 500 parts per million of methane under 40 C.F.R. § 63.1958, both inside and outside the Reaction Area, including:

- (1) Surface emissions concentrations of methane in excess of 500 parts per million at thirteen (13) out of thirty (30) wells sampled in the Reaction Area; and
 - (2) Surface emissions concentrations of methane in excess of 500 parts per million at fifty (50) unique locations on the Landfill, both inside and outside the Reaction Area.
- g. As of January 17, 2024, the Reaction Area was located approximately 1,000 feet from the nearest resident.

11. Complaints, Violations and Endangerment Due to Noxious Odors.

- a. In the spring of 2023, CCL experienced a significant increase in the number of odor complaints it received in connection with the Landfill. In 2023, South Coast AQMD received almost 6,800 complaints of odors from the public, particularly members of the public located in the communities of Val Verde, Hasley Canyon, Hillcrest, Williams Ranch, North Bluffs, Hasley Hills and Live Oak, in California, with numerous complaints alleging CCL as the source.³ The complaints describe various odors but primarily describe landfill gas and other non-trash odors.
- b. A majority of the complaints were received from individuals reporting from the community of Val Verde, which lies northwest and immediately adjacent to the Landfill, and the community of Castaic Junction, which lies northeast of the Landfill.
- c. South Coast AQMD inspectors investigated the complaints – by verifying odors with complainants and tracing them back to CCL – and confirmed CCL as the source of the odors on numerous occasions. On May 18, 2023, South Coast AQMD issued a Notice of Violation (“NOV”) to CCL for public nuisance in violation of South Coast AQMD Rule 402 and California Health and Safety Code (CA H&S) Section 41700. Between April and December 31, 2023, South Coast AQMD issued 107 NOVs to CCL for public nuisance under South Coast AQMD’s Rule 402 and CA H&S Section 41700.
- d. CalRecycle also determined that odors were attributable to the reaction occurring at the Landfill. CalRecycle reported on October 16, 2023, that “the landfill gas generated in and around the reaction settlement area has exceeded the designed gas generation flow rate and caused increased emissions and odors.”⁴

³ These complaints appear in the Summary of Complaints Alleging Chiquita Landfill as Source from January 1, 2023, through December 31, 2023, prepared by South Coast AQMD (the “2023 Complaints Summary.”)

⁴ CalRecycle October 2023 Letter at 17.

- e. The complaints filed reflect that the public has suffered impacts due to the noxious odors, including reports of eye irritation, nosebleeds, tinnitus, nausea, migraines, vomiting, vertigo, respiratory symptoms, cardiac issues, and skin issues. Various members of the public reported that they are unable to have their children play outside in the yard, walk their pets, or exercise outdoors, due to odors from the Landfill. Noxious odors were reported by concerned parents, teachers, staff and students at schools as near as approximately 1.7 miles, and as far as approximately 5.0 miles, from the Landfill, including at Headstart Preschool in Val Verde, Playmakers Preschool in Castaic, Santa Clarita Valley International Elementary School in Castaic, Live Oak Elementary School in Castaic, Castaic Elementary School in Castaic, Castaic High School in Castaic, Rio Vista Elementary School in Canyon Country, West Ranch High School in Stevenson Ranch, and Valencia High School in Valencia.⁵ One parent in Castaic reported that it was “literally difficult to even walk to the car to take [the] kids to school.”⁶
- f. CCL maintains several air monitoring stations around the Landfill perimeter and within the nearest residential community. Pursuant to the CUP issued by the County of Los Angeles Department of Regional Planning, CCL’s monitoring stations continuously monitor for hydrogen sulfide (“H₂S”) and particulate matter (“PM”) concentrations. CCL’s H₂S monitors in the community showed the presence of H₂S in excess of 30 parts per billion from November 2022 through 2023.⁷
- g. Since mid-2023, CCL has also regularly collected grab samples and 24-hour samples for various compounds at the air monitoring sites in the community.⁸ Several of CCL’s 24-hour and grab samples showed above-background concentrations of benzene, exceeding 1 part per billion.⁹ One 24-hour sample in the community showed the presence of benzene in excess of 8 parts per billion.¹⁰
- h. On September 1, 2023, September 19, 2023, October 25, 2023, November 28,

⁵ See 2023 Complaints Summary.

⁶ Complaint was filed on September 15, 2023. See 2023 Complaints Summary.

⁷ Graph prepared by South Coast AQMD from Respondent’s sampling data from continuous air monitors in the community surrounding the Landfill, included as Petitioner’s Exhibit 29 to Proposed Findings and Decision for a Modified Stipulated Order for Abatement, In the Matter of South Coast Air Quality Management District vs. Chiquita Canyon, LLC, Case No. 6177-4, before the Hearing Board of the South Coast Air Quality Management District (“Proposed Modified AO.”)

⁸ Atmospheric Analysis & Consulting, Inc. report analyzing selected grab and 24-hour samples from the community surrounding the Landfill, sampled by Respondent, included as Petitioner’s Exhibit 30 to the Proposed Modified AO (“Community Grab and 24-hour Samples Lab Report.”)

⁹ See sampling data from September 5, 2023, October 10, 2023, October 17, 2023, November 7, 2023, November 21, 2023, and December 5, 2023, respectively, in the Community Grab and 24-hour Samples Lab Report.

¹⁰ See sampling data from November 7, 2023, in the Community Grab and 24-hour Samples Lab Report.

2023, and December 19, 2023, respectively, the LEA conducted inspections at the Landfill. The LEA inspector observed on each of these occasions that the methane gas concentrations at perimeter monitoring wells were above five percent (5%) by volume in air. The LEA issued violations to CCL for non-compliance with gas monitoring and control requirements under Title 27 of the California Code of Regulations (27 CCR), Section 20921(a).

- i. On September 7, 2023, the South Coast AQMD Hearing Board issued a Stipulated Abatement Order (the “Stipulated Abatement Order”) requiring, among other things, investigation and mitigation of odors, investigation of the Reaction Area, expansion of the landfill gas well and collection system, increased flaring, improvements to the cover of the Landfill, and a health study. Despite these efforts, noxious odors have continued to impact the communities surrounding the Landfill. South Coast AQMD has issued at least fifty-three (53) NOVs to CCL, based on the continuous noxious odors emanating from the Landfill since September 7, 2023.
- j. On January 17, 2024, the South Coast AQMD Hearing Board approved modifications to the Stipulated Abatement Order to address issues relating to the Landfill’s leachate collection system and other conditions resulting in increased emissions by, among other things, requiring expanded air monitoring and sampling in the surrounding community.¹¹ The South Coast AQMD AO states that the odor complaints received by the agency included “odor descriptions of both trash and landfill gas, but [South Coast AQMD] and [CCL] believe that all odors complained of related to landfill gas, leachate, and associated surface emissions rather than trash or the working face.”¹² South Coast AQMD asserted, “the ongoing subsurface reaction is the source of the odor complaints received from the public, and the root cause of an ongoing public nuisance.”¹³
- k. On February 7, 2024, Roux Associates, Inc. (“Roux”) issued a community air sampling and health risk report prepared on behalf of Los Angeles County for the investigation of outdoor air quality and the evaluation of potential health risks to residents of the communities surrounding the Landfill.¹⁴ From its independent review of existing continuous air monitoring data for the Landfill, Roux observed that ambient air levels for H₂S in the communities surrounding the Landfill periodically exceeded the California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment acute and chronic recommended

¹¹ Findings and Decision for a Modified Stipulated Order for Abatement, In The Matter of South Coast Air Quality Management District vs. Chiquita Canyon, LLC, Case No. 6177-4, Before the Hearing Board of the South Coast Air Quality Management District (“South Coast AQMD AO.”)

¹² South Coast AQMD AO at 4.

¹³ South Coast AQMD AO at 4.

