

***Draft***  
**Initial Study/Mitigated Negative Declaration**  
**San Bernardino County Department of Public Works**  
**Solid Waste Management Division**

**Stockpile 3 Project**  
**San Timoteo Sanitary Landfill**  
**San Bernardino County, California**

*Lead Agency:*



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Department of Public Works  
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## SECTION 1 – INTRODUCTION

The San Bernardino County Department of Public Works Solid Waste Management Division (County) is proposing to stockpile earthen material excavated onsite at the San Timoteo Sanitary Landfill (STSL), located in Redlands, California. This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to identify and assess the potential environmental impacts from the stockpiling of earthen material removed from the excavation of the Phase 5 area associated with Unit 2 of the STSL. In order to use Phase 5 for future landfilling of refuse, approximately 2,620,000 cubic yards of earthen material must be excavated and would be stockpiled for future use as cover. The earthen material is proposed to be stockpiled in an area that would expand the area of disturbance associated with the landfill although the stockpile would be within the current landfill property limits.

### **Project Purpose and Need**

In order to accommodate future use of the STSL for landfilling refuse, native earthen materials must be excavated from the Unit 2, Phase 5 portion of the landfill. The excavated earthen materials would be stockpiled for future use. The stockpile, identified as Stockpile 3, would be within the current landfill property limits but outside the current limits of disturbance associated with the landfill.

### **Initial Study Organization**

This Initial Study includes the following:

**Section 1 – Introduction:** Provides an introduction to the project and project background, as well as the Project purpose and need.

**Section 2 – Regulatory Framework:** Provides the regulatory context for preparation of the Initial Study and a brief summary of CEQA.

**Section 3 – Detailed Project Description:** Provides essential project information, such as the project description, project location and figures.

**Section 4 – Environmental Checklist Form:** Provides essential project information, followed by an environmental checklist and accompanying analysis for responding to checklist questions. Provides the parameters the County uses when determining level of impact. It also includes:

- *Environmental Factors Potentially Affected:* identifies environmental factors potentially affected by the project;
- *Lead Agency Determination:* identifies the Lead Agency's determination of which type of CEQA document would be required for the project based on the initial evaluation.

**Section 5 – Summary of Mitigation Measures:** Provides a compilation of mitigation measures identified to reduce impacts to less than significant.

**Section 6 – References:** Include a list of references and various resources utilized in preparing the analysis.

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## SECTION 2 – REGULATORY FRAMEWORK

The San Bernardino County Department of Public Works has identified that the Stockpile 3 Project at the San Timoteo SLF meets the CEQA Guidelines Section 15378 definition of a Project. To be a Project, it must require a Discretionary Action by a public agency (i.e., CEQA Lead Agency). In addition, CEQA Guidelines Section 15378 defines a “Project” as the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

In accordance with the CEQA (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation, and maintenance of the Stockpile 3 Project (hereinafter referred to as the "project" or “proposed project”). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the County as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

The Clean Water Act (CWA) Sections 404 and 401 have provisions for protecting biological resources within the aquatic environment through prohibitions on discharges of fill in wetlands or other Waters of the U.S. and identification of beneficial uses. Other waters include non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses.

Under the Porter-Cologne Water Quality Control Act, all Waters of the U.S. that are within the borders of California are also Waters of the State. The State Water Resources Control Board (SWRCB) delegates authority to the Regional Water Quality Control Boards (RWQCBs), which take Section 401 water quality certification actions for activities subject to any permit issued by the USACE pursuant to Section 404 of the CWA. In addition, under Sections 1600-1616 of the State of California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which support fish or wildlife (i.e., bed to bank).

## SECTION 3 – DETAILED PROJECT DESCRIPTION

The STSL is an existing regional Class III landfill operating on a 366-acre site located within the southwest corner of the City of Redlands in San Bernardino County (Figure 1). The landfill is located at 31 Refuse Road, south of San Timoteo Canyon Road with the scale facilities located just inside the entrance gate. The landfill access road is paved with asphalt to the refuse disposal boundary, where it extends as an unpaved road to the active disposal areas. The entrance of the landfill is secured by a permanent fence and gate, with a sign displaying the facility name and owner. Household hazardous waste encountered on STSL are stored in a transportable designated hazardous waste bin until they can be properly treated off site. The STSL accepts only Class III non-hazardous solid waste in accordance with waste classification regulations in California Code of Regulation (CCR) Title 27 (County of San Bernardino Department of Public Works 2022). Solid waste delivered to the STSL is generally classified as residential, commercial, agricultural, industrial, and mixed municipal (County of San Bernardino Department of Public Works 2022). Residential waste includes domestic garbage and rubbish that originates in residential dwellings. Commercial waste includes types of solid waste generated by stores, offices, and other commercial sources excluding residences and industrial waste. Agricultural waste includes residues from farming and livestock land uses. Industrial waste includes types of solid waste that result from industrial processes and manufacturing operations, excluding hazardous materials. Mixed municipal wastes include a combination of residential and commercial waste. Small dead animals are buried immediately away from the working face at the landfill.

The STSL also accepts the following wastes:

- Tires are segregated from disposal wastes and stockpiled for transportation to a tire recycling facility.
- Metallic wastes containing refrigerants such as Freon are separated from metallic discards and stockpiled away from the active face and public utilizing the landfill.
- Universal waste such as computer monitors, fluorescent light bulbs/tubes and televisions with intact cathode ray tubes that require special handling are palletized, shrink wrapped, labeled, and documented. Small miscellaneous Universal Waste is stored in buckets or cardboard boxes on pallets. These materials are temporarily stored on site for future disposal.
- Dewatered sewage sludge is disposed of over areas that have a leachate collection and removal systems and contain more than 50 percent solids by weight.
- Contaminated soils that meet the criteria of Waste Discharge Requirement Order No. R8-2016-0052 are accepted at the landfill.
- Asbestos-containing waste and treated wood is not accepted at this time by the STSL.

In addition, the STSL accepts solid waste diverted from the Mid-Valley SLF located in Rialto, California during high wind events for a maximum 15 days per year. It has been estimated that regional windy conditions may occur as many as 15 days per year that cause the Mid-Valley SLF to be temporarily closed. As much as 1,000 tons per day (tpd) of waste would then be redirected to the STSL that could cause an exceedance of the 2,000 tpd permit limit (County of San Bernardino Department of Public Works 2022).

Typically, waste cells at the working face are developed as part of advancing lifts overlying existing refuse. Refuse is placed in cells that are 20 feet high and 100 by 150 feet in area. Waste is unloaded at the toe of the working face of the cell. A bulldozer is used to push, spread, and compact waste on the

working face in shallow layers up to two feet deep. The equipment traverses the active working face as often as necessary to evenly spread and compact the waste. At the end of each working day, the waste is covered with a minimum of six inches of soil or an Alternative Daily Cover (ADC). Cells that will be inactive for 180 days or longer are covered with an interim cover of twelve inches of compacted soil or other approved material. Waste cells are graded to drain stormwater runoff away from the landfill. Effective drainage minimizes ponding, infiltration, and erosion (County of San Bernardino Department of Public Works 2022).

### **Project Design Features**

The permitted area of the STSL consists of two phases and includes Unit 1 that is closed, Unit 2 Phases 1, 2, 3-1, 3-2, and 4, and Unit 2, Phase 5 that is proposed for construction (Figure 2). The current active working face for landfilling is occurring in Unit 2 Phases 1, 2, 3-1, 3-2, and 4, located on the southwestern side limit of disturbance associated with the landfill (Figure 2). During the construction of Unit 2, Phase 5, 2,620,000 cubic yards of excavated earthen materials would have to be stockpiled in an area designated as Stockpile 3, which is within the landfill site limits but outside the current permit limits of disturbance (Figure 2). During excavation of Unit 2, Phase 5, the current trash haul road would be used by excavators to remove materials from Unit 2, Phase 5 and to create Stockpile 3. The public and contract trash disposers would use a temporary access road on the western side of the landfill to access Unit 4 for trash disposal.

Prior to earth movement, the Stockpile 3 site would require grubbing of all existing vegetation and is estimated to need 7 days to complete. Earth movement would occur 6 days a week and is estimated to take up to 30 months to complete. The following equipment would be required:

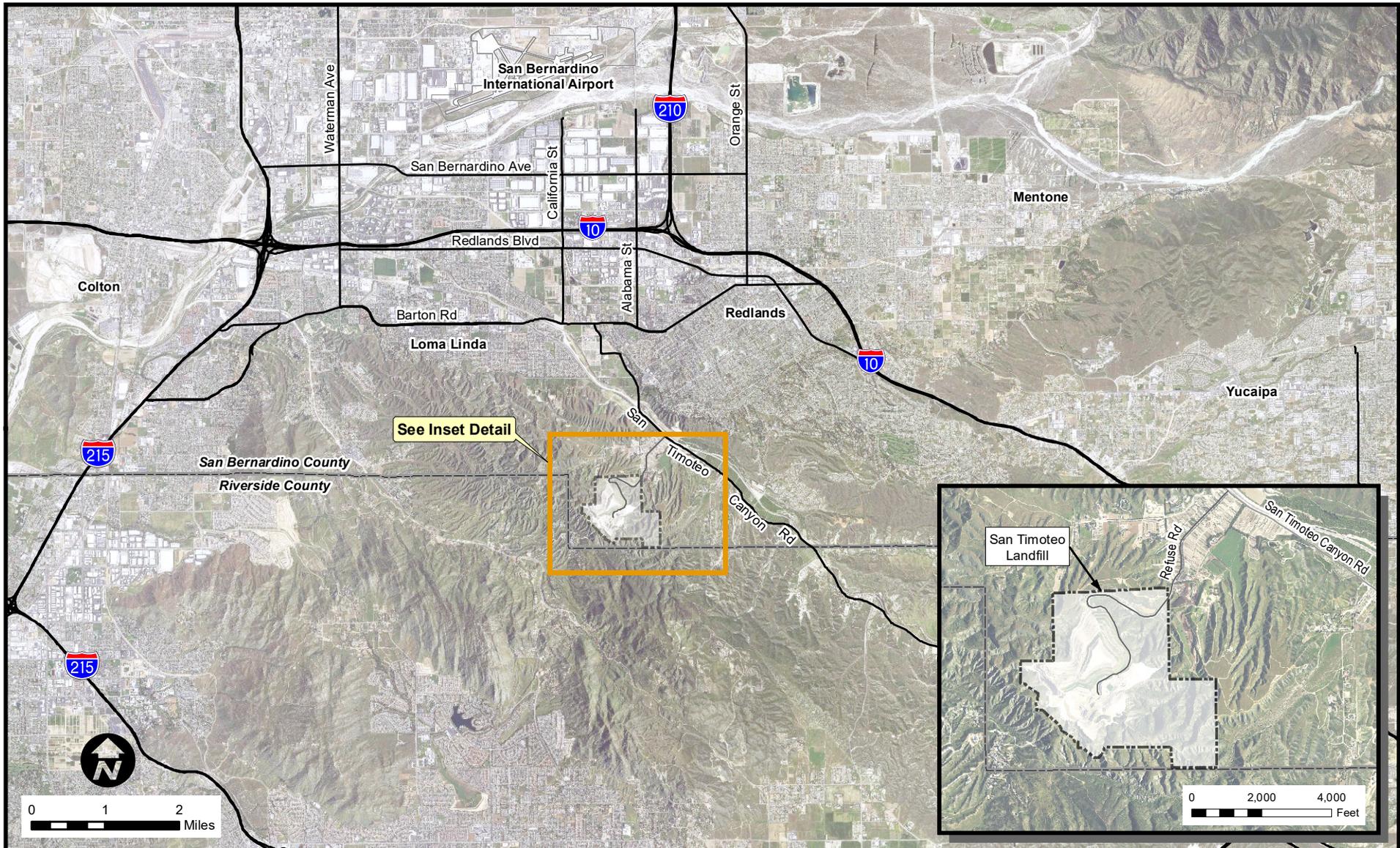
- 30 scrapers with belly scrapers
- 1 excavator
- 3 water trucks

### **Equipment Staging Areas**

Equipment used to excavate earthen materials and create the stockpile would be staged onsite adjacent to the work area when not in use. The upper level of the stockpile would be at the level of the landfill access road and could also be used to stage equipment.

### **Operation and Maintenance**

Once Stockpile 3 has been created, a perimeter V-ditch would then be built that surrounds the down-gradient portion of the stockpile (Figure 3). Stormwater flow originating on the stockpile would be directed to the V-ditches through overland flow from the stockpile and from two down drains also constructed on the stockpile (Figure 3). The stockpile would be revegetated by using a hydroseeding technique with an approved native plant seed mix. In conjunction with other sources present at the landfill, some of the earthen materials from Stockpile 3 would be used as final landfill cover.

