

**DRAFT REMOVAL ACTION WORKPLAN:
Extension of Covered Area
Chiquita Canyon Landfill**

**Prepared For:
Chiquita Canyon, LLC**

**Prepared By:
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
SOLANA BEACH, CALIFORNIA**

CEC Project 350-750

**OCTOBER 2025
UPDATED FEBRUARY 2026**



Civil & Environmental Consultants, Inc.

TABLE OF CONTENTS

| | | |
|------------|--|-----------|
| 1.0 | INTRODUCTION..... | 1 |
| 2.0 | SITE DESCRIPTION, BACKGROUND, RAW OBJECTIVES..... | 3 |
| 2.1 | Site Description..... | 3 |
| 2.2 | Site History and Current Status..... | 4 |
| 2.3 | Removal Action Workplan Goals and Objectives..... | 5 |
| 3.0 | DESIGN AND IMPLEMENTATION PLAN..... | 5 |
| 3.1 | Geomembrane Deployment Implementation Plan..... | 5 |
| 3.2 | Schedule..... | 10 |
| 3.3 | Construction Quality Assurance Plan..... | 11 |
| 3.4 | Required Permits..... | 11 |
| 3.5 | Operations and Maintenance Plan..... | 11 |
| 4.0 | OTHER RAW ELEMENTS..... | 11 |
| 4.1 | Equipment and Proposed Travel Routes..... | 12 |
| 4.2 | Sampling and Analysis Plan..... | 12 |
| 4.3 | Health and Safety Plan..... | 12 |
| 4.4 | Construction Air Monitoring Plan..... | 12 |

TABLES

| | |
|---------|--|
| Table 1 | Approximate Geomembrane Deployment Segments and Schedule |
| Table 2 | Extension Request Events and Procedures |

FIGURES

| | |
|----------|------------------------------|
| Figure 1 | Site Location Map |
| Figure 2 | Facility Plan |
| Figure 3 | Geomembrane Deployment Areas |

APPENDICES

- Appendix A Response to Comments Table
- Appendix B *Chiquita Canyon, LLC's Response to U.S. EPA's, DTSC's, and the LEA's Requirement to Expand the Geomembrane Cover*, dated August 15, 2025
- Appendix C *August 2025 Reaction Area Determination*, dated September 10, 2025
- Appendix D Tetra Tech Drawing, *Approximate Limits of Geosynthetic Cover*
- Appendix E Viaflex Absolute Barrier X60BCS Product Brochure
- Appendix F Email from ViaFlex Regarding Permeance of EVOH in Geomembranes
- Appendix G *Geomembrane Cover Operations and Maintenance Plan*, dated October 3, 2025
- Appendix H *Updated Design and Installation Schedule of the Gas Collection and Control System Well Field Expansion Plan*, dated October 3, 2025
- Appendix I Typical Sub-Geomembrane LFG Surface Collector
- Appendix J EVOH Geomembrane Specifications and CQA Requirements
- Appendix K Typical Construction Details
- Appendix L Area D01 CQA Report
- Appendix M EVOH/HDPE Geomembrane Order Documentation
- Appendix N *ETLF Operations Health and Safety Plan Version 2.3*
- Appendix O *CCL Heat Injury Prevention Plan*
- Appendix P *Chiquita Canyon Landfill Odor Mitigation Plan (Revision 1.01)*

1.0 INTRODUCTION

This Draft Removal Action Workplan (RAW) is a revision of the Draft RAW submitted on May 16, 2025, that was prepared on behalf of Chiquita Canyon, LLC (Chiquita) by Civil and Environmental Consultants, Inc. (CEC). The original draft was prepared in response to the Imminent and Substantial Endangerment Determination and Order (ISE Order) issued by the California Department of Toxic Substances Control (DTSC) on April 2, 2025, regarding the Elevated Temperature Landfill (ETLF) conditions occurring at the Chiquita Canyon Landfill (the Landfill or Site). Figure 1 is a site location map, and Figure 2 is a site plan of the facility.

This draft of the RAW has been prepared to address comments received in a letter dated August 4, 2025¹ from DTSC's Site Mitigation and Restoration Program (SMRP)², DTSC's Engineering and Special Projects Office (ESPO), DTSC's Health and Safety Program (HSP), and the California Department of Resources, Recycling, and Recovery (CalRecycle). As required by DTSC's August 4, 2025 letter, a table listing each comment and Chiquita's response is provided as Appendix A.

This RAW specifically addresses Section 5.1.2(a) of the ISE Order, *Extension of Covered Area*.

Approximately 44.6 acres of the northwest portion of the Landfill was covered with a 30-mil high density polyethylene (HDPE) geomembrane intended to improve landfill gas (LFG) collection, impede the inflow of oxygen and water into the waste mass, and improve control of odors and emissions. The 30-mil HDPE geomembrane cover was installed in accordance with the requirements of:

- The United States Environmental Protection Agency (U.S. EPA) Unilateral Administrative Order (UAO) issued on February 21, 2024;
- The South Coast Air Quality Management District (SCAQMD) Stipulated Order for Abatement (SOFA), dated November 13, 2024, and most recently modified on June 24, 2025; and
- The Los Angeles County Department of Public Health, Solid Waste Management Program, acting as the Local Enforcement Agency (LEA) Compliance Order issued on June 6, 2024.

In addition, approximately 1.3 acres of 40-mil HDPE geomembrane cover was installed over the disposal area of the Landfill in accordance with the west toe drain workplan.

As required by the ISE Order, Chiquita is in the process of installing additional geomembrane cover contiguous with the existing geomembrane cover. The initial, additional geomembrane deployment area is approximately 15 acres (Figure 3). The initial segments D01 and D02 have

¹ DTSC, *Review of Draft Removal Action Workplan, Imminent and Substantial Endangerment Determination and Order (Docket No. HAS-FY24/25-082), Task 7-Extension of Covered Area (Site Code 302132)*, August 4, 2025.

² The DTSC Site Mitigation and Restoration Program is the primary author of the letter. Comments by other DTSC departments and agencies are attached to their comment letter. In this RAW, DTSC will be used to refer to the overall regulatory team, including CalRecycle

been completed and D03 is in progress. An additional 85 acres will be installed as shown in Table 1 and Figure 3.

To comply with the ISE Order, the additional geomembrane is made from HDPE with an inner core of ethylene vinyl alcohol (EVOH) barrier resin. The geomembrane is at least 60-mils thick, tan in color, and textured on both sides. New geomembrane deployment areas will be adjacent to, and seamed continuously with, the existing 30-mil and 40-mil geomembrane cover. Surface collectors will be installed beneath the geomembrane to prevent accumulation of LFG at local high points. Toe drains will be installed at the toe of slopes to collect liquids, where applicable.

The initial deployment of the EVOH/HDPE geomembrane cover commenced on July 21, 2025.

The first 5-acre section, labeled D01 on Figure 3, was completed as of September 5, 2025, and the second 5-acre section, labeled D02, was completed as of September 30, 2025. Deployment of the geomembrane cover over the third 5-acre section, labeled D03, is in progress. The anticipated deployment schedule for areas shown in Figure 3 is listed on Table 1. This phased deployment facilitates movement of LFG control infrastructure and minimizes disruption to the Landfill's operations and implementation of mitigation measures. Procurement of the geomembrane requires a relatively long lead time. To date, Chiquita has ordered 70 acres of the EVOH/HDPE geomembrane and received 20 acres.