¹⁴ Roux Associates, Inc., “Community Air Sampling and Health Screening Evaluation Report: Val Verde and Castaic Communities, Los Angeles County, California,” (February 7, 2024) (“Public Health Report.”)

limits for H₂S of 0.03 ppm and 0.007 ppm, respectively. Roux explained, “H₂S can be an irritant to the eyes, nose, or throat, and can impact the neurological and respiratory systems. [Agency for Toxic Substances and Disease Registry] notes the most common symptoms following exposure to odorants include headaches, nasal congestion, eye, nose and throat irritation, hoarseness/sore throat, cough, chest tightness, shortness of breath, wheezing, heart palpitations, nausea, drowsiness and mental depression.”¹⁵

12. Complaints, Violations and Endangerment Due to Leachate and Leachate Condensate.

- a. Landfill leachate is formed when rainwater or other liquid filters through or drains from wastes placed in a landfill. When this liquid comes in contact with buried wastes, it leaches, or draws out, chemicals or constituents from those wastes. Condensate is the liquid generated as a result of the gas collection and recovery process.
- b. On September 19, 2023, October 25, 2023, and November 28, 2023, respectively, the LEA conducted inspections at the Landfill. The inspector observed on each of these occasions that leachate was leaking through slopes and pooling around gas wells in the upper northwestern to western areas of the Landfill. In November 2023, the inspector also observed that leachate was flowing and pooling on top of the installed scrim cover located on the west-facing Reaction Area slopes. The LEA issued violations to CCL for non-compliance with leachate control requirements under 27 CCR § 20790.
- c. On October 3, 2023, the RWQCB conducted an inspection of the Landfill and observed “a leachate seep in the north-western portion of the Main Canyon of the Landfill that flowed from the edge of the Landfill to a concrete V-ditch. The V-ditch widens to a flat-bottomed ditch on its course to the stormwater debris basin at the front of the Landfill.”¹⁶
- d. On October 17, 2023, the LEA stated in a letter to CCL that the conditions observed at the Landfill “are serious issues and have likely caused the many violations cited by the [South Coast AQMD] investigations this year,” and that “the CalRecycle analysis presents compelling evidence that the CCL needs to act promptly to address the current conditions for the protection of public health and the environment.”¹⁷ The LEA cautioned, with respect to CCL’s landfill gas

¹⁵ Public Health Report at 2.

¹⁶ Letter from RWQCB to Respondent, dated November 22, 2023, regarding Notice of Violation of Waste Discharge Requirements – Chiquita Canyon Landfill, Castaic, California (File No. 67-020, Order No. R4-2018-0172, Geotracker Global ID. L10003464243) (“RWQCB November 2023 NOV.”)

¹⁷ Letter from the LEA to Respondent, dated October 17, 2023, regarding Chiquita Canyon Landfill (SWIS No. 19-AA-0052) CalRecycle Review of the Ongoing Order Incident at Chiquita Canyon Landfill (“LEA October 2023 Letter.”)

control, emission, odor, and leachate issues, “[i]f prompt steps are not taken, the condition is likely to worsen, and may threaten the integrity of the landfill, thereby compromising the landfill cover.”¹⁸ The LEA expected CCL to complete various corrective and mitigation actions, including sampling of the leachate for benzene and other volatile organic compounds, as “past incidents similar to Chiquita Canyon . . . have shown that heating event increases the level of [volatile organic compounds] in the leachate.”¹⁹

- e. On November 2, 2023, representatives from the Regulatory Agencies performed a joint inspection at the Landfill. The Regulatory Agencies observed multiple new leachate outbreaks, as well as stability issues with leachate-saturated slopes and waste. They also observed continuing issues with high temperatures, landfill gas collection, excessive leachate production, and unusual and large-scale settlement. A portion of the Reaction Area had settled as much as twenty-five (25) to thirty (30) feet since 2022. From July 2023 to September 2023, the Reaction Area had expanded in all directions, most notably to the north and west, to an approximate size of thirty (30) to thirty-five (35) acres.
- f. During the November 2, 2023, joint inspection by the Regulatory Agencies, the RWQCB observed that the leachate seep into the concrete V-ditch to a flat-bottomed ditch on its course to the stormwater debris basin at the front of the Landfill was continuing. The RWQCB reported that CCL was pumping leachate into tanker trucks for off-Site disposal. Further, on November 8, 2023, EPA and South Coast AQMD inspectors observed that uncontrolled leachate condensate was spewing out of gas extraction wellheads twelve (12) to eighteen (18) feet into the air, due to the increased temperatures and pressure within the Reaction Area.
- g. Based on the findings from the joint inspection on November 2, 2023, and the LEA inspection on November 28, 2023, the LEA issued a violation to CCL for deteriorated conditions in the Reaction Area and for non-compliance with preventive maintenance program requirements under 27 CCR § 20750.
- h. On November 21, 2023, the LEA issued a letter to CCL requiring CCL to address the ongoing and uncontrolled reactions at the Landfill.²⁰ The LEA determined that it was “unlikely that CCL’s current mitigation measures will be sufficient to control and contain the reaction, which is expanding toward other areas of the [L]andfill.”²¹ The letter requires, among other actions: the installation of temperature monitoring devices to determine the intensity, depth, and direction

¹⁸ LEA October 2023 Letter at 2.

¹⁹ LEA October 2023 Letter at 3.

²⁰ Letter from the LEA to Respondent, dated November 21, 2023, regarding Chiquita Canyon Landfill (SWIS No. 19-AA-0052) CalRecycle’s Review of Conditions at the Landfill Response Letter (“LEA November 2023 Letter.”)

²¹ LEA November 2023 Letter at 2.

of the reaction; the development of a plan and constructing a soil barrier between the reaction and operational areas; the placement and compacting of a minimum cover of 24 inches of 1×10^{-6} low permeability soil in and around the reaction settlement area and any well showing signs of reaction; the development of a written plan to document and track fissures, settlement, and tension cracks in the soil cover; the performance of a slope stability analysis of the western slope near the leachate outbreak; and the collection of temperature readings in and around the Reaction Area to meet the manufacturer's temperature design specifications to ensure the French drain installed by CCL does not fail due to the elevated temperature of the leachate.

- i. On November 22, 2023, the RWQCB issued a NOV to CCL, noting that CCL failed to continuously protect and maintain leachate and landfill-gas condensate containment systems to ensure their effectiveness and to prevent commingling of leachate and gas condensate with surface water run-on and run-off. The RWQCB observed that the "conditions in the area of the leachate seep at the Landfill are not adequate to prevent the commingling of leachate and gas condensate with surface water run-on and run-off during a rain event."²² The RWQCB also cited CCL for failing to report the leachate seepage to the RWQCB upon discovery.
- j. CCL acknowledged that leachate seepage occurred on the western slope of the Landfill from April through November 2023, and was present in levels that reached the stormwater channel on the western slope and intermittently on the northern slope of the Landfill.
- k. Benzene is an EPA Hazardous Waste (No. D018) with a Toxicity Characteristic Leaching Procedure ("TCLP") regulatory level of 0.5 mg/L.
- l. Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells, leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection. The United States Department of Health and Human Services has determined that benzene causes cancer in humans. Long-term exposure to high levels of benzene in the air can cause leukemia, cancer of the blood-forming organs.
- m. On December 12, 2023, DTSC and EPA performed an inspection of the Reaction Area and collected samples of the uncontrolled leachate condensate waste from the gas extraction wellheads.²³ The temperature of the leachate was as high as 180°F. There were TCLP exceedances for benzene in the samples, as high as 0.59

²² RWQCB November 2023 NOV at 2.

²³ Environmental Chemistry laboratory results from DTSC sampling data (DTSC Case #15921) from site visit on December 12, 2023 ("DTSC December Lab Report.")

mg/L and 0.91 mg/L.²⁴ CCL reported test results of the split samples of the leachate condensate provided to CCL from DTSC during the inspection with TCLP exceedances for benzene of 0.59 mg/L, 1.2 mg/L and 2.9 mg/L.²⁵

- n. CCL's test results from various samples contained evidence of TCLP exceedances for benzene in condensate samples taken as early as August 2023.²⁶
- o. CCL has been transporting leachate from the Landfill to multiple facilities for off-Site disposal, including Avalon Premium Tank Cleaning ("Avalon") and Patriot Environmental Services ("Patriot").
- p. On December 27, 2023, Avalon sampled the leachate from a tanker truck delivering leachate from the Landfill and found that the leachate had a TCLP exceedance for benzene of 0.538 mg/L.²⁷
- q. On January 25, 2024, CCL issued a letter to Avalon to inform it of "three recent laboratory tests on discrete samples of the leachate generated at the Chiquita Canyon Landfill, some of which may have been sent to [the] facility for treatment and subsequent disposal," which "three tests indicated somewhat elevated levels of [benzene]."²⁸ CCL reported that grabs samples taken from the location where the vacuum trucks connect to a set of tanks at the Landfill on November 30, 2023, December 6, 2023, and December 27, 2023, had benzene concentrations of 0.92 mg/L, 1.2 mg/L, and 0.538 mg/L, respectively. CCL estimated that there could have been as many as seventy-six (76) truck-loads of this contaminated liquid delivered to two facilities, including Avalon, over the course of numerous days.
- r. On January 26, 2024, CCL issued a letter to Patriot to inform it of "several leachate loads sent to [the] facility between January 23 and January 25, 2024, that may have contained somewhat elevated levels of benzene."²⁹ CCL reported that a grab sample taken from the location where the vacuum trucks connect to a set of tanks at the Landfill on January 23, 2024, had a benzene concentration of 0.65 mg/L. CCL advised that based on a review of its waste manifests, at least

²⁴ DTSC December Lab Report at 28.