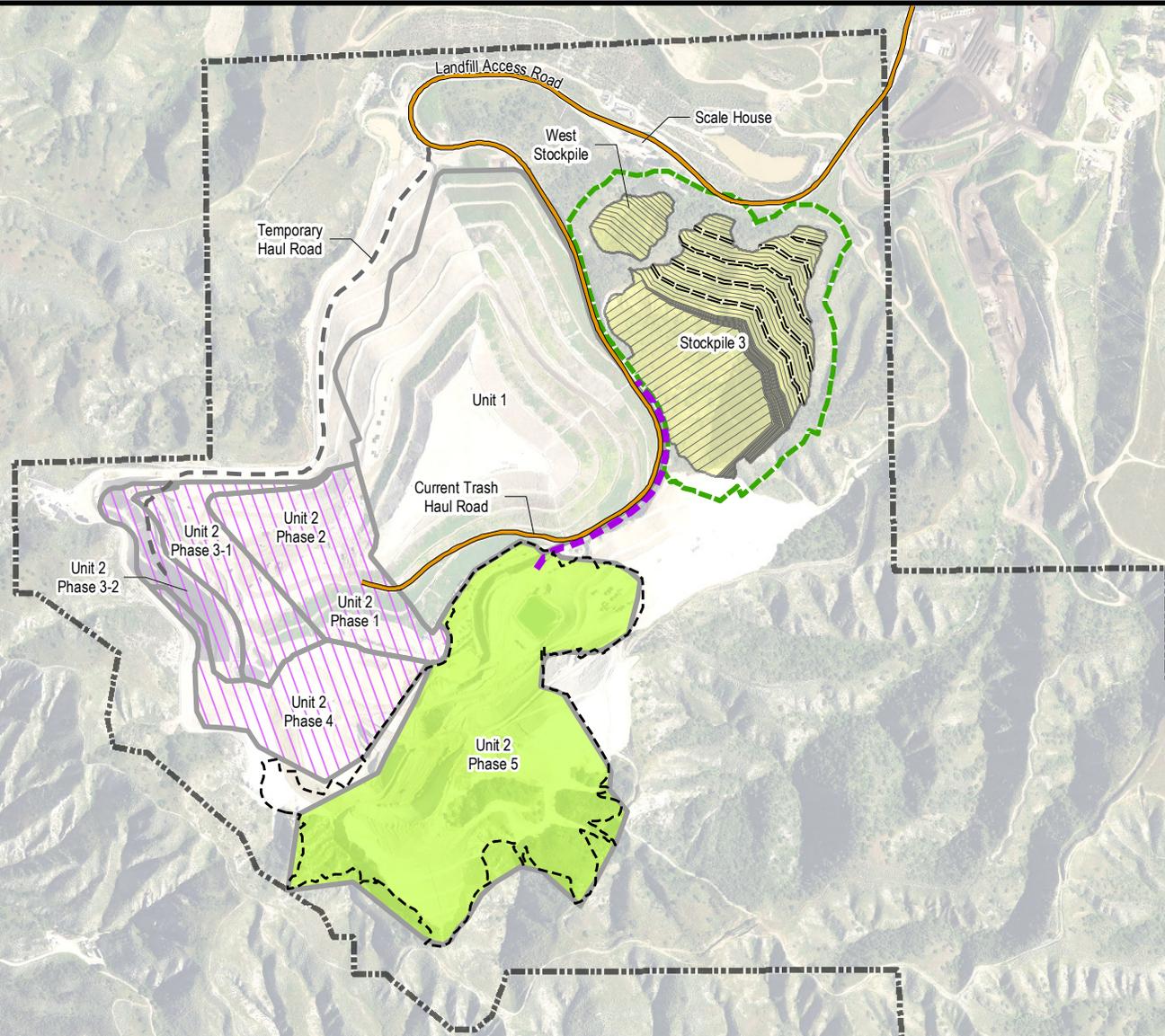


— County Line  
 - - - Landfill Boundary

SAN TIMOTEO LANDFILL

**Figure 1**  
**Regional Location of**  
**San Timoteo Sanitary Landfill**

SAN BERNARDINO COUNTY  
RIVERSIDE COUNTY

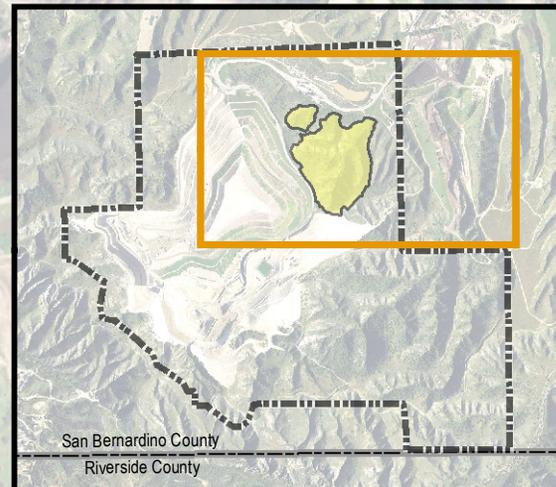
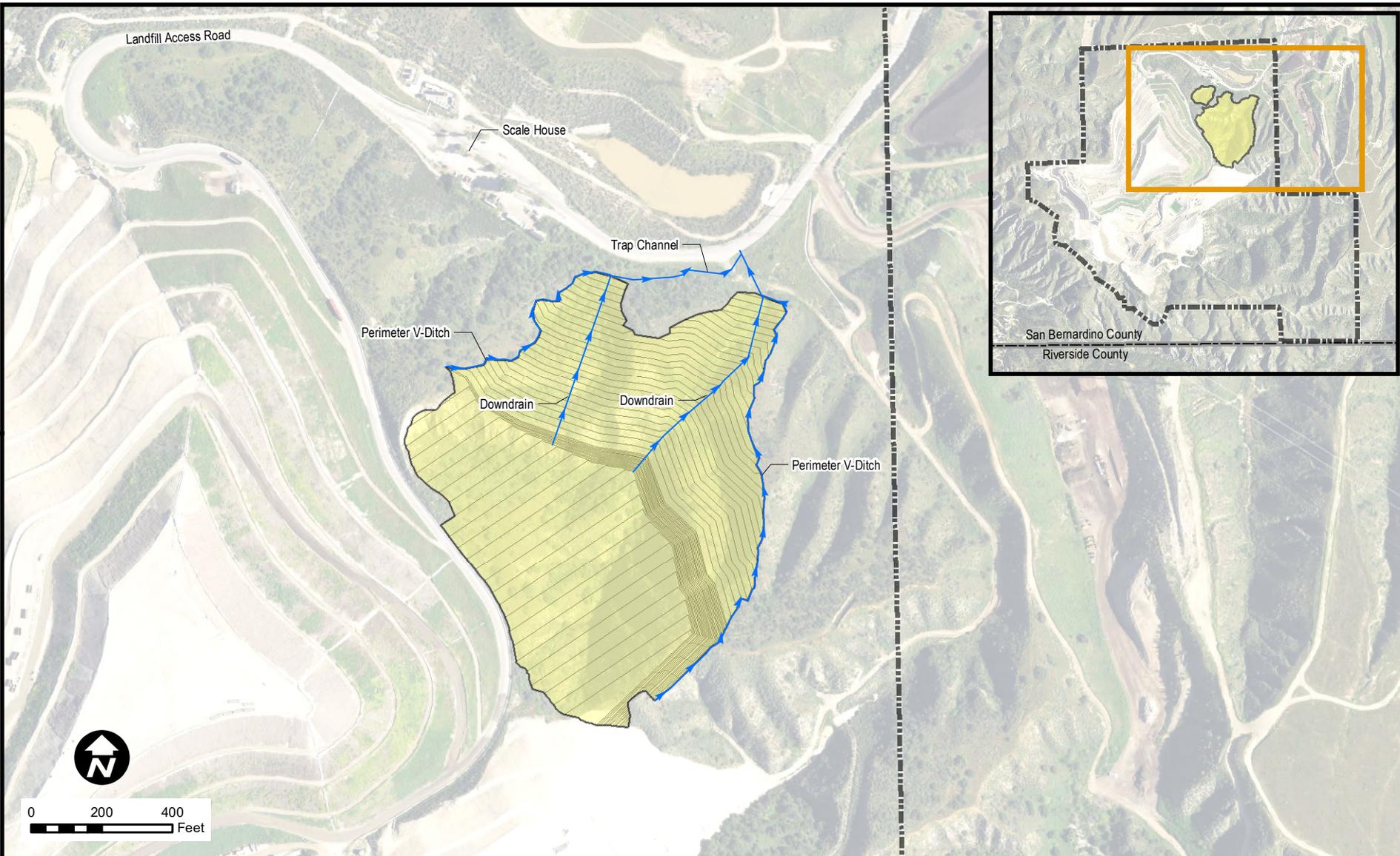


- Scrapper Route from Excavation to Stockpile
- Temporary Haul Road
- Current Trash Haul Road
- County Line
- Stockpiles
- Approximate Area of Excavation (material placed in Stockpile 3)
- Biological Clearance Buffer (100-ft)
- Active Landfill Face
- Limit of Disturbance
- Landfill Unit/Phase
- Landfill Property Boundary

SAN TIMOTEO LANDFILL

**Figure 2**  
**Landfill Operations and**  
**Stockpile Location-**  
**San Timoteo Sanitary Landfill**

TETRA TECH



-  Drainage
-  County Line
-  Stockpile Boundary
-  Landfill Property Boundary

SAN TIMOTEO LANDFILL

**Figure 3**  
**Stormwater Management System**  
**and Drainage Pattern, Stockpile 3**  
**San Timoteo Sanitary Landfill**



## SECTION 4 – ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Stockpile 3 Project at San Timoteo Sanitary Landfill, San Bernardino County, California
  
2. **Lead Agency Name:** San Bernardino County Public Works Department  
  
**Address:** 825 East Third Street  
San Bernardino, California 92415-0835
  
3. **Contact Person:** Patrick Egle, Planner III  
Patrick.Egle@dpw.sbcounty.gov  
(909) 387-1865
  
4. **Project Location:** 31 Refuse Road, within the southwest corner of the City of Redlands in San Bernardino County  
  
Topographic Quad (USGS 7.5"): Redlands 7.5-minute USGS Quadrangle  
  
Topographic Quad Coordinates: T2S, R2W, Section 8  
  
Latitude/Longitude: Latitude: 34° 00' 45.4361" N, Longitude-117° 12' 54.4269" W  
  
Site Access: Access is via 31 Refuse Road from San Timoteo Canyon Road
  
5. **Project Sponsor:** Solid Waste Management Division  
Name and Address: 222 W. Hospitality Lane, 2nd Floor  
San Bernardino, California 92415-0017
  
6. **General Plan/Zoning Designation:** City of Redlands General Plan Designation: Public/Institutional  
City of Redlands Zoning Designation: Agricultural District (A-1)
  
7. **Project Description Summary:**  
The current active working face for landfilling is occurring in Unit 2 Phases 1, 2, 3-1, 3-2 and 4, located on the southwestern side limit of disturbance associated with the landfill. During the construction of Unit 2, Phase 5, it is estimated that 2,620,000 cubic yards of excavated earthen materials would have to be temporarily stockpiled in an area designated as Stockpile 3, which is within the landfill site limits but outside the current permit limits of disturbance. Additional project information is further discussed in Section 3.

**8. Environmental/Existing Site Conditions:**

Stockpile 3 would be located within the STSL boundary and adjacent to the active landfilling activities, but in an area that has not been disturbed by landfilling activities. No designated or proposed critical habitat is located in the area proposed for Stockpile 3 and no known environmental concerns have been identified for this area.

**9. Surrounding land uses and setting:**

The site is generally located within an area characterized as rural residential with no industrial uses within one mile of the landfill. The site is bordered on the north and southwest by rural residential developments, and on the northeast by a landscaping business. Horse ranching and landscape nurseries are located to the northwest of the landfill. The area north of the site is largely vacant and undeveloped.

**10. Other public agencies whose approval is required:**

Federal Agencies: None

State Agencies:

- Regional Water Quality Control Board-Santa Ana Region (RWQCB)
- California Department of Fish and Wildlife

City/County Agencies:

- San Bernardino County Department of Public Health Division of Environmental Health Services (LEA)

Financing Approval or Participation Agreements: (i.e. Federal Funding? Grant Funding? JPA Agreement?): Not applicable

**11. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?**

Yes. AB52 Consultation was concluded on October 3, 2022. The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) requested consultation with the County. Consultation between the County and representatives of the YSMN occurred for this Project. Section 4.18 (Tribal Cultural Resources) provides more details related to the AB52 consultation process undertaken by the County.

**12. Lead Agency Discretionary Actions:** The County has the discretion to approve or not approve the proposed action at the STSL.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agricultural / Forest Resources	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input checked="" type="checkbox"/>	Geology / Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards / Hazardous Materials
<input checked="" type="checkbox"/>	Hydrology / Water Quality	<input type="checkbox"/>	Land Use / Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population / Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input checked="" type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities / Service Systems	<input type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

### LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

*Marc A. Rodabaugh*

11/07/23

Signature [Marc Rodabaugh, P.E., Engineering Manager]

Date

## 1. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

(Check  if project is located within a view-shed of any Scenic Route listed in the General Plan):

### Environmental Setting

The STSL is located within the foothills of San Timoteo Canyon and has been in operation since 1978. The view of the landfill from San Timoteo Canyon Road is somewhat hidden by intervening topography but appears as fill between the hillside canyons. From the ridge on the north side of San Timoteo Canyon around the Smiley Heights neighborhood on Smiley Heights Drive and Wooden Bridge Lane, the landfill is visible as a trapezoidal shape with horizontal features associated with completed layers of waste.

The STSL currently conducts, and is permitted to conduct, site activities from 7:00 am to 9:00 pm. Disposal operations are generally not conducted during hours of darkness unless it is necessary to complete daily cover activities. All disposal equipment has sufficient lighting to provide safe working conditions during hours of darkness. The only nighttime activities occasionally conducted onsite are equipment repair and recycling activities. Portable lighting fixtures or stands may be rented to perform operations during hours of darkness. All light from permanent and temporary night lighting is focused to ensure that areas illuminated are within the landfill property boundaries (County of San Bernardino Department of Public Works 2022).

### Impact Analysis

a) *Have a substantial adverse effect on a scenic vista?*

**Less Than Significant.** Scenic vistas in the City of Redlands consist of the scenic corridors and views to and from the open spaces, canyonlands, hillsides, groves, and the San Bernardino Mountains. Scenic views are also found in the urbanized part of the city, including along scenic and historic drives (City of Redlands 2017). The STSL, which has been in operation since 1978, is situated above San Timoteo Canyon which includes open space, agricultural, and residential uses. The upper portion of the STSL is visible from the surrounding area, and the proposed Project would likely also be visible but would not be appreciably different

than current views of the landfill. Once the stockpile is complete, it would be revegetated using a hydroseeding technique with an approved native plant seed mix, thereby reducing the visual impact of the new feature. In addition, creation of the stockpile would not change the use of the landfill site, and would likely not be visible from San Timoteo Canyon Road, which runs along the bottom of San Timoteo Canyon. A less than significant impact would occur.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact.** Part of State Route 38 near Redlands is included on the Caltrans list of eligible scenic highways but is over 4 miles north of the landfill. As such, the proposed stockpile Project would not have any impact on resources associated with a state scenic highway.