Given the importance of this effort and the fact that directives from U.S. EPA, the LEA, and SCAQMD overlapped with the cover expansion directives in the ISE Order, Chiquita implemented an expedited schedule, including moving forward with ordering approved geomembrane cover, prepping the landfill surface for cover installation, and installing the additional cover. The work of this Draft RAW mirrors requirements of the U.S. EPA to extend the geomembrane cover. On August 15, 2025, Chiquita submitted a letter³ to U.S. EPA (Appendix B) describing its plan to extend the geomembrane cover. Chiquita is executing its initial phase to add 15 acres of the EVOH/HDPE geomembrane cover. The installation of the initial 15 acres of the EVOH/HDPE geomembrane cover is expected to be completed in November 2025, before the typical Southern California area rain season starts, during which Chiquita will continue to perform repairs of the existing 30-mil geomembrane cover using the EVOH/HDPE 60-mil geomembrane. Once the rain season has concluded, Chiquita will resume its phased installation of additional panels of EVOH/HDPE geomembrane on or around April 2026, as detailed further in this workplan and in Table 1.

The Draft RAW has been prepared to meet the requirements presented in Sections 5.1.2(a) and 5.3 of the ISE Order and in accordance with California Health and Safety Code §78130 and §§79195-79240, and in response to DTSC's August 4, 2025 letter. Where applicable, sections in the Draft RAW identify the specific requirement listed in the ISE Order. Requested plans or reports have been attached as appendices, except where the document is publicly available online, in which case a link to the referenced document has been provided.

³ *Chiquita Canyon, LLC's Response to U.S. EPA's, DTSC's, and the LEA's Requirement to Expand the Geomembrane Cover*, dated August 15, 2025

This latest draft of the RAW has also been updated in response to comments received in a letter from U.S. EPA on January 13, 2026. As requested in that letter, Chiquita has updated the RAW to include a new deployment completion deadline of December 1, 2026, and an average geomembrane cover installation rate (subject to potential extension events). Additional details can be found in Table 1. Chiquita has also updated this draft to include the extension request events and procedures discussed with U.S. EPA. Chiquita may request extensions to the new deployment completion deadline on a biweekly basis due to delays associated with the extension events identified in Table 2. Each extension request shall provide event-specific reasoning for each delay, the duration(s) of the delay, and rescheduling following resumption of normal cover operations. Certain requests for extension require additional information, depending on the extension event. Additional details can be found in Table 2. U.S. EPA will respond to the extension requests within two weeks, and may seek additional information on a case-by-case basis.

2.0 SITE DESCRIPTION, BACKGROUND, RAW OBJECTIVES

This section provides a site description and a summary of the site history and Chiquita's existing geomembrane cover that was installed to improve odor control. It also addresses Section 5.3(a) of the ISE Order.

2.1 SITE DESCRIPTION

The Site is in northwestern Los Angeles County (Figure 1), directly east of the Ventura County line and approximately 3 miles west of the junction of Interstate 5 and State Route 126 (SR-126), which is also known as the Castaic Junction. The Site has the following physical address:

29201 Henry Mayo Drive
Castaic, California 91384

It occupies the following parcels:

- 3271-002-011;
- 3271-002-013;
- 3271-002-019;
- 3271-002-034;
- 3271-002-040; and
- 3271-002-041.

These parcels are zoned A-2-2 heavy agriculture, which allows for the construction and operation of solid waste landfills. The surrounding area consists of land zoned industrial, agricultural, and residential.

The Site lies within the United States Geological Survey (USGS) Val Verde, 7½-Minute Quadrangle. The geographic coordinates of the Site are latitude North 34° 25' 28" and longitude West 118° 38' 47".

The Site is permitted as a Class III Non-Hazardous Solid Waste landfill. As shown in Figure 2, the property is approximately 639 acres, with approximately 400 acres designated for waste disposal.

As shown in Figure 2, the constructed landfill consists of three modules (2B/3/4, 4, and 5), six cells (2 PH 2A, 2 PH 2B, 1/2A, 6, 8A and 8B), and six canyon fills (Primary Canyon, Canyon A, Canyon B, Canyon C Cell 1, Canyon C Cell 2 PH1, and Canyon D). The Primary Canyon (approximately 55 acres) operated from 1970 to 1987, and Canyon B (approximately 15 acres) operated from 1987 to 1988. The “Main Canyon” is comprised of Canyons A, C, and D, and Cells 1 through 6 and 8. The Primary Canyon and Canyon B are separate from the Main Canyon and cannot be impacted by the ETLF event (see next section).

2.2 SITE HISTORY AND CURRENT STATUS

The Site was first approved for waste disposal in 1967 and operated as a permitted Class III Non-Hazardous Solid Waste landfill beginning in 1972. It accepted a range of non-hazardous solid waste that includes municipal solid waste, green waste for composting or recycling, construction and demolition debris, and e-waste for recycling. Consistent with its permits and other typical Class III landfills, the Site is prohibited from accepting hazardous waste, biohazardous waste, household hazardous waste, radioactive materials, incinerator ash, sludge, automobile shredder waste (after 2017), and liquid waste. Chiquita began operating the Site in April 2009. On January 1, 2025, the Site ceased further acceptance of waste material.

The Landfill is currently exhibiting signs of an ETLF event, also referred to as a landfill reaction. An approximate outline of the area of the Landfill affected by the reaction, often referred to as the “data-driven reaction area” or the “reaction area”, as of August 2025, is shown in Appendix C.

Because of the ETLF conditions, the Site was directed to install additional geomembrane coverage under three compliance orders to limit migration of LFG from the site. U.S. EPA issued a UAO on February 21, 2024, requiring, in part, installation of a geomembrane cover under a *Master Work Plan* (Paragraph 22 (b) (3)). The South Coast Air Quality Management District (SCAQMD) issued a Stipulated Order for Abatement (SOFA), dated November 13, 2024, and most recently modified on June 24, 2025, which included Condition 31 specifically requiring a geomembrane cover and Condition 50 requiring implementation of the *Master Work Plan* developed under the UAO. The requirement to install the geomembrane cover was also addressed in Milestone 2A-1 of the LEA’s June 6, 2024 Compliance Order.

As required by the orders, a 30-mil HDPE geomembrane was installed in phases over the slopes and top deck in the northwest portion of the Site as described in the *Third Revised Cover Installation Plan*, prepared by Chiquita, and submitted to U.S. EPA on January 9, 2025, as Attachment D to the *Master Work Plan*.⁴ The approximate limits of the geomembrane cover installed as of January 3, 2025, is illustrated in a figure provided by Chiquita’s consultant, Tetra Tech, titled, *Approximate Limits of Geosynthetic Cover* (Appendix D). Approximately 44.6 acres

⁴ See Third Revised Cover Installation Plan to Address US EPA UAO, Section VIII, Paragraph 22(c)(3), Jan. 9, 2025, available at <https://s3.us-west-1.amazonaws.com/chiquitacanyon.com.bucket/2025/01/2025-01-09-FINAL-Third-Revised-UAO-Cover-Installation-Plan.pdf>.

of 30-mil HDPE geomembrane was installed over the northwest portion of the Landfill according to the orders and an additional approximately 1.3 acres of 40-mil HDPE geomembrane cover was installed over the disposal area of the Landfill in accordance with the west toe drain workplan. The completed work is also fully described in Chiquita's *Final Completion Report* submitted to the LEA on January 17, 2025.⁵

On April 2, 2025, DTSC issued the ISE Order which requires Chiquita to further extend the geomembrane coverage area.