²⁵ Weck Laboratories, Inc., Certificate of Analysis Final Reports for samples taken by Respondent on December 13, 2023.

²⁶ Weck Laboratories, Inc., Certificate of Analysis Final Reports for samples taken by Respondent on August 29, 2023, November 30, 2023 and December 6, 2023.

²⁷ Enviro – Chem, Inc. Laboratory Report, dated January 4, 2024, prepared for Avalon, analyzing samples from December 27, 2023.

²⁸ Letter from Respondent to Avalon, dated January 25, 2024, regarding Notification of Leachate Analytical Results from the Chiquita Canyon Landfill.

²⁹ Letter from Respondent to Patriot, dated January 26, 2024, regarding Notification of Leachate Analytical Results from the Chiquita Canyon Landfill.

eleven (11) truck-loads of this contaminated liquid had been sent to Patriot over the course of three (3) days.

- s. On February 15, 2024, DTSC issued violations to CCL related to CCL's leachate management and disposal including violations for failing to make a proper waste determination, disposing of hazardous waste at an unauthorized point, causing storage and treatment of hazardous waste at an unauthorized point, failing to use a hazardous waste manifest, and failing to minimize the possibility of release of hazardous waste or hazardous waste constituents.

13. Regulatory Agencies' Response and Issuance of this UAO.

- a. On November 30, 2023, a Multi-Agency Critical Action Team ("MCAT") was formed among the local, state, and federal regulatory agencies overseeing CCL for the purpose of coordinating regulatory expertise, resources and legal authorities to address the human health and environmental impacts caused by the deteriorating conditions at the Landfill. All members of the MCAT were notified of this UAO prior to issuance and were invited to share comments to, and recommendations for, its contents. This UAO reflects the technical expertise and subject-matter knowledge contributed by the MCAT through this engagement process.
- b. The actions required by this UAO, including financial assurances, may be necessary to protect human health or the environment by mitigating the noxious air emissions and properly handling, storing, treating and disposing of hazardous leachate waste resulting from the deteriorated conditions in Reaction Area within the Landfill. Such emissions and leachate emanating from the Landfill could cause injury, detriment, nuisance, annoyance or endanger the comfort, repose, health or safety of any persons or have a natural tendency to cause injury or damage to the physical environment.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

14. Based on the Findings of Fact set forth above, and an administrative record supporting this UAO, EPA has determined that:

- a. Under RCRA:
 - (1) Respondent is a "person" as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
 - (2) Contaminated soils, organic materials and other materials accepted for disposal at the Site are each discarded material, and therefore are each a "solid waste" as defined in Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

- (3) Leachate and/or leachate condensate emanating from the Landfill near or above the Reaction Area at the Site contains hazardous materials including, but not limited to, benzene, and therefore is a “hazardous waste” as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5).
- (4) Imminent and Substantial Endangerment Under RCRA. The past and present handling, storage, treatment and disposal of contaminated materials and leachate may present an imminent and substantial endangerment to human health or the environment within the meaning of Section 7003(a) of RCRA, 42 U.S.C. § 6973(a).
- (5) Respondent, as the operator of the Site, contributed and is contributing to the handling, storage, treatment, and disposal of solid and hazardous wastes from which air emissions and leachate waste streams are causing a potential endangerment.

b. Under CERCLA:

- (1) The Site is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- (2) Respondent is a “person” as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- (3) Respondent is a liability party under one or more provisions of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), including, but not limited to, the following:
 - i. CCL is the “owner(s)” and/or “operator(s)” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- (4) The leachate condensate, which tested to include elevated levels of benzene, as identified in the Findings of Fact above, includes “hazardous substances” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- (5) The conditions described in the Findings of Fact above constitute an actual and/or threatened “release” of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- (6) The conditions at the Site may constitute a threat to public health or welfare or the environment, based on the factors set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to,

the following:

- i. actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances. This factor is present at the Site due to the existence of leachate and leachate condensate emanating from the Landfill near or above the Reaction Area at the Site containing hazardous materials, including benzene with concentrations in excess of the TCLP threshold. There are several potential pathways for individuals on and off-Site to be exposed to hazardous substances, including, but not limited to: the migration of air emissions, potential contamination of the groundwater if the Reaction compromises the Landfill lining, and threats to human health caused by disposal of untreated hazardous waste leachate and/or leachate condensate at off-Site receiving facilities; and
 - ii. hazardous substances in soils largely at or near the surface, that may migrate. This factor is present at the Site due to the existence of leachate and leachate condensate emanating from the Landfill near or above the Reaction Area at the Site containing hazardous materials including, but not limited to, benzene with concentrations in excess of the TCLP threshold. The hazardous leachate or condensate may discharge via stormwater run-off into surface waters downstream and impair aquatic life and wildlife uses of the Santa Clara River. Leachate has been observed seeping into a concrete ditch on its course to the stormwater basin which ultimately discharges to the Santa Clara River. Hazardous substances may also migrate to and contaminate groundwater if the Reaction compromises the Landfill lining.
- (7) Imminent and Substantial Endangerment Under CERCLA. The conditions described in the Findings of Fact above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a). The actions required by this UAO are necessary to protect human health or the environment.

VII. ORDER

15. Based on the administrative record for the Site and Section V (Findings of Fact) and Section VI (Conclusions of Law and Determinations) set forth above, the following is hereby ordered: Respondent shall comply with all provisions of this UAO, including, but not limited to, any appendices to this UAO and all documents incorporated by reference

into this UAO.

16. Respondent shall finance and perform the Work in accordance with this UAO, plans, standards, specifications and schedules set forth in this UAO or developed by Respondent and approved by EPA pursuant to this UAO.

VIII. WORK TO BE PERFORMED

17. Selection of Contractors, Personnel. All Work performed under this UAO shall be under the direction and supervision of qualified personnel. Within thirty (30) days after the Effective Date, Respondent shall notify EPA in writing of the names, titles, addresses, telephone numbers, email addresses, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. If, after the commencement of the Work, Respondent retains additional contractors or subcontractors, Respondent shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least five (5) days prior to commencement of Work by such additional contractors or subcontractors. EPA retains the right, at any time, to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor or subcontractor, Respondent shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within five (5) days after EPA's disapproval. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.
18. Project Coordinator. Before, or within two (2) days of, the Effective Date of this UAO, Respondent shall designate a Project Coordinator who shall be responsible for administration of the Work required by this UAO. Respondent shall notify EPA in writing within three (3) days of the Effective Date of this UAO of the name, address, phone number, electronic mail address and qualifications of the Project Coordinator.
19. EPA will approve/disapprove of Respondent's Project Coordinator (original or replacement) based upon the person's qualifications and ability to effectively perform this role. The qualifications of the persons undertaking the Work for Respondent shall

be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. All persons under the direction and supervision of Respondent's Project Coordinator must possess all necessary professional licenses required by federal and state law.

20. EPA has designated the following individuals of the Regional Enforcement and Compliance Assurance Division, as its Project Coordinator and Alternate Project Coordinator (collectively, the "EPA Project Coordinators"). The EPA Project Coordinators shall be responsible for overseeing the implementation of this UAO. EPA will notify Respondent of a change of its designated EPA Project Coordinators. Communications between Respondent and EPA, and all documents concerning the activities performed pursuant to this UAO, shall be directed to the EPA Project Coordinators.

Tyler Holybee, Project Coordinator
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Mark Anthony Relon, Alternate Project Coordinator
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The EPA Project Coordinators shall be EPA's designated representatives for the Site. Unless otherwise provided in this UAO, all reports, correspondence, notices, or other submittals relating to or required under this UAO shall be in writing and shall be sent to the EPA Project Coordinators at the address specified in this Paragraph 20, unless EPA otherwise directs. Reports, correspondence, notices or other submittals shall be delivered by electronic mail. All correspondence shall include a reference to the case caption EPA Docket No. RCRA 7003-09-2024-0001 and CERCLA 106-09-2024-05.