- c) *Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

**Less Than Significant.** As discussed for Item 1.a) above, the proposed stockpile would not likely be visible from San Timoteo Canyon Road but could be from nearby residences in the Smiley Heights neighborhood, northeast of the STSL. Once the stockpile is complete, it would be revegetated, thereby reducing the visual impact of the new feature. A less than significant impact would occur.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No Impact.** Creation of the stockpile would not change the day-to-day landfill operations at the STSL, nor would the activities associated with the stockpile be conducted at night. No light or glare impacts would occur.

**Mitigation Measures:**

None required.

**Aesthetics Impact Conclusions:**

No significant impacts to aesthetics or scenic resources have been identified or anticipated and no mitigation measures are required.

## 2. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

(Check  if project is located in the Important Farmlands Overlay):

### Environmental Setting

Citrus farming was Redlands' original economic base. While most agricultural lands in Redlands have been lost due to urban development, citrus farming and other agricultural uses make up 4 percent of the land in the incorporated areas of the city. This includes agricultural uses along the bottom of San Timoteo Canyon,

including near the entrance to the STSL. The agricultural area (a nursery) along the access road to the STSL is identified as Unique Farmland. Other areas northeast of San Timoteo Canyon Road, across from the entrance to the STSL, are identified as Prime Farmland (City of Redlands 2017). In addition, there is Prime Farmland designed north of the STSL in unincorporated San Bernardino County. The STSL site is zoned Agriculture by the City of Redlands, while the General Plan designation for the site is Public/Institutional, but none of the land at the landfill site is used for agriculture.

### **Impact Analysis**

- a) *Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**No Impact.** While there is Unique and Prime Farmland clustered in San Timoteo Canyon along San Timoteo Canyon Road, none of the land at the STSL is identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the proposed stockpile Project would not result in the conversion of any of these types of farmlands to non-agricultural use. No impacts would occur.

- b) *Conflict with existing zoning for agricultural use or a Williamson Act contract?*

**No Impact.** There are lands under the Williamson Act contract north of the landfill in unincorporated San Bernardino County, but there are no Williamson Act contract lands at the STSL. As discussed above, none of the land at the STSL is used for agriculture. Therefore, the stockpile Project would not conflict with existing zoning for agricultural use or a Williamson contract. No impacts would occur.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**No impact.** The STSL and surrounding area does not have forest resources or land zoned for forest use. Therefore, the proposed Project would have no impact on forest resources (City of Redlands 2017).

- d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

**No impact.** The STSL and surrounding area does not have forest resources or land zoned for forest use. Therefore, the proposed Project would have no impact on forest resources (City of Redlands 2017).

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

**No Impact.** The Project would not result in the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use. No impacts would occur.

### **Mitigation Measures:**

None required.

### **Agriculture and Forestry Services Impact Conclusions:**

No significant adverse impacts to agriculture or forestry services are identified or anticipated, and no mitigation measures are required.

DRAFT

### 3. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

#### Environmental Setting

Pursuant to the Federal Clean Air Act Amendments (CAA) of 1990, the US Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS are classified as primary and secondary standards. Primary standards prescribe the maximum permissible concentration in the ambient air and are required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects. NAAQS are established for six pollutants (known as criteria pollutants): ozone (O<sub>3</sub>), particle pollution (i.e., respirable particulate matter less than 10 microns in diameter [PM<sub>10</sub>] and respirable particulate matter less than 2.5 microns in diameter [PM<sub>2.5</sub>]), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). The California Air Resources Board (CARB) has also established its own air quality standards in the State of California, known as the California Ambient Air Quality Standards (CAAQS). The CAAQS are generally more stringent than the NAAQS and include air quality standards for all the criteria pollutants listed under NAAQS plus sulfates (SO<sub>4</sub>), hydrogen sulfide (H<sub>2</sub>S), vinyl chloride, and visibility-reducing particulate matter.

The USEPA classifies the air quality within an Air Quality Control Region with regard to its attainment of federal primary and secondary NAAQS. An area with air quality better than the NAAQS for a specific pollutant is designated as being in attainment for that pollutant. Any area not meeting the NAAQS is classified as a nonattainment area. Where there is a lack of data for the USEPA to make a determination regarding attainment or nonattainment, the area is designated as unclassified and is treated as an attainment area until proven otherwise. Similarly, the CARB makes state area designations for the state criteria pollutants.

The proposed project is within the City of Redlands in San Bernardino County and subject to the South Coast Air Quality Management District (SCAQMD) regulations. Pollutant concentrations within the San Bernardino County portion of the SCAQMD are assessed relative to both the federal and state ambient air quality standards. The San Bernardino County portion of the SCAQMD is in attainment for PM<sub>10</sub>, CO and NO<sub>2</sub> and

in attainment for all State criteria except O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (California Air Resources Board 2020). Applicable SCAQMD rules are presented in Table 1 and described below.

Table 1 Applicable SCAQMD Rules

Rule	Title
401	Visible Emissions
402	Nuisance
403	Fugitive Dust

Rule 401 prohibits the discharge of visible emissions, with respect to Ringelmann Chart Shades Number 1 and Number 2, for a period or periods aggregating more than three minutes in any one hour. Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Rule 403 requires control measures for fugitive dust from active operations, open storage piles, or disturbed surface areas and prohibits activities that would cause visible dust emissions of 20 percent. Rule 403 also prescribes best available control measures applicable to construction activity sources. A Joint Technical Document (JTD) prepared for the STSL details how emissions will be controlled during landfill operations (County of San Bernardino 2022) Dust emissions at the landfill are controlled by keeping well maintained access roads and watering unpaved roads frequently. The two lane road from the site entrance up to the landfill area is paved with asphalt. Internal haul roads are unpaved. A fine-water spray is applied on the access road to the work areas when conditions that might cause the formation of dust are present (County of San Bernardino 2022).

### **Impact Analysis**

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**No Impact.** The federal CAA requires states to develop plans, known as State Implementation Plans (SIPs), stating how they will attain or maintain NAAQS. SIPs are a compilation of new and previously approved plans, programs, district rules, state regulations and federal controls. States and local air quality management agencies prepare SIPs for approval by the USEPA. To this end, the SCAQMD with contribution from and collaboration with CARB, the Southern California Association of Governments (SCAG) and the USEPA has prepared the Final 2022 Air Quality Management Plan (AQMP) (South Coast Air Quality Management District 2022a) to ensure continued progress toward clean air and reach federal and state compliance requirements.

The AQMP incorporates emissions projections based on growth forecasts accounted for in local and regional general plans. Local governments maintain the authority to determine the types of land use that are allowed within their jurisdiction. For example, in a city's general plan, each parcel of land within that city is given a land use designation (i.e., residential, industrial, etc.). Land use types that do not comply with general plan designations are inconsistent with the general plan. A proposed Project that is inconsistent with a local

general plan is also inconsistent with the AQMP. The proposed Project is in the City of Redlands and within the South Coast Air Basin (SCAB) which is the geographic area under the jurisdiction of the SCAQMD. The City of Redlands has adopted a General Plan (City of Redlands 2023) that is consistent with the AQMP. The proposed Project is consistent with the City of Redlands General Plan and poses no obstruction to the implementation of the AQMP. Thus, the proposed Project is not anticipated to conflict with, or obstruct the implementation of the AQMP.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

**Less Than Significant.** Under CEQA a project is cumulatively considerable if the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. CEQA also prescribes that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan (e.g., air quality attainment or maintenance plan) or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (California Office of Administrative Law 2022).

As discussed above, the proposed Project is not anticipated to conflict with or obstruct implementation of the AQMP which is the applicable air quality attainment plan for the SCAB. However, construction of the stockpile would affect regional air quality. To determine the extent to which a project would impact air quality in the SCAB, the SCAQMD has established emission significance thresholds and indicators.

Since the proposed Project operation is not anticipated to change significantly from existing conditions (e.g., it would not introduce a population increase, and it would not generate vehicle trips) only significance thresholds are considered. The Project site is a landfill and will continue to operate as landfill with implementation of the proposed Project. **Project-related operational emissions are not expected and are therefore not further discussed.**

The SCAQMD has established significance thresholds for criteria pollutants generated during construction and operation, and a significant impact would occur if the proposed Project would result in construction emissions that exceed the established significance thresholds. Projects with emissions below established thresholds will not have a significant impact on air quality. Projects with emissions equal to or exceeding the established significance threshold will have a potentially significant adverse impact on air quality unless mitigation measures are implemented. A summary of the SCAQMD air quality significance thresholds is presented in Table 2.

Table 2 South Coast Air Quality Management Air Quality Significance Threshold

Pollutant	Construction (lb/day)	Operation(lb/day)
NOx	100	55
VOC	75	55
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55

Pollutant	Construction (lb/day)	Operation(lb/day)
SOx	150	150
CO	550	550
Lead	3	3
TACs	Maximum Incremental Cancer Risk $\geq$ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas $\geq$ 1 in 1 million) Chronic and Acute Hazard Index $\geq$ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

- Notes:
- CO carbon monoxide
  - lb/day pounds per day
  - NOx oxides of nitrogen (nitric oxide and nitrogen dioxide)
  - PM<sub>2.5</sub> respirable particulate matter less than 2.5 microns in diameter
  - PM<sub>10</sub> respirable particulate matter less than 10 microns in diameter
  - SCAQMD South Coast Air Quality Management District
  - SOx oxides of sulfur
  - TACs Toxic Air Contaminants
  - VOC volatile organic compounds

### Construction Emissions

Construction emissions are temporary emissions that occur only while a project is being constructed and end when construction of the project is complete. Construction emissions originate primarily from the combustion of fossil fuels used by mobile on-road sources (e.g., workers vehicles, material and equipment delivery trucks, soil haul trucks) and mobile off-road sources (e.g., concrete industrial saws, excavators, off-highway trucks, dozers, backhoes, excavators, rollers, trenchers, skid steer loaders, welders, air compressors, cranes, pavers, water trucks, concrete delivery trucks, and cement and mortar mixers).

Emissions from the proposed Project would result from construction activities including the following phases:

- Site Preparation. mobilization, clearing and grubbing of existing vegetation, removal of green waste in preparation for excavation and soil removal phase
- Earth Movement: excavation, soil relocation from the Unit 2 Phase 5 portion of the landfill to the stockpile location
- Construction: Construct V ditches and associated drainage features for stormwater management at the stockpile

Construction activities resulting from the proposed Project would occur during calendar years 2023 to 2026. Air emissions resulting from construction activities of the proposed Project were calculated based on a worst-case scenario where each equipment piece in each phase runs simultaneously. This approach assumes

maximum daily operating time for all equipment assigned in each construction phase (i.e., Site Preparation, Earth Movement, and Construction). Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is widely accepted to provide a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects in California. The model uses pre-programed algorithms to calculate emissions based on data entered. The algorithms are designed to take information such as project size; construction length; vehicle and equipment types; number of vehicle trips and lengths; and equipment operating hours to calculate emissions of criteria pollutants and greenhouse gases. Emission calculations provided in this document factor dust control measures such as implementation of best available dust control measures during active landfill operations capable of generating fugitive dust as prescribed in SCAQMD Rule 403 and off-road vehicles using on average Tier 4 engines.. CalEEMod input values and calculated air emission results for the proposed Project are provided as Appendix A and summarized in Table 3.

Table 3 Project Construction Emissions of Criteria Pollutants (lbs/day)

Calendar Year	VOCs	NOx	CO	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
2023	5.953	24.716	212.062	0.469	12.492	5.018
2024	5.934	24.694	211.850	0.469	1.918	1.039
2025	5.917	24.675	211.654	0.468	1.918	1.039
2026	6.200	28.256	221.093	0.498	2.568	1.248
Threshold of Significance	75	100	550	150	150	55
LST	None	778	29,410	None	322	170
Significant?	No	No	No	No	No	No

Notes: CO carbon monoxide  
 lb/day pounds per day  
 LST localized significance threshold  
 NOx oxides of nitrogen (nitric oxide and nitrogen dioxide)  
 PM<sub>10</sub> respirable particulate matter less than 10 microns in diameter  
 PM<sub>2.5</sub> respirable particulate matter less than 2.5 microns in diameter  
 SOx oxides of sulfur (sulfur dioxide and sulfur trioxide)  
 VOC volatile organic compounds

As identified in Table 3, Project construction impacts to air quality would be less than significant.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant.** The SCAQMD has established localized significance thresholds (LSTs) to address the impacts that pollutant concentrations could have on nearby receptors. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. LSTs are applicable for projects that generate oxides of nitrogen (NO<sub>x</sub>), CO, PM<sub>10</sub>, and respirable particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). LSTs are based on the following criteria: geographic location of the project, project site size, and proximity between the project site and the nearest sensitive receptor such as residences and schools (South Coast Air Quality Management District 2022b).

### Construction Thresholds

The SCAQMD has prepared LST guidance to help lead agencies assess localized air quality impacts from projects that are less than five acres and generate NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The methodology for analyzing localized air quality impacts from proposed projects is presented in the SCAQMD *Final Localized Significance Threshold Methodology* document (South Coast Air Quality Management District 2008a). The methodology includes look-up tables with localized significance thresholds according to source receptor area for one-, two- and five-acre projects. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Thus, only emissions generated by construction equipment and vehicles while at the site are used to evaluate LST. Construction emissions would have a localized impact if they exceeded LST.