2.3 REMOVAL ACTION WORKPLAN GOALS AND OBJECTIVES

This section addresses Section 5.3(a) of the ISE Order. The goal/objective of this removal action is to extend the area of the Landfill provided with a geomembrane cover. The primary purpose of the extension is to improve LFG collection and thereby minimize emissions and reduce odors. In addition, the geomembrane reduces infiltration into the landfill waste.

3.0 DESIGN AND IMPLEMENTATION PLAN

The following sections describe the proposed extension of the geomembrane, construction quality assurance, permitting requirements, and operations and maintenance considerations.

3.1 GEOMEMBRANE DEPLOYMENT IMPLEMENTATION PLAN

This section of the Draft RAW addresses Section 5.3(c) of the ISE Order.

As noted in Section 2.2, approximately 45.9 acres of HDPE geomembrane cover have been deployed over the surface of the Landfill as directed by the U.S. EPA. The majority of that installation was 30-mil thick HDPE geomembrane. A small portion of the installed HDPE geomembrane (approximately 1.3 acres) is 40-mil thick. As part of the concurrent work being performed under the ISE Order, approximately 10 acres of EVOH/HDPE geomembrane have been installed as of October 3, 2025.

The ISE Order directs geomembrane deployment over most of the Main Canyon portion of the Landfill as shown in Figure 3. The area shaded in blue on the figure is the area covered by the existing geomembrane. Chiquita's installation of the additional EVOH/HDPE geomembrane will proceed in a phased approach, which is critical for ongoing management of the ETLF event. In order to install a section of cover, all LFG extraction wells in that section must be taken offline for approximately two weeks. This means that the off-line wells will not extract gas during those two weeks. In addition, during that time period, the pumps are also taken offline. Consequently, no liquid extraction occurs in the off-line area either. Previous installation efforts have shown that even temporary cessation of gas and liquid extraction has an immediate and measurable impact. Staged installation is an essential mitigation effort to minimize the extent and duration of those impacts. This is also a factor in limiting the number of segments being covered at any given time.

⁵ See Final Completion Report of Milestone 2A-a (Formerly Mitigation Measure #2A), Chiquita Canyon Landfill, Jan. 17, 2025, available at <https://s3.us-west-1.amazonaws.com/chiquitacanyon.com.bucket/2025%2F01%2F2025-01-17-Compliance-Order-Milestones-2A-1-Completion-Report.pdf>.

In addition to the congestion and limited working area, having multiple segments off-line would have the same practical impact as making the segments larger with respect to ongoing gas and liquid control efforts.

To that end, Chiquita proposes to install the additional geomembrane cover in approximately five-acre segments. The area shaded in darker green (approximately 15 acres) in Figure 3 is Chiquita's proposed initial deployment of the EVOH/HDPE geomembrane (segments D01-D03). D01 and D02 have been completed, D03 is in progress. Chiquita expects to finish this effort before the typical rainy season begins in November 2025.⁶ During the rainy season, limited installation activities can occur. As noted before, before installation of additional cover, the area to be covered requires preparation including grading. If a rainstorm occurs during this process, much of the prep work will need to be redone. Proceeding with this work would have a high risk of lengthening the time during which wells are offline. Instead, to continue making progress during the rainy season, CCL proposes to conduct repairs on approximately 16.4 acres of the existing 30-mil HDPE geomembrane using the new 60-mil EVOH/HDPE geomembrane. Because the geomembrane repair work does not require the same grading as initial installation, the repair work is less susceptible to weather disruptions. This repair work will focus on portions of the existing cover where odors may still be present, (Appendix B).

Following the rainy season and completion of the repairs outlined above, Chiquita would then proceed with installing the EVOH/HDPE geomembrane cover. The area shaded in lighter green is the remainder of the expansion area divided into five-acre segments. Other segments will receive geomembrane in accordance with the approximate schedule presented in Table 1. Some flexibility in the work plan and timing is critical in order to allow for adjustments accounting for evolving onsite conditions.

The area shaded in purple in Figure 3 is the data-driven reaction area, as determined by the Reaction Committee on September 10, 2025, based on August 2025 data.⁷

Five-acre geomembrane deployment segments provide a practical working area. The quantity of geomembrane required for the deployment is large enough to be effective in controlling emissions but small enough to reduce procurement issues as well as limiting the size of impacts to continued gas collection and control system (GCCS) operation and Chiquita's implementation of mitigation measures.

⁶ Note that Chiquita also intends to complete by November 2025 installation and operation of the additional five TMPs (TPs 36-40) required under the LEA's May 1, 2025 Compliance Order. These TMPs have been drilled but the thermocouples and additional equipment must be installed prior to commencing operation. As directed by the LEA and consistent with communications with U.S. EPA, Chiquita is also prioritizing installation of additional soil vapor extraction (SVE) wells, pursuant to the Revised Remediation Plan prepared and submitted to the LEA in accordance with Milestone 4.4 of the LEA's June 6, 2024 Compliance Order. Chiquita then intends to begin installation of TP-22 and TP-23.

⁷ The Reaction Committee's monthly determinations are submitted to South Coast AQMD and posted on Chiquita's Odor Mitigation website. As an example, see the Reaction Committee's Monthly Reaction Committee Determination on Reaction Area Boundary, dated Sep. 10, 2025, available at https://s3.us-west-1.amazonaws.com/chiquitacanyon.com.bucket/2025/09/2025-09-10-Reaction-Committee-Determination-on-Reaction-Area_Final.pdf.

DTSC identified the following characteristics that the proposed geomembrane should possess:

- Accommodate landfill settlement/subsidence;
- Methane permeance less than 2.5×10^{-13} meters per second (m/s) per ASTM D1434;
- Durability to resist foot traffic wear, UV radiation, inclement weather, and motorized vehicles (if applicable);
- Properties to resist site-specific conditions including elevated landfill temperatures, settlement, and harmful gas/odor emissions; and
- Be no less than 40-mils thick.

The ISE Order also stipulates that the geomembrane be manufactured from materials consistent with the *Stark Memo* (Exhibit 6 of the ISE Order). That memo presented the following recommendations regarding the geomembrane:

- Manufactured as a composite material with an EVOH membrane sandwiched between layers of HDPE;
- Use a tan or green color;
- Underlay the geomembrane with a non-woven geotextile at least 6 ounces per square yard (oz/sy) unit weight;
- Continuously seamed and continuously tied into the existing 30-mil geomembrane;
- Possess a lifespan of at least 10 years;
- Textured on both sides;
- Withstand temperatures of at least 180° Fahrenheit; and
- Methane permeance of less than 2.5×10^{-13} m/s.

CEC contacted the following manufacturers to identify potentially suitable products:

- AGRU America;
- Viaflex;
- Western Environmental Liner;
- IWT Cargo-Guard;
- Earthshield Geosynthetics; and
- Layfield Group.