21. Respondent shall undertake and complete all of the Work to the satisfaction of EPA, pursuant to RCRA § 7003, 42 U.S.C. § 6973 and CERCLA § 106, 42 U.S.C. § 9606. All of the Work performed under this UAO shall be under the direction and supervision of Respondent's Project Coordinator and shall be in accordance with the terms of this UAO.
22. Response Action. Respondent shall perform, at a minimum, all actions necessary to

implement the Work required in this UAO, and the approved Work Plan(s). The required actions to be implemented include, but are not limited to, the following:

- a. Upon the Effective Date, Respondent shall immediately store, transport leachate solid and/or hazardous waste only in accordance with RCRA, 42 U.S.C. Sections 6900, *et seq.*, and associated regulations. All hazardous waste shall be disposed of at a treatment, storage and disposal facility preapproved by EPA.
- b. Within thirty (30) days of the Effective Date, Respondent shall provide to EPA a master work plan ("Master Work Plan"), including an expeditious schedule to meet, the following objectives: (1) remedy and prevent off-Site impacts caused by odors, emissions, leachate or other waste streams; and (2) deploy measures to delineate, fully characterize, prevent the expansion of, contain, and reduce the smoldering or the subsurface reaction occurring at the Landfill. The Master Work Plan shall incorporate all ongoing and planned activities to meet environmental requirements and directives applicable to Respondent and the Landfill pursuant to local, state, or federal laws, regulations, permits, orders or agreements (each an "Environmental Obligation," and collectively, the "Environmental Obligations"), including, but not limited to, the requirements, directives and activities identified by the Regulatory Agencies to manage waste streams at the Site, to mitigate the migration of waste streams off-Site, and to mitigate the harm caused by the subsurface reaction or smoldering. In no event shall Respondent's obligations under the Master Work Plan be less stringent than Respondent's obligations under any Environmental Obligation, and in no event shall the provisions of the Master Work Plan conflict with the provisions of any Environmental Obligation.
- c. Without limiting the foregoing, the Master Work Plan shall incorporate the following:
 - (1) A "Leachate Management Plan" that includes the following criteria or components:
 - i. Standard operating procedures to identify leachate seeps and any necessary repairs or improvements to the leachate collection system;
 - ii. Process to adequately characterize leachate, condensate and all waste streams that are potentially hazardous;
 - iii. Process to collect all leachate and remove it from the Site on a daily basis or as often as necessary to reduce exposure of leachate to the atmosphere at the Landfill to the greatest extent feasible, and in any event so as to prevent standing leachate and the

- pooling or ponding of leachate exposed to the atmosphere throughout the facility;
- iv. Operating procedures to store leachate on Site in a manner that prevents leachate and leachate off-gas/VOC emissions/fumes exposure to the atmosphere, including operating procedures to route all collected gases to air emissions control equipment;
 - v. Operating procedures to transport waste streams to appropriate locations for disposal at a facility. All waste streams characterized as hazardous shall only be disposed of at a facility pre-approved by the EPA and permitted to treat, store and dispose of hazardous waste; and
 - vi. Operating procedures shall include obtaining any required permit(s) from the appropriate local, state, or federal agency for on-Site leachate management activities.
- (2) A "Soil Reaction Break/Barrier Plan" that includes the following criteria or components:
- i. Installation of temperature monitoring devices with a telemetry system to collect and record the temperature data necessary for evaluating the intensity, depth, speed and direction of the reaction;
 - ii. A set of criteria (e.g., what temperature thresholds at which temperature probes that border the Reaction Area) that would require installation of a soil reaction break between the reaction and operational areas of the Landfill;
 - iii. Specifications of the depth, width, material, and location of the containment trench (wall) based on temperature readings collected by the temperature probe network;
 - iv. Specifications of the volume of the waste to be excavated to install the soil reaction break between the reaction and operational areas of the Landfill;
 - v. Procedures for characterization and disposal of waste displaced by excavation;
 - vi. Procedure to cover the excavated area for the soil reaction break at the end of shifts;

- vii. Process to ensure that the soil reaction break is finished with 24 inches of 1×10^{-6} low permeability soil;
 - viii. Construction time estimates to complete the soil reaction break; and
 - ix. Provision for weekly updates for the soil reaction break construction until fully completed.
- (3) A “Cover Installation Plan” that includes the following criteria or components:
- i. Installation of a High-Density Polyethylene geomembrane with at least thirty (30) mil thickness (“Geomembrane Cover”) to address the inadequacy of the current cover in the reaction settlement area resulting from the ongoing reaction;
 - ii. System and procedure to ensure that landfill gas (“LFG”) does not accumulate under the Geomembrane Cover if the LFG collection and control system is inoperative due to power outage, such as through the use of a thermal oxidizer with its own power supply;
 - iii. System and procedure to prioritize LFG extraction from the Reaction Area over other areas of the Landfill in order to prevent the accumulation of LFG under the Geomembrane Cover should the LFG collection and control system lose vacuum;
 - iv. Timeline and provisions for weekly updates for the Geomembrane Cover installation until fully completed;
 - v. Process to document and track fissures, settlement, and tension cracks in the soil cover, including a photo log of the fissure location including the length and severity and corrective action taken and a weekly report to EPA by each Tuesday;
 - vi. Tracking and documentation of maintenance issues pertaining to the Geomembrane Cover once any portion of the Geomembrane Cover is installed. Notification to EPA of any structural issues that arise with the Geomembrane Cover; and
 - vii. Processes to ensure the maximum possible collection and control of LFG and associated odors from the Reaction Area and directly adjacent areas where Reaction Area LFG may migrate to, and minimization of fugitive emissions from the Geomembrane Cover and LFG collection components.

- (4) A “Slope Stability Analysis” work plan, subject to approval by the LEA, for the western slope in the Reaction Area.
- (5) Collection of temperature data in and around the Reaction Area to meet the manufacturer’s temperature design specifications/recommendations to ensure that the materials and parts used for mitigation activities do not fail after installation due to elevated temperature of the leachate, e.g., French drain.
- (6) An “Air Monitoring Plan” that includes the following criteria or components:
 - i. Installation and operation of air monitoring equipment on-Site and off-Site and provision of access to monitoring data so as to permit the Regulatory Agencies to identify transport of odors and other emissions from the Landfill, identify techniques that may be used to remedy potential odor impacts on the nearby community, and provide this data to inform the community in a timely manner;
 - ii. Enhancement of current ambient air monitoring program to include dimethyl sulfide and other constituents of landfill gas, including sampling at or near residential properties where recent odor complaints have been reported, sampling at on-Site locations where odors are most pronounced, and completion of a flux chamber study;
 - iii. Real-time continuous monitoring for particulate matter (“PM”) 2.5, PM10, and H2S recorded at monitoring stations at the fence-line of the Landfill (e.g., monitors MS-01 through MS-05) and in the community surrounding the Landfill (e.g., monitors MS-06 through MS-12);
 - iv. Real-time continuous monitoring for total reduced sulfur, and toxic air contaminants recorded by enhanced monitors at the fence-line of the Landfill (e.g., monitor MS-04);
 - v. Installation and implementation of instruments capable of measuring (i) hazardous substances, including Total Reduced Sulfides, Hydrogen Sulfide and all Toxic Air Contaminants listed in Table 1 of South Coast AQMD Rule 1150.1 and (ii) hourly concentrations of volatile organic compounds with Site surface emissions greater than (1) ton/year, including but not limited to, MS-02, MS-05, MS-06, MS-07, MS-10, MS-11 and MS-12; and

- vi. Requirement to make any continuous air monitoring data available to the public in real-time by posting such data on a dedicated webpage that shows a map of the location from which such data was obtained and that includes a graph of the measured pollutant(s) over time along with a depiction of any applicable health-based threshold or standard for such pollutant(s).

(7) An “Off-Site Migration Prevention Plan” to monitor and prevent off-Site migration of leachate or other contaminants or pollutants which may contaminate surface or subsurface water that includes the following criteria or components:

- i. Installation of wells in the alluvial aquifer downgradient of the Reaction Area and sediment basins, sufficient to monitor potential contamination of groundwater and interconnected surface waters, and to identify and track subsurface migration of contamination from the Landfill to groundwater or surface waters, including to the Santa Clara River;
- ii. Assessment and monitoring of the Landfill liner collection system integrity in the Reaction Area using appropriate indicators/surrogates; and
- iii. Additional monitoring for leachate-related constituents in stormwater runoff and maintenance of stormwater management systems, including but not limited to stormwater practices to prevent/minimize contact of leachate and stormwater, practices to prevent discharge of leachate contaminated stormwater to the unlined settlement basins to prevent groundwater contamination, and practices to prevent off-Site discharge of leachate contaminated stormwater.