### Construction Analysis

The Project is in the City of Redlands in San Bernardino County. The nearest receptors to the Project site are residential housing units to the north. The estimated proximity of the nearest housing unit to the Project site is approximately 600 meters (2,000 feet). The maximum area disturbed per day based on soil movement is anticipated to be within five acres per day. Thus, LSTs were based on the 5-acre LST lookup table and compared against emissions calculated using CalEEMod. Based on the LST analysis, Project construction emissions are below LSTs. LSTs and significance test are summarized in Table 3.

### Toxic Air Contaminants

The SCAQMD prescribes toxic air contaminant thresholds (TACs) that, if exceeded, would result in a significant impact to nearby sensitive receptors. TACs are substances that can cause cancer or other serious health effects. One route of exposure to TACs is through breathing contaminated air. Health risks associated with TACs are estimated by determining how hazardous a substance is and how much of this substance a receptor is exposed to. Sources of TACs include passenger cars, construction vehicles, manufacturing plants, and refineries.

Emissions of TACs associated with the proposed Project would be emitted primarily through the combustion of diesel fuel used by construction equipment during the construction of the Project. These emissions are temporary and will stop once the construction phase is completed. The operation of the proposed Project is not anticipated to add any significant sources of toxic air contaminant, and therefore, would have a less than significant impact on sensitive receptors.

Emissions of TACs from mobile sources are regulated at the state level through the implementation of measures and programs including the pursuit of low-emission vehicle programs, low carbon fuel standards and heavy-duty vehicle emissions regulations. Applicable measures for the proposed Project are the CARB's In-Use Off-Road Diesel Fueled Fleets Regulation and the In-Use On-Road Diesel-Fueled Vehicles. Both regulations are enforced by CARB, and fleet owners (e.g., construction companies, equipment rental companies, brokers) are responsible for meeting compliance requirements. Tier 4 engines in off-road vehicles have been factored into the emissions calculations for this Project as this group of engines is anticipated to be predominant in off-road vehicles at the time of construction. Tier 4 engines are part of an emission reduction measure being pursued by the State of California.

The SCAQMD has neither adopted nor recommended methodology for assessing health risk analysis associated with mobile sources at construction sites. The Office of Environmental Health Hazard Assessment (OEHHA), in its Guidance Manual for Preparation of Health Risk Assessments associated with stationary

sources, recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the maximum exposed individual resident in the Hot Spots Program and the 9 and 70- year cancer risk as supplemental information (Office of Environmental Health Hazard Assessment 2015). Since the Hot Spot Program is aimed at stationary sources and long-term exposure, and the proposed Project would neither have stationary sources nor result in long term exposure to nearby residents, the proposed Project is expected to have a less than significant impact on sensitive receptors.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**Less Than Significant Impact.** Construction of the proposed Project would result in some odors associated with diesel emissions from construction equipment. Odors from construction sources would be significant if they were to become a nuisance pursuant to SCAQMD Rule 402. To become a nuisance, odor resulting from the proposed Project would need to generate multiple valid odor complaints. Diesel odors are common in urbanized environments, and during Project construction, would be temporary and localized, and not expected to result in substantial odor impacts.

**Mitigation Measures:**

None Required.

**Air Quality Impact Conclusions:**

No significant adverse impacts to air quality are identified or anticipated, and no mitigation measures are required.

#### 4. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Check if Project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

#### Environmental Setting

The STSL is generally disturbed due to landfill activities that includes grading, landfilling of trash delivered from off-site and related heavy equipment traffic. Within the active landfill area, 17 acres of coastal sage scrub habitat has been established to the north of the scale house and landfill access road as compensation for a channel stabilization project. Dominant plants in the mitigation area include California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*) (County of San Bernardino 2019). Chaparral located adjacent to the access road is dominated by mule fat (*Baccharis salicifolia*), coyote brush (*B. pilularis*), hoary-leave ceanothus (*Ceanothus crassifolius*), sugar bush (*Rhus ovata*), scrub oak (*Quercus berberidifolia*) and California buckwheat (*Eriogonum fasciculatum*). Beyond the active landfill area and within the landfill site boundaries, vegetation is a mixture of non-native ruderal weeds with scattered patches of coastal sage scrub habitat (K. Carter personal communication 2022). In 2019, a focused survey for California gnatcatcher (*Polioptila californica*) of the mitigation area and habitat adjacent to the landfill access road was conducted (County of San Bernardino 2019). No California gnatcatchers were detected. Based on a review

of the California Natural Diversity Database (CNDDDB) that is maintained by the California Department of Fish and Wildlife (CDFW), Nevin's barberry (*Berberis nevinii*) a federally listed as Endangered and State of California listed as Endangered plant is the only plant likely to be present at the site (K. Carter personal communication 2022). A botanical survey of the landfill site conducted in the spring of 2022 concluded that Nevin's barberry is absent from the site. During the botanical survey, site conditions were noted as not noticeably changed from 2019. County biologists have noted that the landfill does not have suitable habitat for occupation by Stephens' kangaroo rat (*Dipodomys stephensi*) which is a federal and state listed as threatened species (K. Carter personal communications 2022)

An Aquatic Resources Delineation of the unnamed drainage associated with the Stockpile 3 area was completed (Tetra Tech, 2023a) (Appendix B). Plants within the unnamed drainage were noted as dominated by non-native ruderal weeds. Ruderal plants are those that are first to colonize disturbed lands and tend to be non-native invasive species. No emergent wetland plants or riparian habitat were observed. Plants on the unnamed drainage slopes were observed to be occupied by disturbed coastal sage scrub habitat. No riparian or emergent macrophytic plants were observed within the drainage. The unnamed drainage area and adjacent areas associated with the landfill has been subject to past water flow that has resulted in a deeply incised topography. The incised areas were observed to be vegetated by the same mixture of native coastal chaparral habitat mixed and non-native plants as observed in undeveloped areas of the landfill. A total of 0.91 acres of disturbed riverine habitat potentially subject to regulation as a Waters of the State was determined within the unnamed drainage. Based on the lack of clear connection to San Timoteo Wash, a perennial wash located to the east of the landfill, the unnamed drainage was determined to be isolated and not subject to Section 404 of the Clean Water Act as a Water of the U.S.

Within the Stockpile 3 project area outside the identified riverine habitat within the unnamed drainage, a total of 22.1 acres of disturbed coastal sage scrub habitat was determined to be present (Tetra Tech, Inc. 2023a). Riverine systems include all wetland and deepwater habitats contained within a channel, except for wetlands dominated by vegetation made up of trees, shrubs, persistent emergent mosses, or lichens, or habitats with ocean-derived brackish water (exceeding 0.05 percent salts, which will generally fall within the definition of an Estuarine system). Riverine systems can be divided into four subsystems.

- Tidal Subsystems where water levels and velocity varies under tidal influences though always with salinities less than 0.5 percent;
- Lower Perennial subsystems, in which low gradients result in low water velocity and a well-developed floodplain, usually with a muddy, sandy or silty substrate;
- Upper Perennial subsystem, in which higher gradients result in high water velocity, with limited floodplain development and a substrate of primarily gravel and cobbles; and
- Intermittent subsystems, in which water flows for only part of the year and forming either isolated pools or drying up completely throughout the rest of the year (Cowardin et. al. 1979).

The riverine habitat within the drainage located in the Stockpile 3 project area was observed to have signs of intermittent water flow. No perennial water flow within the drainage was observed.

### **Impact Analysis**

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporated.** The stockpile would be created in an area outside the current active portion of the landfill that has not been previously disturbed. Construction of the stockpile would require the removal of native and non-native plants that would be disposed of as green waste. A total of 0.91 acres of riverine Waters of the State were determined to be present within the unnamed drainage associated the project area. In addition, a total of 22.1 acres of disturbed coastal sage scrub habitat was observed outside the riverine habitat within the project area. Shrubs and trees present within the project area may serve as suitable habitat for nesting birds. Impacts to waters subject to regulation and nesting birds can be reduced to a less than significant level with implementation of **Mitigation Measure BIO-1**.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporated.** The Stockpile 3 project would be located in a portion of the landfill site that has a deeply incised badlands land formation and earthen materials would fill in a drainage. A total of 0.91 acres of riverine habitat located within this drainage have been identified as waters subject to regulatory authority (Tetra Tech, Inc. 2023). Project-related impacts to riverine habitat present within the project area can be reduced to a less than significant level with implementation of **Mitigation Measure BIO-2**.

- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**No Impact.** During the ARD, no vernal pools or wetlands were observed within the stockpile area (Tetra Tech, Inc. 2023a) No vernal pools or wetlands within the stockpile area were observed during the 2022 botanical surveys of the site.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**No Impact.** The stockpile would be located adjacent to an area of the site that is an active landfill and would not interfere native wildlife species or native resident or migratory wildlife corridors. The landfill is located with a fully terrestrial environment and no native resident or migratory fish are present.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** The proposed Project would be completed within the landfill site boundaries and would not conflict any local policies or ordinances protecting biological species.

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**No Impact.** The STSL is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or state habitat conservation plan.

### **Mitigation Measures**

**Mitigation Measure BIO-1:** Vegetation removal activities should be conducted outside of the nesting bird season (typically March 1 through August 31 for passerine (songbirds) and January 1 through September 15 for raptors). If vegetation removal activities must occur during the nesting season, a nesting bird survey

shall be completed by a qualified biologist within three days prior to the start of any ground disturbing activities to determine if any nesting birds occur within the project site. If nesting birds are not found within the project site, no further actions will be required. If nesting birds are observed, a buffer zone between construction activities and the nesting bird shall be established by a qualified biologist. The buffer zone shall be determined by the type of nesting bird. A typical buffer zone will be 250 feet for nesting passerine birds (songbirds) and 500 feet for nesting raptors. Due to the steep terrain and potential physical limitations for conducting nesting bird surveys, vegetation removal may best be conducted outside the nesting bird season.

**Mitigation Measure BIO-2.** Prior to ground disturbance, significant permanent direct impacts to Waters of the State shall be mitigated at a 1:1 ratio or as otherwise determined in applicable resource agency permits. Mitigation shall include preservation, creation, enhancement, and/or rehabilitation or restoration of jurisdictional waters or as otherwise determined in applicable resource agency permits. Mitigation may be completed through use of an agency-approved in lieu fee program, a mitigation bank, or applicant-proposed mitigation. For applicant-proposed mitigation, a Habitat Mitigation and Monitoring Plan may be prepared in accordance with relevant agency guidelines and approved by permitting resource agencies.

**Biological Resources Impact Conclusions:**

A potentially significant adverse impact is identified or anticipated to biological resources, and mitigation measures are required. With the implementation of **Mitigation Measures BIO-1 and BIO-2**, impacts to biological resources would be less than significant.

## 5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

(Check if Project is located in the Cultural  overlays or cite results of cultural resource review)

### Environmental Setting

A record search was conducted by the County within the Project area via the cultural resources site and Project file collection at the South-Central Coast Information Center (SCCIC), California State University at Fullerton, of the California Historical Resources Information System on March 3, 2019. An updated record search of the Project site via the SCCIC was completed on December 8, 2022 (Record Search File No. 24334.10462) (Tetra Tech, Inc. 2023b). The results of both searches are summarized here. As part of this records search, the SCCIC database of survey reports and overviews was consulted, as well as documented cultural resources, cultural landscapes, and ethnic resources. Additionally, the search included a review of the following publications and lists: California Office of Historic Preservation Historic Properties Directory, National Register of Historic Places (NRHP), California Office of Historic Preservation Archaeological Determinations of Eligibility, California Inventory of Historical Resources/California Register of Historic Resources (CRHR), California Points of Historical Interest, and California Historical Landmarks. A literature search of ethnographic information, historical literature, historical maps and plats, and local historic resource inventories was also conducted. Both record searches focused specifically on the proposed Project, and combined, provide a 1-mile search radius centered on the Project site (Tetra Tech, Inc. 2023b).

The combined SCCIC record search and desktop review (i.e., historic aerial imagery and map review, literature, etc.) did not identify any potential or previously recorded cultural resources within the Project site. The SCCIC records search did identify two previously conducted reports that overlap with the Project: SB-00765 (NADB-R – 1060765): *Paleontological, Archaeologic, Historic, and Biologic Resources Assessment: Tract 10272, San Timoteo Canyon Area, San Bernardino County, California* by the San Bernardino County Museum Association in 1979; and SB-03136 (NABDR-1063136): *Cultural Resource Assessment of the San Timoteo Landfill Expansion Project, San Bernardino County, California* by Tom Dodson & Associates in 1995. Report SB-00765 overlaps with less than ten percent of the Project site and SB-03136 (NABDR-1063136) and completely overlaps with the Project site.

The prehistory of Southern California is defined by different temporal periods and cultural complexes based on cross-dating of distinct artifact types, cultural patterns, and radiocarbon dates, if available. The cultural chronology of human occupation is characterized by changing settlement and subsistence strategies typically in response to environmental conditions, available resources, and population fluctuations. There is no single cultural historical framework that encompasses the entire prehistoric record for Southern California. Several key archaeologists have contributed to the development and chronological framework throughout regions of southern California and a generalized cultural sequence is summarized here. Paleo Indian Period/terminal Pleistocene (13,000 Before Present [BP] to 9,000 BP): generally characterized by small mobile groups that utilized tools such as large, fluted points, crescents, domed scrapers, and flake tools of local chert. Ground

stone is typically absent or rare. The Archaic Period (9,000 BP to 1,500 BP): is characterized by a transition from large projectile point tool use to a period of extensive milling stone and core tool use and populations become semi-sedentary. The Late Prehistoric Period (1,500 BP to 1769 BP): the Late Prehistoric period is defined by regional local patterns of change, an increase of human population, resource intensification, sedentism, associated expansion of cultural practices, food storage, and the introduction of the bow and arrow. The Late Protohistoric Period (1790 – post): this period is characterized as the ethnographic territory of the Cahuilla at the time of Spanish contact and post. The Project is within the ancestral territory traditionally inhabited by the Cahuilla. The Cahuilla occupied the central area of Southern California (see Section 18 Tribal Cultural Resources for discussion).