Only one of these manufacturers, Viaflex, had a product specifically incorporating the internal EVOH layer. None of the other manufacturers had a suitable product. The Layfield Group, for example, stated that their Enviro Liner 6060 geomembrane is a low-linear density polyethylene (LLDPE) and HDPE hybrid that would meet the performance standard, but they had concerns with seaming LLDPE geomembrane to Chiquita's existing HDPE geomembrane.

To meet the geomembrane requirements presented in the ISE Order, Chiquita is using the approved Absolute Barrier X60BCS produced by Viaflex (generically referred to as EVOH/HDPE in this Draft RAW). The manufacturer's product data sheet is provided in Appendix E. The membrane is co-extruded and textured on both sides. The exterior is comprised of HDPE and the inner core consists of an EVOH barrier resin. The entire geomembrane has a minimum thickness of 60-mils. The approved material color for this project is tan.

As noted by DTSC in its August 4, 2025 letter, there is some apparent inconsistency in the literature provided by Viaflex with respect to permeance. Some of the literature refers to testing done on EVOH sandwiched between layers of HDPE, while some of the literature refers to testing of EVOH sandwiched between layers of Linear Low-Density Polyethylene (LLDPE). Viaflex has informed Chiquita that the material factor with respect to permeance is the presence of the EVOH resin. Whether the outer material is HDPE or LLDPE has little, if any, impact on the liner's performance in this regard. Viaflex has provided an email to this effect which is found in Appendix F. It is our understanding that Viaflex has had similar discussions with DTSC.

HDPE, in general, is a material that meets the requested properties listed by DTSC. The X60BCS with the EVOH inner core provides the desired methane permeance and heat resistance. Landfill settlement typically reduces strain on the geosynthetic components of a cover system. It is possible, however, that within the ETLF area the landfill could experience differential settlements that could induce large strains on the geosynthetic materials. To accommodate potentially large settlements, Chiquita has implemented an approved *Operations and Maintenance Plan* (see Section 3.4, below and Appendix G) to identify conditions where the existing geomembrane is distressed and to promptly repair as needed. Chiquita has revised this operations and maintenance plan to address DTSC's comments received on August 4, 2025. Chiquita will implement this revised plan with respect to the additional approved EVOH/HDPE geomembrane installed in accordance with this Draft RAW.

Geomembrane will generally be installed as described in the *Third Revised Cover Installation Plan*, prepared by Chiquita, and submitted to U.S. EPA on January 9, 2025, as Attachment D to the *Master Work Plan*, and as further described herein.⁸ The boundaries of the deployment segments will be staked in the field by a surveyor and adjusted as needed by operations personnel to accommodate existing features (e.g., access roads) and infrastructure (e.g., LFG headers). The as-built location of the anchor trench for the existing geomembrane will also be identified in the field.

Preparation of the deployment area will include:

- Clear and grub/prepare the work area, including removing the green waste and vegetation;
- Prepare the subgrade to receive the 60-mil EVOH/HDPE geomembrane;
- Regrade existing benches and slopes (as needed) to ensure proper drainage;
- Install vertical LFG collectors per the *Updated Design and Installation Schedule of the Gas Collection and Control System Well Field Expansion Plan* (Appendix H). This plan was revised on October 3, 2025, to reflect changes resulting from this draft RAW;
- Install surface LFG collectors to ensure proper distribution of vacuum to the underside of the geomembrane. This project will use the same surface collector design as that used for the existing geomembrane. The design is illustrated in Appendix I. Collector positions will be located in the field and spaced no greater than 100 feet apart. Note that the gravel shown on the bench roads is part of the collector and is not part of the access road. All

⁸ See Third Revised Cover Installation Plan to Address US EPA UAO, Section VIII, Paragraph 22(c)(3), Jan. 9, 2025, available at <https://s3.us-west-1.amazonaws.com/chiquitacanyon.com.bucket/2025/01/2025-01-09-FINAL-Third-Revised-UAO-Cover-Installation-Plan.pdf>.

access road gravel is installed over the geomembrane with an underlying geotextile to protect against punctures and abrasion;

- Toe drains will be installed for segments where geomembrane is installed on slopes. The toe drain will be located at the toe of the slope under the geomembrane and inside of the anchor trench. Temporary sumps will be located at the low end of each toe drain and connected to the LFG condensate system (the initial deployment area will not require any toe drains); and
- Disconnect and temporarily remove LFG headers and laterals in the deployment area.

Geomembrane installation will include:

- Geomembrane pipe boots around vertical collectors;
- Continuous seaming between the existing geomembrane and the new geomembrane;
- Placement of geotextile and gravel access roads where needed (locations will be determined in the field by operations personnel);
- Placement of sandbag ballast in other areas to prevent geomembrane uplift by wind;
- Re-installation of LFG headers and laterals over the geomembrane;

In addition to the information provided in the *Third Revised Cover Installation Plan* and described herein and the enclosed appendices, Chiquita uses the experience and knowledge of selected contractors to ensure that construction is done in a workman-like manner consistent with the standard of practice in the industry and applicable regulations. Appendix J contains the specifications and CQA requirements used for installation of the geosynthetics including the Viaflex X60BCS (EVOH/HDPE) geomembrane. Appendix K presents typical cross-sections and details that are used by the contractors as guides, as further described below. Chiquita relied on experienced construction crews to use, and, where necessary adapt these guidelines to the specific conditions found in the field.

The typical road cross-section (Appendix K) shows the general configuration of geotextile and gravel placed over the textured geomembrane and is applicable to this cover extension. Many of the access roads at the Landfill are placed over the bench roads built into the fill. The remaining access roads are built across the relatively flat surfaces of the landfill deck. Access roads are not built across open steep slopes. However, geotextile or geocomposite is used between the geomembrane and gravel to protect against punctures. It is Chiquita's experience that the textured geomembrane provides an adequate friction coefficient for the access roads at the Landfill. The dynamic condition of the landfill surface can quickly render stability calculations obsolete. Conditions at the Landfill are monitored daily, and adverse conditions promptly addressed.

The typical pipe-road crossing detail (Appendix K) shows the general approach field crews take to install a road over piping such as LFG headers. This typical detail applies to this action and is field fit to accommodate specific conditions and available materials for this action.

The typical joint trench/electrical trench cross-section illustrates the general construction approach for distributing electrical power at the Landfill. It is field fit to accommodate specific conditions and materials. Electrical power is routed around the site as needed in dedicated conduits or overhead lines in accordance with the California Electrical Code.

The typical anchor trench detail is used to secure the end of the geomembrane. The detail is adjusted as needed to fit field conditions. The techniques used for securing against uplift are also determined in the field. The access road acts as an anchor for the geomembrane. Between the typical anchor trenches and the access roads, the geomembrane is secured from uplift by tethered sand bags, in accordance with standard industry practice.

Chiquita understands permanent or semi-permanent structures with respect to the Landfill to mean thermal oxidizers, treatment systems, or the like. Appendix K presents a list of the permanent or semi-permanent structures in the geomembrane coverage area at the Landfill. However, these structures are supported on skids or steel plates that are placed directly on the landfill surface. They are moved to allow placement of the geomembrane system. The subgrade is leveled and compacted prior to placement of the geomembrane, which is further protected by a non-woven geotextile placed between the skid or plate and the geomembrane.