23. The Work undertaken pursuant to this UAO shall be conducted in compliance with all applicable EPA guidance, policies and procedures, and with this UAO, and is subject to EPA approval. Pending approval of any Work Plan hereunder by EPA, Respondent shall continue, and shall not delay due to the pending approval required by this UAO, any ongoing and planned activities to meet environmental requirements and directives applicable to Respondent and the Landfill pursuant to any Environmental Obligation, including, but not limited to, the requirements, directives and activities identified by the Regulatory Agencies to manage waste streams at the Site, to mitigate the migration of waste stream off-Site, and to mitigate the harm caused by the subsurface reaction or smoldering, notwithstanding whether such work may also constitute the Work required by this UAO. Respondent shall take into consideration the progress and/or completion

of any such ongoing work when preparing its expeditious schedule for its Master Work Plan. Following EPA's approval or modification of the Master Work Plan, Respondent shall implement the Master Work Plan in accordance with the schedule and provisions approved by EPA.

24. Sampling and Analysis Plan. Within thirty (30) days after the Effective Date, Respondent shall submit a Sampling and Analysis Plan to EPA for review and approval. This plan shall consist of a Field Sampling Plan ("FSP") and a Quality Assurance Project Plan ("QAPP") that is consistent with the applicable regulations guidance documents, including "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" EPA 240/B-01/003 (March 2001, reissued May 2006), and "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3 EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA, the Sampling and Analysis Plan shall be incorporated into and become enforceable under this UAO.
25. Health and Safety Plan. Respondent shall develop a Health and Safety Plan and it shall be implemented during the Work performed under this UAO. This Health and Safety Plan shall be prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at <https://www.epa.gov/nscep>, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at <https://www.epaosc.org/HealthSafetyManual/manual-index.htm>. In addition, the Health and Safety Plan shall comply with all currently applicable Occupational Safety and Health Administration regulations found at 29 C.F.R. Part 1910. Respondent shall incorporate all changes to the Health and Safety Plan recommended by EPA.
26. Progress Reports. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this UAO on a monthly basis, or as otherwise requested by EPA, from the date of receipt of EPA's approval of the Master Work Plan until notice of termination is delivered pursuant to Section XXV (Termination and Satisfaction), unless otherwise directed in writing by the EPA Project Coordinators. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
27. Final Report. Within fifteen (15) days after completion of all Work required by this UAO, with the exception of any continuing obligations required by this UAO, including Respondent's obligations to comply with Sections XIV (Sampling, Access and Data Availability), XVI (Record Retention), XVIII (Reservation of Rights), and XXII

(Indemnification) of this UAO, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this UAO. EPA will review and approve the final report in accordance with Section XXV (Termination and Satisfaction). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the UAO, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal actions (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the certification required under Section XIII (Document Certification).

28. Off-Site Shipments.

- a. Respondent may ship hazardous substances, pollutants, and contaminants as defined under Sections 101(14) and (33) of CERCLA, 42 U.S.C. § 9601, from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Without limiting the foregoing, Respondent may ship hazardous waste as defined under Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), from the Site to an off-Site facility only if it complies with 40 C.F.R. § 262.20 of RCRA.
- b. Respondent may ship Waste Material from the Site to an out-of-State waste management facility only if, prior to any shipment, it provides written notice to the appropriate state environmental official in the receiving facility's state and the EPA. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent shall also notify the state environmental official referenced above and the EPA of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-State facility. Respondent shall provide the notice after the award of the contract for the removal action and before the Waste Material is shipped.
- c. Respondent may ship Investigation Derived Waste ("IDW") from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation

Derived Waste,” OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the Action Memorandum. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

IX. EPA APPROVAL OF DELIVERABLES

29. Deliverables required by this UAO shall be submitted to EPA for approval or modification. All deliverables must be delivered by electronic mail at EPA by the due date specified in this UAO or by schedules developed pursuant to this UAO. Deliverables shall be provided to the EPA Project Coordinators by electronic mail at:

Tyler Holybee and Mark Anthony Relon
Enforcement and Compliance and Compliance Assurance Division (ENF-2)
75 Hawthorne Street
San Francisco, California 94105
(415) 972-3765 and (415) 972-3252
Holybee.Tyler@epa.gov and Relon.Markanthony@epa.gov

Additionally, Respondent shall post all deliverables on a virtual platform and make them available to the Regulatory Agencies.

30. Respondent shall submit all deliverables in electronic form. Respondent shall provide data and corresponding information in editable Excel format, and not in image format. If Excel format is not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel. All other deliverables shall be submitted to EPA in the form specified by the EPA Project Coordinators.
31. After review of any deliverable that is required pursuant to this UAO, EPA will: (a) approve, in whole or in part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA will not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within five (5) days, except where EPA determines that to do so would cause serious disruption to the Work or where EPA has disapproved previous submission(s) due to material defects and EPA determines that the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
32. In the event of approval, approval on conditions, or modification by EPA, pursuant to this Section, Respondent shall proceed to take any action required by the deliverable, as approved or modified by EPA.
33. Resubmission of Deliverable. On receipt of a notice of disapproval, in whole or in part,

pursuant to this Section, Respondent shall, within five (5) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval.

34. Notwithstanding the receipt of a notice of disapproval pursuant to this Section, Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for penalties for non-compliance regarding the deficient portion of the deliverable.
35. In the event that a resubmitted deliverable, or portion thereof, is disapproved by EPA, EPA may again require Respondent to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Respondent shall implement any action as required in a deliverable that has been modified or developed by EPA.
36. If on resubmission, a deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such deliverable timely and adequately.
37. All deliverables required to be submitted to EPA under this UAO shall, on approval or modification by EPA, be incorporated into and be enforceable under this UAO. In the event that EPA approves or modifies a portion of a deliverable required to be submitted to EPA under this UAO, the approved or modified portion shall be enforceable under this UAO.

X. MODIFICATION OF THE WORK

38. If at any time during the implementation of the Work, Respondent identifies a need for a compliance date modification or revision of any Work Plan, Respondent shall submit a memorandum documenting the need for the modification or revision to the EPA Project Coordinators. EPA in its discretion will determine if the modification or revision is warranted and may provide written approval or disapproval. Any approved modified compliance date or Work Plan modification is incorporated by reference into this UAO.
39. Emergency Response. In the event of any action or occurrence during the performance of the Work that constitutes an emergency situation or may present an immediate threat to human health and the environment, Respondent shall immediately take all appropriate action to minimize such emergency or threat and shall immediately notify the National Response Center at (800) 300-2193 and EPA's Project Coordinators. Respondent shall take such immediate and appropriate actions in consultation with EPA's Project Coordinators. Respondent shall take these actions in accordance with all applicable provisions of this UAO, including the Health and Safety Plan. Respondent shall then submit to EPA written notification of such emergency or threat at the Site within

three (3) days of such discovery. Respondent shall thereafter submit to EPA for approval a plan to mitigate this threat. EPA will approve or modify this plan in accordance with the provisions of Section IX (EPA Approval of Deliverables) of this UAO, and Respondent shall implement this plan as approved or modified by EPA. In the case of an extreme emergency, Respondent may act as it deems appropriate, at its own risk, to protect human health or the environment.

40. Release Reporting. Upon the occurrence of any event during performance of the Work that Respondent is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. §9603, or Section 304 of the Emergency Planning and Community Right-To-Know Act (EPCRA), 42 U.S.C. § 11004, Respondent shall immediately orally notify the EPA Project Coordinators, or, in the event of their unavailability, the Regional Duty Officer at (800) 300-2193, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, the reporting required by CERCLA § 103 or EPCRA § 304.