European settlement began in 1771, when Spanish missionaries began to settle along the California coast and adjacent inland areas. Following the Mexican American War and secularization of the nearby missions in 1834, the region was transferred to private landowners (ranchos) who established a primary economy of cattle ranching. Specifically, the former footprint of the Rancho San Bernardino is within the Project and surrounding area to the north and northeast. The rancho was used for agriculture and cattle raising.

After the fall of the rancho system (post 1848), the Town of San Bernardino was established in 1851 by Mormon colonists, and the County was formed two years later. The City of Redlands was founded in 1881. During this time, railway transportation routes were established. In the early twentieth century, agriculture was the primary economy, and many citrus groves (typically oranges) dotted the region. After World War II, the citrus groves were soon replaced by residential and commercial development.

Regionally, the Project lies within the northern reach of the San Timoteo Badlands, a northwest to southeast trending mountain range. The topography consists of steep (30 to 50 percent slopes) foothills. San Timoteo Canyon and an intermittent creek by the same name is approximately one mile to the east. Sediments within the Project area consist of the San Timoteo Formation (early Pleistocene and Pliocene in age). Early Pleistocene and Pliocene deposits are considered unlikely to contain prehistoric archaeological deposits. Soils within the Project area consist of Saugus sandy loam (30 to 50 percent slopes) consisting of sandy loam and loam to bedrock at approximately 40 to 44 inches. Based on the combined negative desktop study result, the environmental conditions, and results of County tribal consultation (see Section 18), the Project site is assessed as having an overall low sensitivity for cultural resources.

## **Impact Analysis**

- a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

**No Impact.** The results of the SCCIC desktop study determined that the Project site does not contain any known historic resources as defined by the CEQA Guidelines. Therefore, there would be no impact to any historical resources from the proposed Project.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less Than Significant with Mitigation Incorporated.** Results of the SCCIC records search, desktop study, and tribal consultation (see Section 18) revealed there is a low potential for the Project to impact previously unknown archaeological deposits, however, since the proposed Project includes ground disturbance, there remains the potential that unanticipated archaeological resources could be unearthed. If unknown archaeological resources are discovered during Project construction, significant impacts could occur. To protect archaeological resources and potential unanticipated discoveries associated with archaeological resources, **Mitigation Measures, CR-1, CR-2, and CR-3** (also see Section 18) were incorporated into this

Project. Therefore, Project impacts would be less than significant with the mitigation incorporated, and no further analysis is required.

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant.** Results of the SCCIC records search, desktop study, and tribal consultation (see Section 18) revealed there are no known burials or cemeteries within or adjacent to the Project site. Existing regulations require that if human remains and/or cultural items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the San Bernardino County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the Most Likely Descendent (MLD) as stipulated by California PRC, Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Any discovery of human remains would be treated in accordance with Section 5097.98 of the PRC and Section 7050.5 of the Health and Safety Code. Therefore, with compliance with existing regulations and **Mitigation Measure CR-3**, Project impact would be less than significant (see CR-3).

**Mitigation Measures:**

**Mitigation Measure CR-1:** Inadvertent Discovery of Archaeological Resources During Construction – During Project-level construction, should surface or subsurface archaeological resources be discovered, all activity within 60 feet of a “find” shall stop and a qualified archaeologist meeting the Secretary of Interior Standards for archaeology shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1 (see Section 18), regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. The archaeologist and YSMN shall be afforded the necessary time to assess the find. If any find is determined to be significant, the archaeologist shall develop a Monitoring and Treatment Plan (Plan), in consultation with the County and YSMN (see CR-2 below). Construction activities may continue outside the buffer zone on other areas of the Project site during evaluation and treatment of the resource. Public agencies must, when feasible, avoid damaging effects to any tribal cultural resource. Pub. Res. Code § 21084.3 (a). If the lead agency determines that a Project may cause a substantial adverse change to a tribal cultural resource, mitigation measures should be identified through consultation with YSMN and provided in the Plan. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include but shall not be limited to: (i) Project re-route or re-design; (ii) Project cancellation; or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and YSMN. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

**Mitigation Measure CR-2:** If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall

develop a Plan, the drafts of which shall be provided to the YSMN for review and comment, as detailed within TCR-1 (see Section 18). The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly. The Plan will include monitoring protocols and other appropriate mitigation.

**Mitigation Measure CR-3:** If human remains or funerary items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease within a 100-foot buffer of the find, and the San Bernardino County Coroner would be contacted immediately. Any discovery of human remains would be treated in accordance with Section 5097.98 of the PRC and Section 7050.5 of the Health and Safety Code.

**Cultural Resources Impact Conclusions:**

Potentially significant adverse impacts are identified or anticipated to cultural resources, and mitigation measures are required. With the implementation of **Mitigation Measures CR-1, CR-2, and CR-3**, impacts to cultural resources would be less than significant.

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## 6. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

### Environmental Setting

The STSL is in the southwest corner of the City of Redlands (City). Much of the City is devoted to residential, parks, agriculture, and resources preservation. Areas in the far west of the City are allocated to industrial uses. Primary energy use is associated with on-road transportation, residential energy use, commercial energy use, and stationary sources sectors (San Bernardino Council of Governments 2021).

### Impact Analysis

- a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

**Less Than Significant.** During excavation of soil and creation of the stockpile, equipment using carbon-based fuels would be used. However, construction would be temporary and in compliance with SCAQMD regulations, which includes keeping equipment maintained for optimal performance so as not to waste fuel. The Project would not require excavated soil be transported off site, which would require additional fuels for transport. In addition, the Project would not change the level of activity or operations at the STSL from current level. A less than significant impact would occur.

- b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

**Less Than Significant Impact.** The San Bernardino County Council of Governments, in partnership with 25 partnership cities in the County (collectively called the Partnership), approved the San Bernardino County Regional Greenhouse Gas Reduction Plan in 2021 (San Bernardino Council of Governments 2021). This Plan compiled a greenhouse gas (GHG) emissions inventory and an evaluation of reduction measures that could be adopted by the Partnership cities and the County to address State of California requirements for reducing GHG emissions. As discussed for Item 6.a), the proposed stockpile Project would use equipment that uses carbon-based fuels but that the impact would be small and temporary and would not result in any changes to landfill operations. The Project would not interfere with the goals of the Plan.

### Mitigation Measures:

None required.

### Energy Impact Conclusions:

No significant adverse impacts related to energy are identified or anticipated and no mitigation measures are required.

## 7. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury death involving?				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?				X
iv. Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

(Check if project is located in the Geologic Hazards  or Paleontologic Resources  Overlay District):

### Environmental Setting

Southern California is a seismically active region. The San Timoteo SFL is in proximity to several active and potentially active faults. Active faults are defined as those that have experienced surface displacement within the Holocene period (approximately the last 11,000 years). The San Jacinto Fault that is capable of producing up to  $M_w$  7.5 earthquakes, is located approximately 500 feet south of the San Timoteo SFL. The San Andreas Fault that is capable of producing up to  $M_w$  8.2 earthquakes is located approximately 8 miles north of the site. As a result of being between these two faults, the region the San Timoteo SFL is located within is being stretched causing a series of faults known as the Crafton Hills fault zone (County of San Bernardino 2012).

The State of California prohibits construction of buildings used for human occupancy on top of active faults. To that end, the State Geologist established regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and to issue appropriate maps. The closest Alquist-Priolo Special Study Zone is just southeast of the landfill site and is part of the San Jacinto Fault zone. The

law only addresses the hazard of surface rupture and is not directed toward other earthquake hazards (City of Redlands 2017).

The San Timoteo Formation underlies the area of the landfill and consists of poorly interbedded non-marine, sand, gravelly sand, sandy gravel, silt, clayey sand, and clay (County of San Bernardino 2014). The Formation is semi-consolidated and locally moderately cemented and is estimated to underlie the landfill to a depth of at least 440 feet below ground surface (IT Corporation, 1989). The San Timoteo Formation is inferred to lie unconformably upon a crystalline bedrock complex (County of San Bernardino 2014). San Timoteo Canyon, which runs along San Timoteo Canyon Road past the entrance to the landfill, is carved in part through the San Timoteo Formation. This Formation weathers to form the extensive badlands topography which is typical of San Timoteo Canyon (City of Redlands 2017).

The canyon areas in the City are dominated by soils of sedimentary composition, the Saugus, San Emigdio series and San Timoteo series. The Saugus Sandy Loam soil (ShF), which underlies the landfill, is characterized by deep, well-drained soils, and moderate to high slopes. These soils have a low potential for liquefaction (City of Redlands 2017).

A Geologic Hazards Overlay map is part of the San Bernardino County General Plan, Land Use Plan. This map shows an Earthquake Fault Zone boundary just southeast of the landfill site, which corresponds with the Alquist-Priolo Zone discussed previously. The landfill site has a moderate to high level of landslide susceptibility. (San Bernardino County Assessor 2023, Map FH31C-20100309) The STSL has been in operation since 1978. As regulations to address slope stability and seismic performance requirements have changed, changes have been made at the landfill in terms of how the waste is placed, covered, and maintained (County of San Bernardino 2022).

Paleontological resources, including fossils, have also been found in the Redlands area, and there is potential for paleontological finds to occur in remaining, unexcavated open space areas within and adjacent to the City. Paleontological resources are the fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. These resources are found in geologic strata conducive to their preservation, typically sedimentary formations. The San Timoteo Formation is known to have yielded fossiliferous materials (City of Redlands 2017). The San Timoteo Formation has been identified by the San Bernardino County Museum (SBCM) as having the potential to yield significant nonrenewable paleontological resources and significant fossil remains.

### **Impact Analysis**

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
  - i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

**Less Than Significant.** The nearest Alquist-Priolo Earthquake Fault Zone is just southeast of the STSL site. However, no structures for human occupancy will be constructed as part of the stockpile Project even though the Project site would be subject to strong seismic ground-shaking during a sizeable earthquake.

ii. *Strong seismic ground shaking?*

**Less Than Significant.** The proposed stockpile Project would result in a temporary increase in the number of workers at the landfill site, but their work would be outside and risks to life and health would be less than significant. Normal operation would not change with the proposed Project.

iii. *Seismic related ground failure, including liquefaction?*

**No Impact.** The soils at the San Timoteo SLS have a low potential for liquefaction and the proposed Project would not increase hazards for seismic-related ground failure. No impacts would occur.

iv. *Landslides?*

**Less Than Significant.** Soils and slopes at the STSL proposed Project are subject to landslides but prior to the start of excavation for the Project, the proposed stockpile area would be grubbed and graded, thereby removing the risk for landslides in that area. This would be a less than significant impact.

b) *Result in substantial soil erosion or the loss of topsoil?*

**Less Than Significant.** The proposed Project involves the excavation of soil from one part of the landfill and transporting it to another location to be stockpiled for future use. As discussed in the detailed Project Description, once the stockpile has been created, a perimeter V-Ditch would be built to capture stormwater flow. In addition, the stockpile would be revegetated to minimize erosion. This would result in a less than significant impact.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant.** As discussed above for Items 7.a) iii and 7.a) iv, soils at the STSL have a low potential for liquefaction and the proposed Project would not increase hazards for seismic-related ground failure, and prior to the start of excavation for the Project, the proposed stockpile area would be grubbed and graded, thereby removing the risk for landslides in that area. This would result in a less than significant impact.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

**No Impact.** Soils at the STSL have been classified as having a sandy loam texture (United States Department of Agriculture 1980). These soils are not expansive. The proposed Project would not require construction or expansion of the landfill footprint or infrastructure where the expansive nature of soils would be a consideration.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** The proposed Project would not require construction at the STSL that would include septic tanks or alternative wastewater disposal systems.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less Than Significant With Mitigation Incorporated.** The excavation of native materials in the San Timoteo Formation has the potential to have adverse impacts on significant nonrenewable paleontological resources. In addition, the stockpile site would require grubbing of all existing vegetation and preparation of the ground to receive the excavated material. Implementation of **Mitigation Measure GEO-1** would reduce impacts to paleontological resources to a less than significant level.

**Mitigation Measure:**

**Mitigation Measure GEO-1:** If any paleontological resources are unearthed during grading or excavation, the County shall halt all activity in the vicinity of the discovery and contact the Earth Sciences Division of the SBCM to investigate. The County shall avoid the discovery area until the SBCM staff indicates it is acceptable to reenter. Recommendations of the SBCM regarding collection and curation shall be implemented.

**Geology and Soils Impact Conclusions:**

No significant adverse impacts related to geology or soils are identified or anticipated and no mitigation measures are required. However, potentially significant adverse impacts are identified for paleontological resources, and a mitigation measure is required. With the implementation of **Mitigation Measure GEO-1**, impacts to paleontological resources would be less than significant.

## 8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

### Background

Significant changes in global climate patterns have been associated with global warming, an average increase in the temperature of the atmosphere near the Earth’s surface, attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes while others are anthropogenic (i.e., created and emitted solely through human activities).

Regulated GHGs consist of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>) (California Health and Safety Code 38505). GHGs are commonly quantified in the equivalent mass of CO<sub>2</sub>, denoted CO<sub>2</sub>e, which takes into account the global warming potential of each individual GHG compound.