The LFG collection headers and laterals are typically placed directly on the geomembrane, or over an HDPE rubsheet welded to the geomembrane. There are no dedicated pipe support structures placed over the geomembrane that would impose a point load, and consequently there are no supporting calculations. Chiquita uses sandbags in areas where a pipe is either supported to ensure proper drainage or lateral support is required,

As a general safety measure, Chiquita provides signs at the Landfill to direct traffic, notify of hazards, note safety requirements (e.g., PPE requirements), and identify key areas of the Site, consistent with normal operating procedures.

A hydrology analysis is being prepared that evaluates the effect of extending the geomembrane over the landfill surface which increases the amount of impervious surface area and will increase peak flow and total run-off volume. The geomembrane extension project includes deployment of typical stormwater management best practices. The hydrology analysis is in progress and will be submitted in the next update to the RAW. As noted above, it is understood that increasing the impervious area of the landfill surface will increase peak flows. Preliminary assessment of the site hydrology indicates that the existing detention basins are adequate to attenuate those peak flows and that the existing stormwater management system will be able to manage the increased flows without modification. Currently, Chiquita does not anticipate the need to modify the stormwater management system or acquire additional stormwater permits.

Like the final completion report submitted for the existing geomembrane cover, Chiquita will document construction in a completion report that includes surveyed limits of the cover and Construction Quality Assurance (CQA) data (see next section). The CQA documentation for segment D01 is found in Appendix L. CQA documentation for D02 is being prepared and will be submitted under separate cover when completed.

3.2 SCHEDULE

The nominal schedule for this work is presented in Table 1. This schedule is conservative but does not account for delays associated with weather or unforeseen conditions. Adjustments to the delineated deployment areas and the order of construction will be made, if necessary, to ensure safe work conditions.

The original schedule assumed DTSC's approval of the RAW would be received no later than June 16, 2025. Given the urgency of the work, and at the urging of other regulatory agencies, Chiquita elected to proceed with the work in parallel with the preparation, submittal, and approval of this Draft RAW.

3.3 CONSTRUCTION QUALITY ASSURANCE PLAN

This section of the RAW addresses Section 5.3(o) of the ISE Order.

Construction quality assurance (CQA) will be performed in accordance with the Site's standard operating procedures and typical industry practices. Fill placed to regrade benches and for preparation of the subgrade will be compacted to at least 90 percent of the relative maximum density per ASTM D1557. Specifications for the geomembrane (including manufacturer's specifications for the X60BCS product) and associated CQA requirements are provided in Appendix J. Pressure testing of carrier piping will be performed in accordance with ASTM F2164 or ASTM F2786, and a final completion report will be submitted.

There have been 72 rolls (20 acres) of the X60BCS material delivered to the site (Appendix M). An additional 180 rolls (50 acres) are on order with Viaflex.

CQA documentation of the geomembrane installation in segment D01 is provided as an example in Appendix L.

3.4 REQUIRED PERMITS

This section of the RAW addresses Section 5.3(l) of the ISE Order.

At this time, it is believed that the actions required to implement this RAW are consistent with the current operating permits for the Site, which include

- Conditional Use Permit CUP 2004-00042-(5);
- Solid Waste Facilities Permit No. 19-AA-052;
- Waste Discharge Requirements Order No. 98-086; and
- SCAQMD Permit to Operate G43917

3.5 OPERATIONS AND MAINTENANCE PLAN

This section of the RAW addresses Section 5.3(m) of the ISE Order.

Operations and maintenance for the existing geomembrane cover is described in the *Operations and Maintenance Plan*, submitted to the LEA on May 9, 2025, and revised on October 3, 2025, to incorporate the 60-mil EVOH/HDPE geomembrane (Appendix G), and incorporates by reference the *Revised Geomembrane Cover Monitoring and Maintenance Plan, Chiquita Canyon Landfill (Facility ID 119219), Castaic, California*, attached as an appendix to Chiquita's *Third Revised Cover Installation Plan*.

4.0 OTHER RAW ELEMENTS

The following sections provide additional information requested by DTSC in the ISE Order.

4.1 EQUIPMENT AND PROPOSED TRAVEL ROUTES

This section of the RAW addresses Section 5.3(h) and (j) of the ISE Order.

The untreated leachate is considered contaminated material for purposes of this RAW. No leachate is expected to be handled or otherwise managed as part of the work performed under this RAW.

4.2 SAMPLING AND ANALYSIS PLAN

This section of the RAW addresses Section 5.3(d) and (i) of the ISE Order.

Installation of the geomembrane does not include excavation of impacted soils or waste. Since there is no excavation of impacted soils or waste, and there is no handling of leachate or condensate as part of the geomembrane installation, there is no need for a Sampling and Analysis Plan for this Draft RAW.

4.3 HEALTH AND SAFETY PLAN

This section of the RAW addresses Section 5.3(e) and (k) of the ISE Order.

The Site's *ETLF Operations Health and Safety Plan* has been revised in response to DTSC's August 4, 2025 comments and is provided in Appendix N.

A copy of the Site's Heat Illness Prevention Program is provided as Appendix O.

4.4 CONSTRUCTION AIR MONITORING PLAN

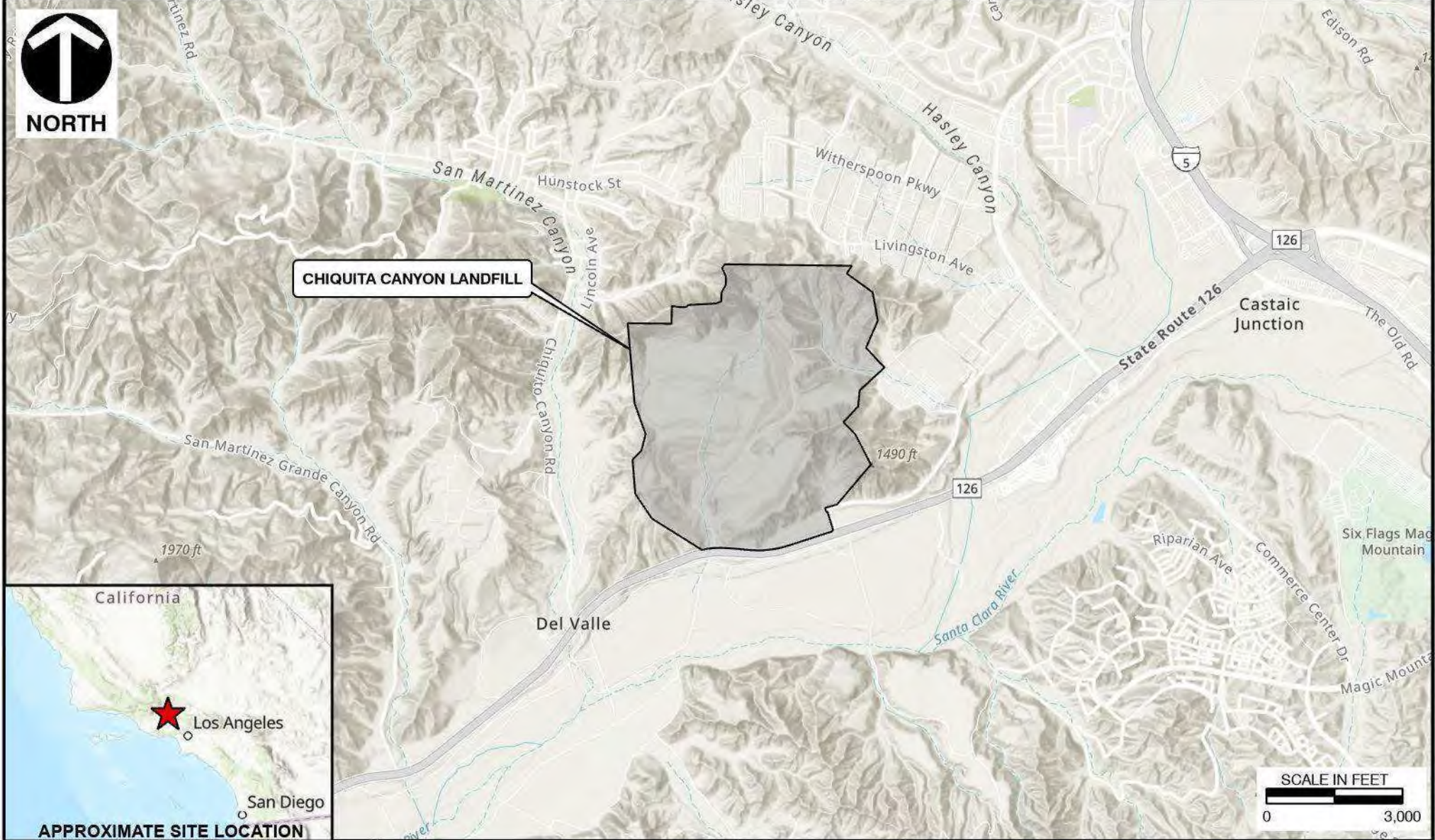
This section of the RAW addresses Section 5.3(f) of the ISE Order.