XI. QUALITY ASSURANCE

41. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with “EPA Requirements for Quality Assurance Project Plans (QA/R5),” EPA/240/B-01/003 (March 2001, reissued May 2006), “Guidance for Quality Assurance Project Plans (QA/G-5),” EPA/240/R-02/009 (December 2002), and “Uniform Federal Policy for Quality Assurance Project Plans,” Parts 1-3, EPA/505/B-04/900A-900C (March 2005).
42. Respondent shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent pursuant to this order. Respondent shall ensure that all laboratories employed for analyses shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the EPA’s “EPA QA Field Activities Procedure,” CIO 2105-P-02.1 (9/23/2014) available at <https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures>. Respondent shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this UAO meet the competency requirements set forth in EPA’s “Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions” available at <https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements> and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, SW 846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (<https://www.epa.gov/hw-sw846>). However, upon approval by EPA, Respondent may use other appropriate analytical method(s), as long as

(i) quality assurance/quality control (“QA/QC”) criteria are contained in the method(s) and the method(s) are included in the QAPP, (ii) the analytical method(s) are at least as stringent as the methods listed above, and (iii) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this UAO have a documented Quality System that complies with ASQ/ANSI E4:2014 “Quality management systems for environmental information and technology programs – Requirements with guidance for use” (American Society for Quality, February 2014), and “EPA Requirements for Quality Management Plans (QA/R-2)” EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program, or laboratories that meet International Standardization Organization standards or other nationally recognized programs as meeting the Quality System requirements. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this UAO are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

43. EPA reserves the right to require a change in laboratories for reasons which may include, but shall not be limited to, QA/QC performance, conflict of interest, or confidential agency audit information. In the event EPA requires a laboratory change, Respondent shall propose two alternative laboratories within thirty (30) days. Once EPA approves of the laboratory change, Respondent shall ensure that laboratory service shall be made available within fifteen (15) days.

XII. ADMINISTRATIVE DOCUMENTATION

44. EPA retains the responsibility for the issuance of any decision documents related to the Site.
45. EPA will provide Respondent with copies of all decision documents for the Site.
46. Submission of Documentation. EPA will determine the contents of and maintain the administrative record file. The administrative record supporting this UAO and the Work to be performed shall be available for public review in EPA’s offices at 75 Hawthorne Street, San Francisco, California (94105). A copy of the administrative record will also be available for viewing at a local repository established by EPA.

XIII. DOCUMENT CERTIFICATION

47. Any report or other document submitted by Respondent pursuant to this UAO that makes recommendations as to whether or not further actions are necessary or makes any representation concerning Respondent’s compliance or noncompliance with any

requirement of this UAO shall be certified by a responsible corporate officer for Respondent. A responsible corporate officer means: a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision-making functions.

48. The certification required by Paragraph 47 above shall be in the following form:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____
Name: _____
Title: _____
Date: _____

XIV. SAMPLING, ACCESS AND DATA AVAILABILITY

49. All results of sampling, testing, modeling or other data generated (including raw data if requested) by Respondent, or on Respondent's behalf, during implementation of this UAO shall be validated by Respondent and submitted to EPA promptly upon receipt by Respondent or its agents of such results by posting such results at the Chiquita Canyon Landfill Task Force Update webpage. Respondent shall tabulate data chronologically by media. EPA will make available to Respondent data generated by EPA for the purposes of oversight of the Work unless it is exempt from disclosure by any federal or state law or regulation.
50. Upon request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA not less than seven (7) days in advance of any sample collection activity. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to Respondent split or duplicate samples of any samples it takes as part of EPA's oversight of Respondent's implementation of the Work.
51. Site Access. Pursuant to RCRA Section 3007(a), 42 U.S.C. § 6927(a) and CERCLA Section 104(e)(3), 42 U.S.C. § 9604(e)(3), Respondent shall provide access to the Site at reasonable times to EPA, EPA's contractors and oversight officials. Respondent shall use their best efforts to gain access to areas owned by or in the possession of someone

other than Respondent, as necessary to implement this UAO, as described in Paragraph 53. Such access shall be provided to EPA, its contractors and oversight officials. These individuals shall be permitted to move freely about the Site and appropriate off-Site areas in order to conduct actions that EPA determines to be necessary. EPA, its contractors and oversight officials shall notify Respondent of their presence on the Site by presenting their credentials.

52. Pursuant to this Section, any denial of access at reasonable times to any portion of the Site property where a request for access was made for the purposes of enforcing the requirements of RCRA, CERCLA or this UAO shall be construed as a violation of the terms of this UAO subject to the penalty provisions outlined in Section XVII (Penalties) of this UAO.
53. Access Agreements. Where action under this UAO is to be performed in areas owned by, or in possession of, someone other than Respondent, Respondent shall use best efforts to obtain all necessary access agreements within forty-five (45) days of approval of any Work Plan for which access is necessary or as otherwise specified, in writing, by the EPA Project Coordinators. Any such access agreement shall provide (i) for access by EPA and its representatives to move freely in order to conduct actions that EPA determines to be necessary and (ii) for such non-Respondent owner to refrain from using such property in any manner EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation, integrity, or protectiveness of the response action. The access agreement shall specify that Respondent is not EPA's representative with respect to any liabilities associated with activities to be performed. Respondent shall provide EPA's Project Coordinators with copies of any access agreements. Respondent shall immediately notify EPA if after using Respondent's best efforts it is unable to obtain such agreements within the time required. Best efforts as used in this Paragraph shall include, at a minimum, a certified letter from Respondent to the present owner of such property requesting access agreements to permit Respondent, EPA, and EPA's authorized representatives to enter such property, and the offer of payment of reasonable sums of money in consideration of granting access. Respondent shall, within ten (10) days of its receipt of a denial of access, submit in writing, a description of its efforts to obtain access. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake the Work on such property and Respondent shall reimburse EPA for all costs and attorney fees incurred by the United States in obtaining such access.
54. Respondent shall provide to EPA and the other Regulatory Agencies, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this UAO, including,

but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA and the other the Regulatory Agencies, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

55. Confidential Business Information. Respondent may assert a claim of business confidentiality covering part or all of any information submitted to EPA or any Regulatory Agency pursuant to the terms of this UAO under 40 C.F.R. § 2.203 in the manner described at 40 C.F.R. § 2.203(b) and substantiated with the information described at 40 C.F.R. § 2.204(e)(4). Information EPA determines is confidential will be given the protection specified in 40 C.F.R. Part 2. If no such claim or substantiation accompanies the information when it is submitted to EPA, it may be made available to the public or state or tribal officials by EPA without further notice to Respondent.
56. Privileged Documents. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, Respondent shall have the burden of demonstrating to EPA by clear and convincing evidence that such privilege exists. Respondent shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the author's name and title; (4) the name and title of each addressee and recipient; (5) a description of the contents; and (6) the privilege asserted by Respondent. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide to EPA or any Regulatory Agency in redacted form to mask the privileged or protected portion only. However, Respondent may make no claim of privilege, confidentiality or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this UAO.
57. Notwithstanding any provision of this UAO, all Regulatory Agencies retain all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XV. COMPLIANCE WITH OTHER LAWS

58. Respondent shall perform all actions required pursuant to this UAO in accordance with all applicable local, state, and federal laws and regulations, including, but not limited to, the laws and regulations underlying the Environmental Obligations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under

such laws and regulations in a timely manner so as not to delay the Work required by this UAO.

XVI. RECORD RETENTION

59. Respondent shall preserve all documents and information, including raw data, relating to the Work performed under this UAO, or relating to any solid waste or hazardous waste found at the Site, for five (5) years following the termination of the UAO in accordance with Section XXV (Termination and Satisfaction).
60. Respondent shall acquire and retain copies of all documents that relate to the Site that are in the possession of its employees, agents, accountants, contractors or attorneys.
61. Respondent shall make available to EPA all employees and persons, including contractors, who engage in activities under this UAO, and ensure their cooperation with EPA with respect to this UAO.
62. After the five (5) year retention period and ninety (90) days before any document or information is destroyed, Respondent shall notify EPA that such documents and information are available to EPA for inspection, and on request, shall provide the originals or copies (at no extra cost) of such documents and information to EPA. Notification shall be in writing and shall reference the effective date, caption, and docket number of this UAO, and shall be addressed to EPA's Enforcement and Compliance Assurance Division Director. In addition, Respondent shall provide documents and information retained under this Section at any time before expiration of the five (5)-year retention period at the written request of EPA.
63. All documents pertaining to this UAO shall be stored by Respondent in a centralized location at the Site, or an alternative approved by Respondent to promote easy access by EPA or its representatives.