Carbon dioxide enters the atmosphere through the process of burning fossil fuels (coal, natural gas, and oil), solid waste, trees, wood products, and as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle. Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills. Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste. HFCs, PFCs, SF<sub>6</sub>, and NF<sub>3</sub> are synthetic, powerful GHGs that are emitted from a variety of industrial processes. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases (“High GWP gases”). HFCs and PFCs are sometimes used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). SF<sub>6</sub> is employed in electricity transmission and distribution and semiconductor manufacturing. NF<sub>3</sub> results from semiconductor manufacturing processes (California Air Resources Board 2022). The most common GHG that results from human activity is CO<sub>2</sub>, followed by CH<sub>4</sub> and N<sub>2</sub>O.

**Impact Analysis**

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less Than Significant.** GHG thresholds are not established for temporary sources, and there are no other federally, statewide, or regionally established significance thresholds to support impact assessments of GHG emissions from land use Projects. Instead, the state has pursued other initiatives to meet GHG reduction goals. Some of those initiatives include the pursuit of low-emission vehicle programs, low carbon fuel standards, heavy-duty vehicle GHG regulations, and renewable energy technologies (e.g., wind and solar power).

On December 5, 2008, pursuant to state law (i.e., CEQA Guidelines 15064.7) the SCAQMD Governing Board adopted a proposal for an interim GHG significance threshold for Projects where the SCAQMD is lead agency. The significance threshold is applicable for stationary sources and can be used for determining significant impacts for proposed Projects (South Coast Air Quality Management 2008b). Under the interim significance thresholds, Projects can emit up to 10,000 metric tons (MT) per year of CO<sub>2</sub>eq before being deemed as having significant air quality impacts. While this threshold is for stationary sources, it is used as a reference to gage the level of impact that construction emissions may have on the environment.

GHGs from the proposed Project would result primarily from off-road equipment used for site preparation, soil movement within the landfill, and concrete delivery trucks. Construction emissions were, therefore, calculated using CalEEMod. CalEEMod output results are included as Appendix A. The total calculated GHG construction emissions, reference thresholds, and assessment of significance are summarized in Table 4. As presented in Table 4, GHG emissions from construction activities do not exceed reference significant thresholds, and, therefore, represent a less than significant impact.

Table 4 Project GHG Construction Emissions

Calendar Year	GHG (MTCO <sub>2</sub> eq/yr)
2023	1,464
2024	6,515
2025	6,487
2026	4,290
Total	18,393
Average Annual Emissions Amortized over 30 years	613
Significance Yearly Threshold	10,000
Significant?	No

Notes:  
 GHG: greenhouse gas  
 MTCO<sub>2</sub>eq/yr: metric tons of carbon dioxide equivalent per year

No GHG emissions are anticipated to result from the operation of the proposed Project. Operation activities would be the same as to existing conditions such that additional operational emissions would not result from the construction of the proposed Project. The proposed Project site is a landfill and would continue to be used as a landfill with or without implementation of the proposed Project.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Less Than Significant.** GHG emissions would conflict with applicable plans, policy or regulations if the proposed Project conflicts with any of the plans, policies or regulations adopted for the purpose of reducing GHG emissions in the City. The current applicable GHG plan is the City of Redlands Climate Action Plan (CAP). The CAP is designed to help the City achieve its part of the GHG goals addressed in the California Climate Change Scoping Plan (Scoping Plan), which lays out California's strategy for meeting the GHG emission reduction goals of Assembly Bill (AB) 32. AB 32 was signed into law on September 27, 2006, and it requires the CARB to develop and implement regulations and initiatives to reduce GHG emissions, as stipulated in Executive Order S-3-05, to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. GHG emission reduction goals are primarily based on strategies aimed at reducing both energy usage and pollution. Since the proposed Project would not result in an increase of either population (which requires energy) nor emission sources, and does not require a general plan amendment, it is consistent with, and will have a less than significant impact on the implementation of the CAP, the State's Climate Change Scoping Plan.

**Mitigation Measures**

None Required

**Greenhouse Gas Emissions Impact Conclusions:**

No significant adverse impacts are identified or anticipated from Project-related GHG emissions, and no mitigation measures are required.

## 9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk loss, injury or death involving wildland fires?			X	

### Environmental Setting

Hazardous materials/hazardous waste are materials that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Solid waste delivered to the STSL can generally be classified as residential, commercial, agricultural, industrial, and mixed municipal. In addition, demolition and construction debris and inert solid wastes are also received at the site. (County of San Bernardino 2022). The Stockpile 3 project area is undeveloped, and no landfilling activities have occurred within this area. The project area would be used to stockpile excavated earthen materials that may be used in the future as final landfill cover. No known hazardous materials/hazardous wastes have been deposited in the project area.

### Impact Analysis

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less Than Significant.** During excavation and construction of the stockpile, equipment would require small amounts of potentially hazardous materials such as fuels and lubricants on a regular basis. Some of these materials would be transported to the site by permitted vendors who would be required to obtain permits and are subject to inspection to ensure compliance with all relevant state and federal regulations governing the transportation of hazardous materials. Standard best management practices (BMPs) for handling and storage of hazardous materials, as well as proper storage and clean-up of minor spills or leaks, would be used to minimize the potential for release of hazardous materials and to ensure that any accidental hazardous materials released would be cleaned up and disposed of as appropriate. When not in use, equipment would be parked outside drainage areas to prevent accidental leaks from entering the unnamed drainage associated with the project area. This would be a less than significant impact and no mitigation measures are required.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Less Than Significant.** As discussed for Item 9.a), some potentially hazardous materials such as fuels and lubricants would be used on a regular basis. If these materials were to spill, it could result in a significant hazard to workers or the public. However, Standard BMPs for handling and storage of hazardous materials, and for clean-up of minor spills or leaks, would be used to ensure any accidental hazardous materials released would be cleaned up and disposed of as appropriate. An industrial SWPPP is in place for activities at the STSL. Prior to ground disturbance for the Stockpile 3 project, the project contractor will be required to prepare an erosion control plan in compliance with the STSL SWPPP that will identify BMPs for handling and storage of hazardous materials used during project implementation. This would be a less than significant impact and no mitigation measures are required.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**No Impact.** There are no schools within one-quarter mile of the STSL.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**No impact.** The STSL is not a hazardous materials site as identified by Government Code Section 65962.5. No impacts would occur.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact.** The STSL is not located near an airport. The closest airports to STSL are the Redlands Airport, located approximately 9 miles to the northeast; and the San Bernardino International Airport, located approximately 10 miles to the northwest. The proposed increase in solid waste at STSL would not cause a safety hazard to people residing in the area due to the presence of an airport.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** The proposed Project would not interfere with any adopted emergency response plans or emergency evacuation plans because it would not require closing off any streets and access to the site is adequate. No mitigation is required.

- g) *Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

**Less Than Significant.** Personnel at the STSL would continue to manage fire risks on the landfill site. Refer to Section 20, Wildfire, for additional discussion regarding wildfire risks and management related to the Project. Impacts would be less than significant, and no mitigation is required.

**Mitigation Measure**

None required.

**Hazards and Hazardous Materials Impact Conclusions**

No potentially significant adverse impacts are identified or anticipated for hazards and hazardous materials and no mitigation measures are required]

## 10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?				
I. Result in substantial erosion or siltation on – or off-site;		X		
II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site;		X		
III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	

### Environmental Setting

The unnamed drainage associated with the Stockpile 3 project area originates immediately adjacent to Refuse Road within the landfill and terminates near the northeast within the landfill boundary. The unnamed drainage is one of a series of extensively eroded ravines with steep slopes found at the landfill. While no natural stream courses were identified by United States Geological Survey or the United States Fish and Wildlife Survey within the drainage (United States Geological Survey, 2021; United States Fish and Wildlife Service, 2023), an ARD conducted recently at the site identified a total of 0.91 acres of riverine habitat present within the unnamed drainage. Stormwater flow that originates within the lowest portions of the drainage flows from the highest point in the southwestern portion of the drainage to the lowest point to the northeast where the drainage flattens out. No evidence of stormwater flow flowing beyond the drainage was observed (Tetra Tech. Inc. 2023b).

Groundwater quality at the landfill is monitored using a series of groundwater monitoring wells located up gradient and down gradient from the landfill. (County of San Bernardino 2018). No groundwater monitoring wells are preset within the project area.

### **Impact Analysis**

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

**Less Than Significant with Mitigation Incorporated.** No groundwater resources would be required for the Project. There is the potential during excavation and creation of the stockpile for sediments originating in the Project area to be carried downstream, especially during a storm event. To reduce these potential impacts to surface water quality, prior to Project construction, an erosion control plan in compliance with the STSL SWPPP will be prepared that will identify BMPs for erosion control during project implementation. The County then requires implementation of these measures for a Project to comply with the area-wide permit requirements. A project-specific erosion control plan will include BMPs to reduce construction-related impacts to surface water quality. Implementation of **Mitigation Measure HWQ-1** would reduce impacts to water quality to a less than significant level.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

**Less than Significant.** One permitted onsite well provides non-potable water used for dust suppression at the landfill. Bottled water is provided as drinking water for workers at the landfill (County of San Bernardino Department of Public Works 2022). Implementation of the proposed Project would require the use of additional groundwater for dust suppression during construction. This would be similar to what already occurs at the landfill and would be a temporary impact. This would be a less than significant impact and no mitigation would be required.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*
- I. *Result in substantial erosion or siltation on – or off-site;*
  - II. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;*
  - III. *Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or*

**Less Than Significant with Mitigation Incorporated.** The proposed Project entails the excavation of over 2.6 million cubic yards of material and moving that material to another location at the landfill and creating an engineered stockpile. The upper level of the stockpile would be at the level of the landfill access road and could also be used to stage equipment. Once the stockpile has been created, a perimeter V-ditch would be built that surrounds the down-gradient portion of the stockpile. Stormwater flow originating on the stockpile would be directed to the V-ditches through overland flow from the stockpile and from two down drains also constructed on the stockpile. The stockpile would be revegetated using a hydroseeding technique with an approved native plant seed mix. As discussed for Item 10.a, the Project would require an erosion control plan consistent with the STSL SWPPP to be prepared and then approved by RWQCB. The erosion control plan would include BMPs to reduce construction-related impacts to surface water quality. Implementation of **Mitigation Measure HWQ-1** would reduce impacts to surface water to a less than significant level.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

**No Impact.** Based on a review of the Flood Insurance Rate Map Number 06071C8714H for the STSL, the landfill is located in Flood Zone X (Federal Emergency Management Act 2008). Flood Zone X is defined as an area determined to be outside of a 0.2% annual chance of floodplain (500-year flood zone). In addition, the landfill is not in an area subject to tsunamis or seiches. No impacts would occur.

e) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

**Less Than Significant.** Refer to the discussion for Item 10.b. The amount of additional groundwater needed for dust suppression for the proposed Project would not be significant and the demand for it would be temporary. Therefore, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. This would be a less than significant impact and no mitigation would be required.

### **Mitigation Measures**

**Mitigation Measure HWQ-1:** Prior to Project implementation, a project-specific erosion control plan will be prepared that will identify BMPs to be implemented during construction to prevent introduction of pollutants into the channel that may cause a degradation of surface water.

### **Hydrology and Water Quality Impact Conclusions**

Potentially significant adverse impacts are identified for hydrology and water quality, and a mitigation measure is required. With the implementation of **Mitigation Measure HWQ-1**, impacts to water quality and surface water would be less than significant.

## 11. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

### Environmental Setting

The STSL is located within the incorporated limits of the City, although it is managed by the County. The STSL site is zoned as Agriculture by the City, while the General Plan designation for the site is Public/Institutional.

### Impact Analysis

a) *Physically divide an established community?*

**No Impact.** The STSL has been a permitted landfill since 1978. The proposed Project would not change the use of the site, or the surrounding area. The Project would not divide an established community.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact.** Implementation of the proposed Project would not change the use of the site as a landfill and, therefore, would not conflict with any existing land use plan, policy, or regulation.

### Mitigation Measures

None required.

### Land Use and Planning Impact Conclusions

No potentially significant adverse impacts are identified or anticipated for land use and no mitigation measures are required.

## 12. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

### Environmental Setting

The STSL is located in an area identified by the California Geologic Survey that contains known or inferred mineral occurrences of undetermined mineral significance (City of Redlands 2017). While areas to the north of the landfill have been identified as having mineral deposits that meet a certain criterion for value and marketability, no known deposits have been observed during earthwork at the landfill.

### Impact Analysis

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

**No Impact.** The movement of earthen material from Unit 2, Phase 5 to the stockpile location would not impact known mineral resources.

- b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**No Impact.** During use of the landfill, earthen materials have been excavated for use as daily cover and to create cells to deposit refuse. No locally important mineral resources have been identified. Movement of earthen material from Unit 2, Phase 5 to the stockpile location would not impact known mineral resources.

### Mitigation Measures

None required.

### Mineral Resources Impact Conclusions:

No potentially significant adverse impacts are identified or anticipated to mineral resources, and no mitigation measures are required.

### 13. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration of groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

#### Environmental Setting

Noise levels of facility equipment are controlled by maintaining proper mufflers on the equipment at all times. Operators and other field personnel wear approved ear protection devices while operating or working near facility equipment. There have been no documented noise complaints at the landfill (County of San Bernardino 2022). As part of the increase in permitted tonnage and maximum vehicles in 2012, a noise analysis due to the proposed increases was prepared (County of San Bernardino 2022). The resulting noise analysis determined that the increased tonnage and resulting traffic would raise noise levels at the nearest sensitive receptors by up to 1 dBA CNEL, which is likely imperceptible to the public driving along San Timoteo Canyon Road or workers and residences found in the area adjacent to and northeast of the landfill. Excavation of earthen materials from the Unit 2, Phase 5 area and placed in the stockpile location would be on the opposite side of the landfill from where the public and trash conveyances would be accessing the landfill (Figure 2).