The actions taken to implement this RAW are consistent with the ongoing landfill operations related to the ETLF event and are addressed in the current *Chiquita Canyon Landfill Odor Mitigation Plan (Revision 1.01)*, which is provided in Appendix P.

DRAFT

DRAFT

FIGURES



CHIQUITA CANYON LANDFILL



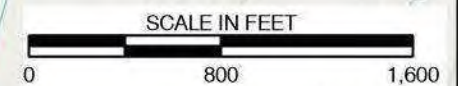
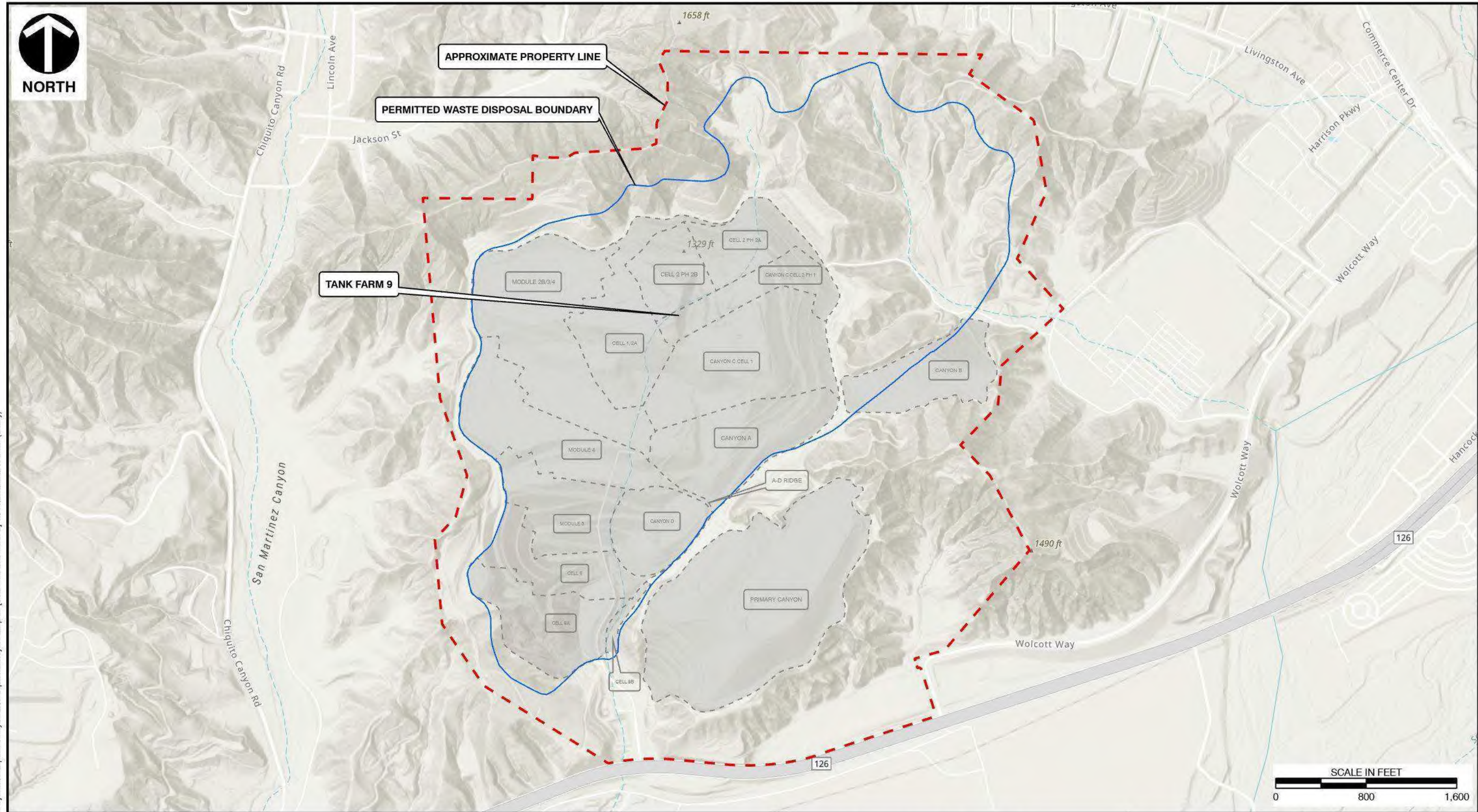
**Civil & Environmental
Consultants, Inc.**

265 Santa Helena
Suite 210
Solana Beach, CA 92075
Ph: 619.837.6555 · 800.365.2324
www.cecinc.com

**REMOVAL ACTION WORKPLAN
EXTENSION OF COVERED AREA
CHIQUITA CANYON LANDFILL**

SITE LOCATION MAP

| | | | | | | | |
|-----------|-----------|-------------|-------------|--------------|---------|------------|----------|
| DRAWN BY: | CMM | CHECKED BY: | RVH | APPROVED BY: | RVH | FIGURE NO: | 1 |
| DATE: | 5/15/2025 | SCALE: | 1" = 3,000' | PROJECT NO: | 350-750 | | |



| LEGEND | |
|--------|-------------------------------|
| | APPROXIMATE PROPERTY BOUNDARY |
| | REFUSE LIMIT |
| | CELL LIMIT |
| | CONSTRUCTED CELL |

CEC
Civil & Environmental
Consultants, Inc.