XVII. PENALTIES

64. Civil Penalties. Any willful violation, or failure or refusal to comply with any provision of this UAO may subject Respondent to civil penalties up to the maximum amount authorized by law pursuant to Section 7003(b) of RCRA, 42 U.S.C. § 6973(b) and/or pursuant to Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1), as applicable. As of the date of issuance of this UAO, the statutory maximum amount under Section 7003(b) of RCRA, 42 U.S.C. § 6973(b), is eighteen thousand, one hundred and thirty-nine dollars (\$18,139.00) per violation per day and the statutory maximum amount under Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1), is sixty-nine thousand, seven hundred and thirty-three dollars (\$69,733) per violation per day. This maximum amount may increase in the future, as EPA amends its civil penalty amounts through rulemaking pursuant to the 1990 Federal Civil Penalties Inflation Adjustment Act (Public Law 101-410, codified at

28 U.S.C. § 2461), as amended by the 2015 Federal Civil Penalties Inflation Adjustment Act Improvements Act (Section 701 of Public Law 114-74)). The maximum amount to be applied to this violation will be set as the most recent maximum amount set forth in 40 C.F.R. Section 19.4 as of the date that the U.S. District Court assesses any such penalty. In the event of such willful violation, or failure or refusal to comply, EPA may unilaterally carry out the actions required by this UAO, pursuant to any applicable authorities, and may seek judicial enforcement of this UAO. In addition, nothing in this UAO shall limit EPA's authority under Section XXI (Cost Estimates and Financial Assurance). Respondent may also be subject to punitive damages in an amount up to three (3) times the amount of any cost incurred by the United States as a result of such failure to comply, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. §9607(c)(3).

XVIII. RESERVATION OF RIGHTS

65. Notwithstanding any other provisions of this UAO, the United States retains all of its authority to take, direct, or order any and all actions necessary to protect public health or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste or constituents of such wastes, on, at, or from the Site, including but not limited to the right to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.
66. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this UAO, including without limitation the assessment of penalties under Section 7003 of RCRA, 42 U.S.C. § 6973 and/or any claims under Sections 106 of and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607, as applicable.
67. This UAO shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, claims, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.
68. This UAO is not intended to be, nor shall it be construed to be, a permit. Compliance by Respondent with the terms of this UAO shall not relieve Respondent of its obligations to comply with RCRA, CERCLA or any other applicable local, state, tribal or federal laws and regulations.
69. Notwithstanding any other provision of this UAO, no action or decision by EPA pursuant to this UAO, including without limitation any action or decision by any authorized representative of EPA pursuant to this UAO, shall constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this UAO, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this UAO.

XIX. OTHER CLAIMS

70. By issuance of this UAO, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. Neither the United States nor EPA shall be deemed a party to any contract, agreement or other arrangement entered into by Respondent or its officers, directors, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this UAO.
71. Nothing in this UAO constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this UAO, for any liability such person may have under RCRA, CERCLA, other statutes, or common law, including but not limited to any claims of the United States under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
72. Nothing in this UAO shall be deemed to constitute preauthorization of a claim within the meaning of Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2), or 40 C.F.R. § 300.700(d).

XX. INSURANCE

73. Prior to commencing the on-Site Work under this UAO, Respondent shall secure, and shall maintain in force for the duration of this UAO and for two (2) years after the completion of all activities required by this UAO, commercial general liability with limits of liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured. Prior to commencement of the Work under this UAO, and annually thereafter on the anniversary of the Effective Date of this UAO, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the UAO, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondent pursuant in furtherance of this UAO. If Respondent demonstrates by evidence satisfactory to EPA that its contractors and subcontractors maintain insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by the contractors and subcontractors.
74. For the duration of this UAO, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and worker's compensation insurance for all persons performing the Work on behalf of Respondent, in furtherance of this UAO.

75. Prior to commencing the Work under this UAO, Respondent shall certify to EPA that its contractors and subcontractors have obtained the required insurance.

XXI. COST ESTIMATES AND FINANCIAL ASSURANCE

76. Cost Estimates. Within thirty (30) days after the Effective Date of this UAO, Respondent shall submit to EPA a detailed written initial estimate, in current dollars, of the cost of hiring a third party to perform the Work described in Section VIII (Work to be Performed) (the “Cost Estimate”). A third party is a party who: (i) is neither a parent nor a subsidiary of Respondent and (ii) does not share a common parent or subsidiary with Respondent. The initial Cost Estimate must account for the total costs of the work activities described in Section VIII (Work to be Performed) for the entire period of this UAO, including any necessary long-term costs, such as operation and maintenance costs, monitoring costs, and institutional controls. The Cost Estimate must not incorporate any salvage value that may be realized from the sale of wastes, facility structures or equipment, land or other assets associated with the Site.
77. Concurrent with the submission of any Work Plan(s) for additional work required under Section XXIV (Additional Work), Respondent shall submit revised detailed written estimate(s), in current dollars, of the cost of hiring a third party to perform the Work.
78. Respondent must annually adjust the Cost Estimate(s) for inflation within thirty (30) days after the close of Respondent’s fiscal year until the Work required by this UAO is completed. In addition, Respondent must adjust the Cost Estimate if EPA determines that any additional work is required, pursuant to Section XXIV (Additional Work), or if any other conditions increase the cost of the Work to be performed under this UAO.
79. Respondent shall submit each Cost Estimate to EPA for review, pursuant to Section IX (EPA Approval of Deliverables).
80. Assurances of Financial Responsibility for Completing the Work. In order to ensure completion of the Work, Respondent shall secure financial assurance pursuant to the environmental programs in Paragraph 4 of this UAO, initially in the amount of the Cost Estimate (the “Estimated Cost of the Work”), within 30 days of EPA approval of the Cost Estimate. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the “Financial Assurance - Orders” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>, and satisfactory to EPA.
- a. A trust fund: (1) established to ensure that funds will be available as and when needed for performance of the Work; (2) administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; and (3) governed by an agreement that

requires the trustee to make payments from the fund only when EPA Region IX advises the trustee in writing that: (i) payments are necessary to fulfill Respondent's obligations under the UAO; or (ii) funds held in trust are in excess of the funds that are necessary to complete the performance of Work in accordance with this UAO;

- b. A surety bond, issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury, guaranteeing payment or performance in accordance with Paragraph 84 (Access to Financial Assurance); or
 - c. An irrevocable letter of credit, issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency, guaranteeing payment in accordance with Paragraph 84 (Access to Financial Assurance).
81. Standby Trust. If Respondent seeks to establish financial assurance by using a surety bond or a letter of credit, Respondent shall at the same time establish and thereafter maintain a standby trust fund, which must meet the requirements specified in Paragraph 80.a, and into which payments from the other financial assurance mechanism can be deposited if EPA so requires in accordance with the terms and conditions of the financial assurance mechanism and Paragraph 84 (Access to Financial Assurance). An originally signed duplicate of the standby trust agreement must be submitted, with the other financial mechanism, to EPA in accordance with Paragraph 82. Until the standby trust fund is funded pursuant to Paragraph 84 (Access to Financial Assurance), neither payments into the standby trust fund nor annual valuations are required.
82. Within thirty (30) days of EPA Approval of the Cost Estimate, Respondent shall submit to EPA proposed financial assurance mechanisms in draft form in accordance with Paragraph 80 (Assurances of Financial Responsibility for Completing the Work) for EPA's review. Within sixty (60) days after the Effective Date, or thirty (30) days after EPA's approval of the form and substance of Respondent's financial assurance, whichever is later, Respondent shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to:

Marie Ortesi
Mission Support Division (MSD-4)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105
(415) 972-3710
Ortesi.Mari@epa.gov

With a copy to:

Laura Friedli
Office of Regional Counsel (ORC-3)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105
(415) 972-3325
Friedli.Laura@epa.gov

83. Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondent shall notify EPA of such information within thirty (30) days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondent of such determination. Respondent shall, within thirty (30) days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. Respondent shall follow the procedures of Paragraph 85 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this UAO.
84. Access to Financial Assurance.
- a. If EPA determines that Respondent (1) has ceased implementation of any portion of the Work, (2) is seriously or repeatedly deficient or late in its performance of the Work, or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both Respondent and the financial assurance provider regarding Respondent's failure to perform. Any Performance Failure Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondent a period of ten (10) days within which to remedy the circumstances giving rise to EPA's issuance of such notice. If, after expiration of the ten (10)-day period specified in this Paragraph, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice, then, in accordance with any applicable financial assurance mechanism, EPA may at any time thereafter direct the financial assurance provider to immediately: (i) deposit any funds assured pursuant to this Section into the standby trust fund;

or (ii) arrange for performance of the Work in accordance with this UAO.