#### Impact Analysis

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Less Than Significant.** Excavation of earthen materials from the Unit 2, Phase 5 area, and placement in the stockpile location, would be on the opposite side of the landfill from where the public and contract trash disposers would be accessing the landfill. Closed Unit 1 of the landfill is an elevated landform that physically separates the proposed Project area and the area of the landfill actively being used. Users of the landfill would use a temporary haul road located on the western side of the landfill and the Project area would be completely avoided. Noise generated by earth moving equipment would not be perceived by public users or trash conveyances accessing the landfill above the ambient conditions associated with the active landfill.

- b) *Generation of excessive groundborne vibration of groundborne noise levels?*

**Less Than Significant.** With the proximity of the Project area on the opposite side of the active portion of the landfill, groundborne vibration generated by earth moving equipment is not likely to be perceived by public

users or trash conveyances accessing the landfill above the ambient conditions associated with the active landfill.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

**No Impact.** The STSL is not located within a two-mile radius of a public airport or public use airport (County of San Bernardino Department of Public Works 2022). The closest airports to the landfill are the San Bernardino International Airport and the Redlands Municipal Airport which are over 10 miles to the northwest and nine miles to the northeast of the site, respectively.

### **Mitigation Measures**

None

### **Mineral Resources Impact Conclusions**

No potentially significant adverse impacts are identified or anticipated from Project-generated noise, and no mitigation measures are required.

## 14. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

### Environmental Setting

The STSL is located in an area designated as a Public Facility and is surrounded by lands that are undeveloped hillsides, terrain, and landscaping nurseries. There are no industrial uses found within one mile of the landfill.

### Impact Analysis

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact.** Excavation of earthen materials from Unit 2, Phase 5 to be deposited in the stockpile area would allow additional areas of the landfill to be used but would not change the amount of waste brought to the site on a daily basis and would not induce a direct or indirect unplanned population growth in the area.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The proposed Project would be completed by the existing workforce at the landfill or other local workers. No housing for that workforce would be needed. The Project would be completed within an active landfill site boundary and no residences or people would be displaced.

### Mitigation Measures

None required.

### Mineral Resources Impact Conclusions

No potentially significant adverse impacts are identified or anticipated to populations or housing, and no mitigation measures are required.

## 15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?				X
ii. Police protection?				X
iii. Schools?				X
iv. Recreation/Parks?				X
v. Other public facilities?				X

### Environmental Setting

**Fire Protection.** The STSL has permits issued by the San Bernardino County Fire Department (Special Handler Permits and a Hazardous Waste Generator Permit). The scale house and landfill equipment are equipped with fire extinguishers for extinguishing minor fires. Landfill equipment and vehicles are frequently cleaned to remove oil and grease buildup, and debris and dust from under carriages and engine compartments. Any fire occurring accidentally on the landfill is extinguished by landfill personnel using soil and the water truck. The City of Redlands Fire Department would be contacted if a fire occurred that could not be controlled by on-site personnel and equipment. Redlands Fire Station 262, located at 1690 Garden Street, Redlands, California 92373, located 2.7 miles from the landfill, would be the closest fire station that could respond in the event of a fire emergency.

Three water tanks are located on site to provide water for fire, dust control, and landscape irrigation purposes (County of San Bernardino Department of Public Works 2022). The landfill scale house, landfill vehicles, and landfill equipment, are equipped with fire extinguishers for extinguishing minor fires. Any minor fire occurring on the landfill would be extinguished by landfill personnel using cover soil. Also, a water truck is available to assist with any fire emergency. All plants that could be fuel for a wildfire would be cleared from the stockpile site. For the Project, two additional water trucks would be used for dust suppression and would assist for fire emergencies at the Project site and landfill if needed. The City of Redlands Fire Department would be alerted for assistance for fire emergencies beyond the capability of site personnel and equipment. The landscaping associated with the landfill is inspected semi-annually for maintenance parameters that also include weed control, reseeding, fire control, and rodent control.

**Police Protection.** Unauthorized access to the landfill is controlled by the gate at the landfill entrance and by perimeter fencing along the north side of the entrance road. The surrounding topography around other areas of the landfill also restricts access to the site. The entrance gate is locked during non-operating hours (County of San Bernardino Department of Public Works 2022). The Redlands Police Department location that would

likely provide police services at the landfill is located at 1150 Brookside Avenue, Redlands, California 92373 and is located 1.5 miles north of the landfill.

*Schools.* The San Timoteo SLF is an active landfill site. No schools are located at the site. No schools are located in proximity to the landfill. The closest school to the landfill is Smiley Elementary School, 1210 West Cypress Avenue, Redlands, California 92373 located approximately two miles to the northeast of the landfill.

*Recreation/Parks.* The STSL is an active landfill site. No recreation/parks are located at or in the immediate vicinity of the landfill. The Carriage Trail that roughly parallels much of San Timoteo Canyon Road is managed by the San Timoteo Nature Sanctuary and is located within 0.5 miles to the east of the landfill. Prospect Park is the closest park to the landfill and is located two miles to the northeast at 1352 Prospect Drive, Redlands, California 20372

*Other Public Services.* The STSL is a public landfill. No other public services are located within the general area of the landfill.

### **Impact Analysis**

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Recreation/Parks, Other public facilities?*

**No Impact.** Excavation of earthen material from Unit 2, Phase 5, and creation of the stockpile, would not require an increase in services provided by the City of Redlands Fire Department or Police Department. Existing fire prevention measures at the landfill would extend to Project activities. The Project would be located within the secured landfill site and will not require extra security measures. The Project would not require construction of new schools, recreation/park facilities, or other public services.

### **Mitigation Measures**

None required.

### **Mineral Resources Impact Conclusions**

No potentially significant adverse impacts are identified or anticipated to public services, and no mitigation measures are required.

## 16. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

### Environmental Setting

The STSL is an active landfill site. As identified in Section 15, no recreation/parks are located at or in the immediate vicinity of the landfill. The Carriage Trail that roughly parallels much of San Timoteo Canyon Road is managed by the San Timoteo Nature Sanctuary and is located within 0.5 miles to the east of the landfill. Prospect Park is the closest park to the landfill and is located two miles to the northeast at 1352 Prospect Drive, Redlands, California 20373.

### Impact Analysis

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**No Impact.** Excavation of earthen material from Unit 2, Phase 5, and creation of the stockpile, would not cause an increase in use of existing recreation facilities.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**No Impact.** Excavation of earthen material from Unit 2, Phase 5, and creation of the stockpile, would not require the construction or expansion of recreation facilities.

### Mitigation Measures

None required.

### Mineral Resources Impact Conclusions

No potentially significant adverse impacts are identified or anticipated to recreation facilities, and no mitigation measures are required.

## 17. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

### Environmental Setting

Senate Bill 32 requires California to reduce GHG emissions below 1990 levels by 2030 and Executive Order B-16-12 provides a target rate of 80 percent below 1990 emissions levels for the transportation sector by 2050. The transportation sector has three means of reducing GHG emissions: increasing vehicle efficiency, reducing fuel carbon content, and reducing the amount of vehicle miles (Office of Planning and Research 2018). The California Air Resources Board (CARB) has provided a path forward for achieving these emissions reductions from the transportation sector in its 2016 Mobile Source Strategy. CARB determined that it will not be possible to achieve the State’s 2030 and post-2030 emissions goals without reducing Vehicle Miles Traveled (VMT) growth. It has been concluded that to achieve the State’s long-term climate goals, California needs to reduce per capita VMT (Office of Planning and Research 2018). This can occur under CEQA through VMT mitigation. Many agencies use “screening thresholds to quickly identify when a Project should be expected to cause a less-than-significant impact without conducting a detailed study. Many local agencies have developed screening thresholds to indicate when detailed analysis is needed (Office of Planning and Research 2018). Absent substantial evidence indicating that a Project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or General Plan, Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact (Office of Planning and Research 2018).

### Impact Analysis

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**No Impact.** During construction of the Project, there would be a temporary increase in traffic from workers traveling to the site plus equipment and materials being delivered to the site. This minor, temporary increase in traffic to an area that is largely undeveloped, would not conflict with the City ordinances that address transportation with the city limits.

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

**Less Than Significant.** During construction of the proposed Project, it is anticipated that less than 110 trips per day would be generated. During site preparation/grubbing, an estimated total of 10 trips per day for workers and equipment/material deliveries would occur. During earth movement and grading, an estimated total of 44 trips per day for workers and equipment/material deliveries would occur. During construction of the stormwater features, an estimated total of 10 trips for workers and equipment/material deliveries occur (Appendix A).

c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

**No Impact:** Existing roads at the landfill would be used to access the Project site. No new roads would be needed and no hazards due to geometric design features or incompatible uses would occur.

d) *Result in inadequate emergency access?*

**No Impact.** The Project would be completed entirely within the landfill and would not cause inadequate emergency access to either the landfill or adjacent areas to the site. A temporary road on the western side of the landfill would allow the public and trash conveyor contractors to access the active landfill area. Equipment used for excavating and movement of earthen materials would use the existing landfill access road on the eastern side of the site. Access to the landfill by emergency equipment could be completed on either road during construction.

#### **Mitigation Measures**

None required.

#### **Mineral Resources Impact Conclusions:**

No potentially significant adverse impacts are identified or anticipated to transportation systems associated with the landfill and region, and no mitigation measures are required.

## 18. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

### Environmental Setting

The Project is located within the ancestral territory traditionally inhabited by the Cahuilla. The Cahuilla occupied the central area of southern California. Traditional Cahuilla territory encompasses the inland region between the San Bernardino Mountain Range, to the Borrego Springs and the Chocolate Mountains in the south, and a portion of the Colorado Desert west of the Orocopia Mountains, and the San Jacinto Plain, and the eastern slopes of the Palomar Mountains. The Cahuilla practiced a hunting and gathering subsistence strategy and exploited a variety of floral and faunal resources available within the diverse ecological zones of their territory (i.e., rivers, creeks, foothills, and mountains). Mesquite beans and pine nuts were important wild staples, but some farming also took place, producing corn, beans, and squash. Other resources included chia seeds, saltbush seeds, juniper berry, chokeberry, palm tree fruit, and wild raspberry collected in the fall, and mesquite bean yucca, wild onion, barrel cactus and other cacti fruit, goosefoot, seeds of grass, manzanita, and wild plum harvested in the spring and summer. A variety of mammal resources were also incorporated into the diet such as bighorn sheep, deer, and rabbits. Fish, shellfish, and migratory waterfowl were also consumed (Schaefer and Laylander 2007). The San Timoteo Canyon corridor (east and southeast of the Project) was used to harvest acorns and as a trade route, and settlements were established along the San Timoteo Canyon and San Timoteo creek.

### Impact Analysis

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

**Less Than Significant with Mitigation Incorporated.** The SCCIC records search and tribal consultation did not identify any historical resources within, or adjacent to, the Project site. As a result, it is believed the proposed Project would not cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5020.1 (k).

Pursuant to AB52, CEQA (as amended, 2015) and CA PRC 21080.3.1 tribal consultation requirements, the County notified the following Native American Tribes or Tribal representatives that are traditionally and culturally affiliated with the Project area:

- Gabrieleño Band of Mission Indians – Kizh Nation: No response.
- Morongo Band of Mission Indians: No response.
- Yuhaaviatam of San Manuel Nation (formally known as the San Manuel Band of Mission Indians): Response discussed below.
- Soboba Band of Luiseño Indians: No response.
- Twenty-Nine Palms Band of Mission Indians: No response.

The Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians) (YSMN) requested consultation on this Project. Consultation between the County and representatives of the YSMN occurred for this Project. No other requests to consult were received. The YSMN did not have any concerns with the Project's implementation as planned, provided that **Mitigation Measures CR-1, CR-2, CR-3** (see Section 5) and **TCR-1 and TCR -2** are incorporated into Project permitting. To protect tribal cultural resources and potential unanticipated discoveries associated with tribal cultural resources, these measures were incorporated into this Project. Therefore, Project impact would be less than significant with mitigation incorporated, and no further analysis is required.

- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

**Less Than Significant with Mitigation Incorporated.** As described above, no tribal cultural resources were identified through the SCCIC search, nor as part of the County's government-to-government notification and consultation efforts with interested Native American groups conducted pursuant to AB52. To protect tribal cultural resources and potential unanticipated discoveries associated with tribal cultural resources, **Mitigation Measures, CR-1, CR-2, and CR-3 and TCR-1 and TCR-2** were incorporated into this Project. Therefore, Project impact would be less than significant with mitigation incorporated, and no further analysis is required.

### **Mitigation Measures**

**Mitigation Measure TCR-1:** The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during Project implementation and be provided information regarding the nature of the find, to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resource Monitoring and Treatment Plan (Plan) shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the Project, should YSMN elect to place a monitor on-site.

**Mitigation Measure TRC-2:** Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the Project. Note: YSMN realizes that there may be additional tribes claiming cultural

affiliation to the area; however, YSMN can only speak for itself. YSMN has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.

### **Tribal Cultural Resources Conclusions**

Potentially significant adverse impacts were identified to Tribal cultural resources, and mitigation measures are required. With the implementation of Mitigation Measures CR-1, CR-2, CR-3, TRC-1 and TRC-2, impacts to Tribal Cultural Resources would be less than significant.

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## 19. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

### Environmental Setting

**Water Usage.** One permitted onsite well provides non-potable water used for dust suppression at the landfill. Bottled water is provided as drinking water for workers at the landfill (County of San Bernardino Department of Public Works 2022).

**Wastewater Management.** Portable toilets located at the scale house are provided and maintained at the landfill for use by workers (County of San Bernardino Department of Public Works 2022).

**Stormwater Management.** Stormwater generated at the site is actively managed at the landfill. Refuse and cover materials are graded to minimize ponding, infiltration, and erosion. Effective drainage systems within the landfill footprint minimizes ponding, infiltration, and erosion. Basins outside the landfill footprint allow stormwater to infiltrate and/or evaporate. Once the stockpile has been constructed, stormwater flow originating on the stockpile would be directed to the V-ditches through overland flow from the stockpile and from two down drains also constructed on the stockpile (Figure 3). The stockpile would be revegetated using a hydroseeding technique with an approved native plant seed mix.