265 Santa Helena
Suite 210
Solana Beach, CA 92075
Ph: 619.837.6555 · 800.365.2324
www.cecinc.com

REMOVAL ACTION WORKPLAN
EXTENSION OF COVERED AREA
CHIQUITA CANYON LANDFILL

SITE PLAN

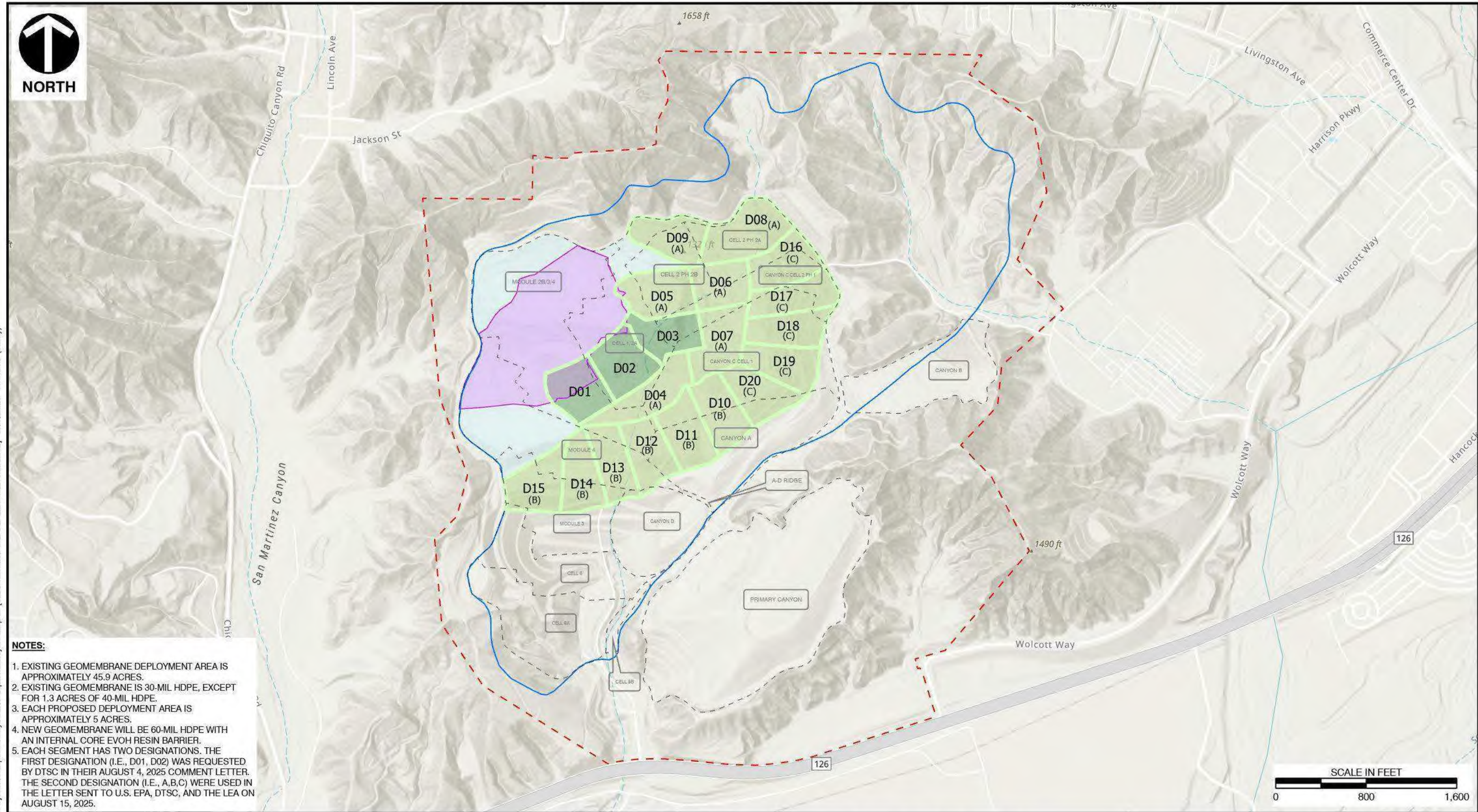
| | | | | | | | |
|-----------|-----------|-------------|-----------|--------------|---------|------------|---|
| DRAWN BY: | CMM | CHECKED BY: | RVH | APPROVED BY: | RVH | FIGURE NO: | 2 |
| DATE: | 5/15/2025 | SCALE: | 1" = 800' | PROJECT NO: | 350-750 | | |

*Hand Signature on file

C:\Users\omay\Documents\ArcGIS\Projects\Chiquita Canyon 2\Chiquita Canyon 2.aprx [350-750 Site Plan 2] 5/15/2025 2:17 PM (mxd)



C:\Users\omay\Documents\ArcGIS\Projects\Chiquita Canyon 2\Chiquita Canyon 2.aprx [GEOMEMBRANE DEPLOYMENT AREAS] 10/3/2025 1:55 PM (cmay)



- NOTES:**
1. EXISTING GEOMEMBRANE DEPLOYMENT AREA IS APPROXIMATELY 45.9 ACRES.
 2. EXISTING GEOMEMBRANE IS 30-MIL HDPE, EXCEPT FOR 1.3 ACRES OF 40-MIL HDPE.
 3. EACH PROPOSED DEPLOYMENT AREA IS APPROXIMATELY 5 ACRES.
 4. NEW GEOMEMBRANE WILL BE 60-MIL HDPE WITH AN INTERNAL CORE EVOH RESIN BARRIER.
 5. EACH SEGMENT HAS TWO DESIGNATIONS. THE FIRST DESIGNATION (I.E., D01, D02) WAS REQUESTED BY DTSC IN THEIR AUGUST 4, 2025 COMMENT LETTER. THE SECOND DESIGNATION (I.E., A,B,C) WERE USED IN THE LETTER SENT TO U.S. EPA, DTSC, AND THE LEA ON AUGUST 15, 2025.

| LEGEND | |
|--------|--|
| | APPROXIMATE SITE BOUNDARY |
| | REFUSE LIMIT |
| | CELL LIMIT |
| | EXISTING GEOMEMBRANE DEPLOYMENT AREA |
| | SUBSEQUENT SUPPLEMENTAL GEOMEMBRANE DEPLOYMENT AREAS |
| | INITIAL SUPPLEMENTAL GEOMEMBRANE DEPLOYMENT AREA |
| | REACTION AREA AUGUST 2025 |

ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE IN THE STATE OF NORTH CAROLINA WILL BE PROVIDED BY CEC SURVEYING AND LANDSCAPE ARCHITECTS OF NC, PLLC. SERVICES IN PUERTO RICO WILL BE PROVIDED BY CEC ENGINEERS & CONSULTANTS, LLC. LANDSCAPE ARCHITECTURE SERVICES IN THE STATE OF OHIO WILL BE PROVIDED BY CEC LANDSCAPE ARCHITECTS, LLC.

Civil & Environmental Consultants, Inc.