- b. If EPA is notified by the provider of a financial assurance mechanism that it intends to cancel the mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least thirty (30) days prior to the cancellation date, EPA may, prior to cancellation, direct the financial assurance provider to deposit any funds guaranteed under such mechanism into the standby trust fund for use consistent with this Section.

85. Modification of Amount, Form, or Terms of Financial Assurance. Respondent may submit, on any anniversary of the Effective Date or following Respondent's request for, and EPA's approval of, another date, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to the EPA individual(s) referenced in Paragraph 82, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, a description of the proposed changes, if any, to the form or terms of the financial assurance, and any newly proposed financial assurance documentation in accordance with the requirements of Paragraphs 80 (Assurances of Financial Responsibility for Completing the Work) and 81 (Standby Trust). EPA will notify Respondent of its decision to approve or disapprove a requested reduction or change. Respondent may reduce the amount or change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Within thirty (30) days after receipt of EPA's approval of the requested modifications pursuant to this Paragraph, Respondent shall submit to the EPA individual(s) referenced in Paragraph 82 all executed and/or otherwise finalized documentation relating to the amended, reduced, or alternative financial assurance mechanism. Upon EPA's approval, the Estimated Cost of the Work shall be deemed to be the estimate of the cost of the remaining Work in the approved proposal.
86. Release, Cancellation, or Discontinuation of Financial Assurance. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) after receipt of documentation issued by EPA certifying completion of the Work; or (b) in accordance with EPA's written approval of such release, cancellation, or discontinuation.

XXII. INDEMNIFICATION

87. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, employees, and representatives from any and all claims or causes of action: (a) arising from, or on account of, acts or omissions of Respondent, Respondent's directors, officers, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this UAO; and (b) for damages or reimbursement arising from or on account of any contract,

agreement, or arrangement between Respondent and any persons for performance of the Work on or relating to the Site, including claims on account of construction delays.

XXIII. DELAY IN PERFORMANCE

88. Respondent shall notify EPA of any delay or anticipated delay in performing any requirement of this UAO. Such notification shall be made by telephone and email to the EPA Project Coordinators within forty-eight (48) hours after Respondent first knew or should have known that a delay might occur. Respondent shall adopt all reasonable measures to avoid or minimize any such delay. Within seven (7) days after notifying EPA by telephone and email, Respondent shall provide to EPA written notification fully describing the nature of the delay, the anticipated duration of the delay, any justification for the delay, all actions taken or to be taken to prevent or minimize the delay or the effect of the delay, a schedule for implementation of any measures to be taken to mitigate the effect of the delay, and any reason why Respondent should not be held strictly accountable for failing to comply with any relevant requirements of this UAO. Increased costs or expenses associated with implementation of the activities called for in this UAO is not a justification for any delay in performance.
89. Any delay in performance of this UAO that, in EPA's judgment, is not properly justified by Respondent under the terms of Paragraph 88 shall be considered a violation of this UAO. Any delay in performance of this UAO shall not affect Respondent's obligations to fully perform all obligations under the terms and conditions of this UAO.

XXIV. ADDITIONAL WORK

90. EPA may determine, or Respondent may propose, that certain tasks are necessary in addition to or in lieu of the tasks included in any EPA-approved Work Plan when such additional work is necessary to meet the objectives set forth in this UAO. EPA may determine that Respondent shall perform any additional work and EPA will specify, in writing, the basis for its determination that any additional work is necessary. Within five (5) days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with EPA to discuss any additional work. Respondent shall submit for EPA approval a Work Plan for any additional work, which Work Plan shall conform to the applicable requirements of Section VIII (Work to be Performed). Such Work Plan shall be submitted within fifteen (15) days of Respondent's receipt of EPA's determination that any additional work is necessary, or according to an alternative schedule established by EPA. On approval of a Work Plan for any additional work, Respondent shall implement the Work Plan for any additional work in accordance with the schedule and provisions contained therein. The Work Plan for any additional work shall be incorporated by reference into this UAO.

XXV. TERMINATION AND SATISFACTION

91. When EPA determines, after EPA’s review of the final report, that all Work has been fully performed in accordance with this UAO, with the exception of any continuing obligations required by this UAO, including Respondent’s obligations to comply with Sections XIV (Sampling, Access and Data Availability); XVI (Record Retention); XVIII (Reservation of Rights); and XXII (Indemnification) of this UAO, EPA will provide notice to Respondent. If EPA determines that any Work has not been completed in accordance with this UAO, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan, if appropriate, in order to correct such deficiencies in the Work within thirty (30) days after receipt of the EPA notice. The modified Work Plan shall include a schedule for correcting such deficiencies. Within five (5) days after receipt of written approval of the modified Work Plan, Respondent shall commence the implementation of the modified and approved Work Plan and, upon completion of the Work pursuant to the modified and approved Work Plan, shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this UAO.

XXVI. SEVERABILITY

92. If a court issues an order that invalidates any provision of this UAO or finds that Respondent has sufficient cause not to comply with one or more provisions of this UAO, Respondent shall remain bound to comply with all provisions of this UAO not invalidated or determined to be subject to a sufficient cause defense by the court’s order.

XXVII. EFFECTIVE DATE

93. This UAO is deemed effective within five (5) days of receipt (the “Effective Date”), unless (i) a conference is requested, or notice is given that written materials will be submitted in lieu of a conference as provided in Section XXVIII (Opportunity to Confer) and (ii) EPA and Respondent mutually agree to modify the Effective Date.

XXVIII. OPPORTUNITY TO CONFER

94. Within two (2) days of receipt of this UAO, Respondent may, in writing, (a) request a conference with EPA to discuss this UAO, including its applicability, the factual findings and the determinations upon which it is based, the appropriateness of any actions Respondent is ordered to take, or any other relevant and material issues or contentions that Respondent may have regarding this UAO, or (b) notify EPA that it intends to submit written comments or a statement of position in lieu of requesting a conference.
95. At any conference held pursuant to Respondent’s request, Respondent may appear in person, or be represented by an attorney or other representative. If Respondent desires such a conference, Respondent shall contact Laura Friedli, EPA Attorney Advisor, at (415) 972-3325.

96. The purpose and scope of any such conference held pursuant to this UAO shall be limited to issues involving the implementation of the Work required by this UAO and the extent to which Respondent intends to comply with this UAO. If such a conference is held, Respondent may present any evidence, arguments or comments regarding this UAO, its applicability, any factual determinations on which the UAO is based, the appropriateness of any action that Respondent is ordered to take, or any other relevant and material issue. Any such evidence, arguments or comments should be reduced to writing and submitted to EPA within three (3) days following the conference. This conference is not an evidentiary hearing and does not constitute a proceeding to challenge this UAO. It does not give Respondent a right to seek review of this UAO, or to seek resolution of potential liability, and no official record of the conference will be made. If no conference is requested, any such evidence, arguments or comments must be submitted in writing within three (3) days following the Effective Date of this UAO. Any such writing should be directed to Laura Friedli, at the following address:

Environmental Protection Agency
75 Hawthorne Street, ORC-3
San Francisco, CA 94105
(415) 972-3325
Friedli.Laura@epa.gov

97. Respondent is hereby placed on notice that EPA will take any action that may be necessary in the opinion of EPA for the protection of public health and welfare and the environment.

XXIX. NOTICE OF INTENT TO COMPLY

98. Respondent shall, on or before the Effective Date of this UAO, provide written notice to EPA of Respondent's irrevocable intent to comply with this UAO. Respondent's written notice shall describe, using facts that exist on or prior to the Effective Date, any "sufficient cause" defense asserted by Respondent under Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3). The absence of a response by EPA to the notice required by this Paragraph shall not be deemed to be acceptance of Respondent's assertions. Failure of Respondent to provide such notice of intent to comply within this time period shall, as of the Effective Date, be treated as a violation of this UAO by Respondent. Failure to respond, or failure to agree to comply with this UAO, shall be deemed a refusal to comply with this UAO.

It is ORDERED this 21 day February, 2024

By: /s/
Amy C. Miller-Bowen

Enforcement and Compliance Assurance Division Director
U.S. Environmental Protection Agency, Region 9

By: _____/s/_____
Michael Montgomery
Superfund and Emergency Management Division Director
U.S. Environmental Protection Agency, Region 9

Attachment A – Map of Landfill