265 Santa Helena Suite 210
Solana Beach, CA 92075
Ph: 619.837.6555 · 800.365.2324
www.cecinc.com

| | | | |
|-----------|-----------|-------------|-----------|
| DRAWN BY: | GMM | CHECKED BY: | RVH |
| DATE: | 10/3/2025 | SCALE: | 1" = 800' |

**REMOVAL ACTION WORKPLAN
EXTENSION OF COVERED AREA
CHIQUITA CANYON LANDFILL**

PROPOSED GEOMEMBRANE DEPLOYMENT AREAS

| | | | |
|--------------|---------|------------|----------|
| APPROVED BY: | RVH | FIGURE NO: | 3 |
| PROJECT NO: | 350-750 | | |

*Hand Signature on file

DRAFT

TABLES

Table 1
Approximate Geomembrane Deployment Segments and Schedule
Revised February 2026

| Geomembrane Segment ⁽¹⁾ | Underlying Cell/Module⁽²⁾ | Approximate Installation Timing ⁽³⁾ |
|--|--|---|
| D01 | Module 2B/3/4 Cell 1/2A | 9/17/2025 |
| D02 | Cell 1/2A | 9/30/2025 |
| D03 | Cell 1/2A Cell 2 Ph 2B Canyon C Cell 2 Ph 1 Canyon C Cell 1 | Nov. 2025 |
| Repairs of Existing 30-mil HDPE Geomembrane with new 60-mil EVOH/HDPE Geomembrane ⁽⁴⁾ | Cell 1/2A Cell 2 Ph 2B Module 2B/3/4 Module 4 | Nov. 2025-Apr. 2026 |
| D04 (A) | Module 2B/3/4 Cell 1/2A Canyon C Cell 1 | By November 2026 |
| D05 (A) | Cell 1/2A Cell 2 Ph 2B Canyon C Cell 2 Ph 1 | By November 2026 |
| D06 (A) | Cell 2 Ph 2A Cell 2 Ph 2B Canyon C Cell 2 Ph 1 | By November 2026 |
| D07 (A) | Canyon C Cell 1 | By November 2026 |
| D08 (A) | Cell 2 Ph 2A Cell 2 Ph 2B | By November 2026 |
| D09 (A) | Cell 1/2A Cell 2 Ph 2A Cell 2 Ph 2B | By November 2026 |
| D10 (B) | Canyon C Cell 1 Canyon A | By November 2026 |
| D11 (B) | Canyon C Cell 1 Canyon A | By November 2026 |
| D12 (B) | Module 2B/3/4 Module 4 Canyon A Canyon C Cell 1 | By November 2026 |
| D13 (B) | Module 4 Module 5 Canyon A Canyon D | By November 2026 |

Table 1
Approximate Geomembrane Deployment Segments and Schedule
Revised February 2026

| Geomembrane Segment ⁽¹⁾ | Underlying Cell/Module | Approximate Installation Timing ⁽²⁾ |
|------------------------------------|---|--|
| D14 (B) | Module 4 Module 5 | By November 2026 |
| D15 (B) | Module 5 Cell 6 | By November 2026 |
| D16 (C) | Cell 2 Ph 2A Canyon C Cell 2 Ph 1 Canyon C Cell 1 | By December 1, 2026 |
| D17 (C) | Canyon C Cell 1 Canyon C Cell 2 Ph 1 | By December 1, 2026 |
| D18 (C) | Canyon C Cell 1 Canyon C Cell 2 Ph 1 | By December 1, 2026 |
| D19 (C) | Canyon C Cell 1 | By December 1, 2026 |
| D20 (C) | Canyon C Cell 1 Canyon A | By December 1, 2026 |

1. Labeling for geomembrane segments includes the nomenclature (i.e., D01, D02) requested by DTSC in the August 4, 2025 comment letter. It also includes the general identification (i.e., A, B, or C) used in the letter, *Chiquita Canyon, LLC's Response to U.S. EPA's, DTSC's, and the LEA's Requirement to Expand the Geomembrane Cover*, sent to U.S. EPA, DTSC, and the LEA on August 15, 2025.
2. Chiquita may alter the scheduled order of segment installation and deployment for efficiency and to achieve complete installation of the additional 100 acres of the geomembrane cover by December 1, 2026, as discussed with USEPA on January 30, 2026 and confirmed in U.S. EPA's email correspondence dated February 6, 2026.
3. Approximate geomembrane timing is taken from the August 15, 2025 letter. Timing is subject to field conditions and can be affected by weather conditions that pose a risk to safety (e.g., high wind, rain), other agency directed work in the same area, or availability of materials or work crews. As noted during meetings with U.S. EPA on January 30, 2026 and February 6, 2026, Chiquita's February 5, 2026 response to U.S. EPA's letter dated January 13, 2026, and subsequent email correspondence between Chiquita and U.S. EPA on February 6, 11, and 12, 2026, Chiquita will plan to complete the 100 acre extension of the geomembrane cover by December 1, 2026, with an average geomembrane cover installation rate of 10 acres every four weeks over the course of any non-rainy season period, subject to the list of extension events discussed and clarified in Chiquita's February 5, 2026 response and U.S. EPA's February 6, 2026 and February 12, 2026 email correspondence. Chiquita will also maintain sufficient geomembrane cover to conduct planned installations and repairs, as well as sufficient staffing and equipment to deploy cover and prepare segments. Per U.S. EPA's February 6, and February 12, 2026 email correspondence, Chiquita may request extensions of the December 1, 2026 deadline to complete installation of the additional 100 acres of

Table 1
Approximate Geomembrane Deployment Segments and Schedule
Revised February 2026

geomembrane cover. Such extension requests shall be made in accordance with the potential extension events and procedures discussed and clarified in U.S. EPA's correspondence dated February 6 and February 12, 2026. The extension request events and procedures are summarized in Table 2.

4. As stated in Section 3.1 of this RAW, Chiquita will conduct repairs of the existing geomembrane cover when new geomembrane cover deployment is postponed due to extension requests events, to the extent feasible under the circumstances.

**Table 2
Extension Request Events and Procedures**

| Extension Event | Demonstration |
|---|---|
| Reasonably unanticipated access issues or unsuitable site conditions | (1) Plan for, construct, or otherwise facilitate access that allows for cover crew operations necessary to meet the deadline, barring any reasonably unanticipated issues such as damp or slick soil following weather events, (2) Provide event specific reasoning for each delay for which Chiquita seeks an extension, and (3) Provide the duration(s) of delay and requested deadline for final cover installation based on final duration(s) of delay and rescheduling following resumption of normal cover operations. |
| Competing projects, repairs to equipment, repairs to infrastructure, the need to relocated infrastructure | (1) Plan for schedule flexibility around planned and competing projects to allow for necessary cover crew operations to meet the deadline, (2) Provide event specific reasoning for each delay for which Chiquita seeks an extension, and (3) Provide the duration(s) of delay and requested deadline for final cover installation based on final duration(s) of delay and rescheduling following resumption of normal cover operations. |
| Unanticipated changes in cover crew (contractors and liner crews) availability | (1) Maintain a cover crew contract that ensures the contractors will maintain sufficient crew availability and reevaluate any contract where cover crew availability is uninsured or otherwise insufficient to meet the deadline, (2) Provide event specific reasoning for each delay for which Chiquita seeks an extension, and (3) Provide the duration(s) of delay and requested deadline for final cover installation based on final duration(s) of delay and rescheduling following resumption of normal cover operations. |
| Unsafe weather conditions, emergencies, evacuations, or acts of God | (1) Provide event-specific reasoning for each delay for which Chiquita seeks an extension, and (2) Provide the duration(s) of delay and requested deadline for final cover installation based on final duration(s) of delay and rescheduling following resumption of normal cover operations. |
| Other reasons that CCL's superintendents and foremen determine, in their good faith, in-field judgment, preclude deployment | (1) Provide event-specific reasoning for each delay for which Chiquita seeks an extension, and (2) Provide the duration(s) of delay and requested deadline for final cover installation based on final duration(s) of delay and rescheduling following resumption of normal cover operations. |