**Electricity and Telecommunications.** Electricity is supplied to the site by Southern California Edison. Telephone and telecommunications are supplied to the landfill by Verizon (County of San Bernardino Department of Public Works 2022).

**Natural Gas.** No natural gas is supplied to the landfill.

## **Impact Analysis**

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

**Less Than Significant Impact.** The Project is excavation of soil from Unit 2, Phase 5, and creation of Stockpile 3. No new or expanded water, wastewater treatment, electrical, or telecommunications facilities are proposed. Once the stockpile has been constructed, stormwater flow originating on the stockpile would be directed to the V-ditches through overland flow from the stockpile and from two down drains also constructed on the stockpile (Figure 3).

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**No Impact.** Water from the on-site well would be used for dust suppression, and bottled water is provided to the workers. Once the stockpile has been constructed, no more water for dust suppression would be needed.

- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**No Impact.** Portable toilets would be provided and maintained for Project workers. No wastewater treatment facilities would be needed or constructed.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

**Less Than Significant Impacts.** Greenwaste generated during grubbing of vegetation in the stockpile area would be disposed of at the landfill. During excavation of earthen materials, minor construction debris would be generated that would also be disposed of as waste at the landfill.

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**No Impact.** Where possible, minor trash generated during construction would be recycled. The remainder would be disposed of at the landfill.

## **Mitigation Measures**

None required.

## **Mineral Resources Impact Conclusions**

No potentially significant adverse impacts are identified or anticipated to utilities associated with the landfill, and no mitigation measures are required.

## 20. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project?				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

### Environmental Setting

STSL is located in an area of San Bernardino County that is adjacent to Fire Hazard Severity Zones classified as Very High (California Department of Forestry and Fire Protection 2022). The landfill is in an area where the responsibility to respond to a wildfire is with local authorities. Fire Hazard Severity Zones are determined based on fuel loading, slope, fire weather, and other relevant factors that are present, including areas where winds have been identified as a major cause of wildfire spread.

### Impact Analysis

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** As identified in Section 9, the proposed Project would not interfere with any adopted emergency response plans or emergency evacuation plans because it would not require closing off any streets and access to the site is adequate. No mitigation is required.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

**Less Than Significant Impact.** The stockpile area would be located in an area of the landfill characterized as incised badlands that have steep slopes where high wind days could cause spread up or down slope of wildfire. The landfill does not have permanent occupancy and on-site workers would evacuate the site if there was a wildfire threat. As a result, a less than significant impact would occur.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

**No Impact.** The existing landfill access road would be used to move the soil from Unit 2, Phase 5, to the stockpile area. An existing road on the western side would be use as a temporary access road for members of the public and commercial trash haulers. No impacts would occur.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

**No Impact.** There are no residences or industries located immediately adjacent to the landfill. Stormwater infrastructure management devices are in place at the landfill to control stormwater flow. Once the stockpile construction is complete, stormwater management devices will be constructed to control stormwater (Figure 3). No impacts would occur.

### **Mitigation Measures**

None required.

### **Wildfire Impact Conclusions:**

No potentially significant adverse impacts are identified or anticipated from wildfire impacts to the landfill, and no mitigation measures are required.

## 21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Less Than Significant With Mitigation.** As described in Section 4 (Biological Resources), Section 5 (Cultural Resources), Section 10 (Hydrology and Water Quality), Section 7 (Geology and Soils) and Section 18 (Tribal Cultural Resources), the proposed Project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or prehistory after the proposed mitigation measures are implemented.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less Than Significant.** The proposed Project has the potential to have cumulative impacts to air quality and greenhouse gases. However, as discussed in Section 3 (Air Quality) and Section 8 (Greenhouse Gas Emissions), these impacts would be temporary during construction and would not be significant.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Less Than Significant.** The proposed Project may have indirect minor short-term effects on human beings during construction. However, in the long term, the Project would have a beneficial impact by increasing the life of the landfill and its ability to continue to accept regionally generated waste. No substantial adverse effects on human beings would occur.

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## SECTION 5 – SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

### **BIOLOGICAL RESOURCES:**

**Mitigation Measure BIO-1:** Vegetation removal activities should be conducted outside of the nesting bird season (typically March 1 through August 31 for passerine (songbirds) and January 1 through September 15 for raptors). If vegetation removal activities must occur during the nesting season, a nesting bird survey shall be completed by a qualified biologist within three days prior to the start of any ground disturbing activities to determine if any nesting birds occur within the project site. If nesting birds are not found within the project site, no further actions will be required. If nesting birds are observed, a buffer zone between construction activities and the nesting bird shall be established by a qualified biologist. The buffer zone shall be determined by the type of nesting bird. A typical buffer zone will be 250 feet for nesting passerine birds (songbirds) and 500 feet for nesting raptors. Due to the steep terrain and potential physical limitations for conducting nesting bird surveys, vegetation removal may best be conducted outside the nesting bird season.

**Mitigation Measure BIO-2.** Prior to ground disturbance, significant permanent direct impacts to Waters of the State shall be mitigated at a 1:1 ratio or as otherwise determined in applicable resource agency permits. Mitigation shall include preservation, creation, enhancement, and/or rehabilitation or restoration of jurisdictional waters or as otherwise determined in applicable resource agency permits. Mitigation may be completed through use of an agency-approved in lieu fee program, a mitigation bank, or applicant-proposed

### **CULTURAL RESOURCES:**

**Mitigation Measure CR-1** Inadvertent Discovery of Archaeological Resources During Construction – During Project-level construction, should surface or subsurface archaeological resources be discovered, all activity within 60 feet of a “find” shall stop and a qualified archaeologist meeting the Secretary of Interior Standards for archaeology shall be hired and contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1 (see Section 18), regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. The archaeologist and YSMN shall be afforded the necessary time to assess the find. If any find is determined to be significant, the archaeologist shall develop a Monitoring and Treatment Plan (Plan), in consultation with the County and YSMN (see CR-2 below). Construction activities may continue outside the buffer zone on other areas of the Project site during evaluation and treatment of the resource. Public agencies must, when feasible, avoid damaging effects to any tribal cultural resource. Pub. Res. Code § 21084.3 (a). If the lead agency determines that a Project may cause a substantial adverse change to a tribal cultural resource, mitigation measures should be identified through consultation with YSMN and provided in the Plan. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, (i) Project re-route or re-design, (ii) Project cancellation, or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and YSMN. If an archaeological site does not qualify as an historical resource but meets

the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

**Mitigation Measure CR-2** If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan (Plan), the drafts of which shall be provided to the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) for review and comment, as detailed within TCR-1 (see Section 18). The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly. The Plan will include monitoring protocols and other appropriate mitigation.

**Mitigation Measure CR-3** If human remains or funerary items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease within a 100-foot buffer of the find, and the San Bernardino County

### **GEOLOGICAL RESOURCES:**

**Mitigation Measure GEO-1** If any paleontological resources are unearthed during grading or excavation, the County shall halt all activity in the vicinity of the discovery and contact the Earth Sciences Division of the San Bernardino County Museum to investigate. The County shall avoid the discovery area until the Museum staff indicates it is acceptable to reenter. Recommendations of the Museum regarding collection and curation shall be implemented.

### **HYDROLOGY AND WATER QUALITY RESOURCES:**

**Mitigation Measure HWQ-1:** Prior to Project implementation, a project-specific erosion control plan will be prepared that will identify BMPs to be implemented during construction to prevent introduction of pollutants into the channel that may cause a degradation of surface water.

### **TRIBAL CULTURAL RESOURCES:**

**Mitigation Measure TCR-1** The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during Project implementation and be provided information regarding the nature of the find, to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resource Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the Project, should YSMN elect to place a monitor on-site.

**Mitigation Measure TRC-2** Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the Project. Note: Yuhaaviatam of San Manuel Nation realizes that there may be additional tribes claiming cultural affiliation to the area; however, Yuhaaviatam of San Manuel Nation can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.

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## SECTION 6 - REFERENCES

### California Air Resources Board

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### California Department of Forestry and Fire Protection

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- 2022 California Code of Regulations 14 CCR 15064

### City of Redlands

- 2017 City of Redlands General Plan Update and Climate Action Plan Revised Draft Environmental Impact Report. SCH #2016081041, July 21, 2017.
- 2023 General Plan 2035. <https://www.cityofredlands.org/post/planning-division-general-plan>, accessed February 2023

### County of San Bernardino

- 2018 County Wide Siting Element. Countywide Integrated Waste Management Plan. Amendment 6, 2018
- 2022 San Timoteo Sanitary Landfill Five-Year Solid Waste Facilities Permit Review Application Package.

### County of San Bernardino Department of Public Works Solid Waste Management Division

- 2018 Initial Study/Negative Declaration County of San Bernardino Department of Public Works Solid Waste Facility Permit Revision and Joint Technical Document Amendment, San Timoteo Sanitary Landfill, San Bernardino County, California
- 2019 45-Day Report for Protocol Coastal California Gnatcatcher Surveys, May 10, 2019

### County of San Bernardino Department of Public Works Environmental Management Division

- 2022 K. Carter, Personal Communication, August 25, 2022

### Cowardin, L M. V. Carter, F.C. Goblet, E.T. LaRoe

- 1979 Classification of wetlands and deepwater habitats in the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

### Federal Emergency Management Agency

- 2008 National Flood Hazard Layer, Flood Insurance Rate Map Number 06071C8714H

### Office of Environmental Health Hazard Assessment

- 2015 Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February 2015

### San Bernardino County Assessor

- 2023 Zoning and Overlay Maps. <https://lus.sbcounty.gov/planning-home/zoning-and-overlay-maps/>. Accessed 03/02/2023.

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2021 San Bernardino County Regional Greenhouse Gas Reduction Plan. March.

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2008a Final Localized Significant Threshold Methodology. June 2003. Revised July 2008

2008b Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans

2022a Air Quality Management Plan. Adopted December 2, 2022

2022b Localized Significant Thresholds. Accessed February 2023.

<http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

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2023a Cultural Resource Desktop Study Results for the County of San Bernardino Department of Public Works Solid Waste Management Division Stockpile 3 Project San Timoteo Sanitary Landfill, San Bernardino County, California.

2023b Aquatic Resources Delineation, Stockpile 3 Project, San Timoteo Sanitary Landfill, San Bernardino County, California

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2007 The Colorado Desert: Ancient Adaptations to Wetlands and Wastelands. In California Prehistory: Colonization, Culture, and Complexity. Edited by Terry L. Jones and Kathryn A. Klar. Alta Mira Press, New York.

United States Fish and Wildlife Service

2023 National Wetlands Inventory, accessed 27 February 2023,  
<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>



San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**San Timoteo Landfill  
South Coast AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	55.00	Acre	55.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2025
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - 55 acres of which 22.1 represent stock pile area
- Construction Phase - Phases and phase length provided by engineer
- Off-road Equipment - Equipment and operating hours provided by engineer
- Off-road Equipment - Equipment provided and operating hours provided by engineer
- Off-road Equipment - Equipment and operating hours provided by engineer
- Grading - Grading estimated by CalEEMod
- Construction Off-road Equipment Mitigation - Engine Tier 4 Interim (mix of Tier 3 and Tier 4 engines)
- Off-road Equipment - No Building Construction
- Trips and VMT - Trips based on number of workers provided by engineer



San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstructionPhase	NumDays	110.00	900.00
tblConstructionPhase	NumDays	75.00	60.00
tblConstructionPhase	NumDays	40.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	AcresOfGrading	27,000.00	330.00
tblGrading	AcresOfGrading	10.50	60.00
tblLandUse	LandUseSquareFeet	2,395,800.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,300.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Year	lb/day										lb/day					
2023	24.0726	250.2393	190.4551	0.4693	27.3798	9.8250	28.4197	10.9715	9.0390	11.9281	0.0000	45,474.8110	45,474.8110	14.4469	0.0199	45,841.9117
2024	23.2445	232.4421	185.1499	0.4688	1.3725	9.1996	10.5720	0.3029	8.4636	8.7664	0.0000	45,418.5887	45,418.5887	14.4350	0.0185	45,784.9821
2025	20.5667	192.4965	167.3554	0.4682	1.3725	7.5878	8.9603	0.3029	6.9808	7.2837	0.0000	45,361.3218	45,361.3218	14.4239	0.0173	45,727.0804
2026	21.2600	199.2891	173.9401	0.4978	1.9750	7.7649	9.7399	0.4660	7.1444	7.6105	0.0000	48,390.7918	48,390.7918	15.0144	0.2256	48,833.3950
<b>Maximum</b>	<b>24.0726</b>	<b>250.2393</b>	<b>190.4551</b>	<b>0.4978</b>	<b>27.3798</b>	<b>9.8250</b>	<b>28.4197</b>	<b>10.9715</b>	<b>9.0390</b>	<b>11.9281</b>	<b>0.0000</b>	<b>48,390.7918</b>	<b>48,390.7918</b>	<b>15.0144</b>	<b>0.2256</b>	<b>48,833.3950</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9370	24.6979	212.0624	0.4693	12.4439	0.7597	12.4920	4.9698	0.7592	5.0178	0.0000	45,474.8110	45,474.8110	14.4469	0.0199	45,841.9117
2024	5.9182	24.6778	211.8503	0.4688	1.1586	0.7594	1.9180	0.2798	0.7590	1.0388	0.0000	45,418.5887	45,418.5887	14.4350	0.0185	45,784.9820
2025	5.9015	24.6608	211.6536	0.4682	1.1586	0.7592	1.9178	0.2798	0.7588	1.0385	0.0000	45,361.3218	45,361.3218	14.4239	0.0173	45,727.0804
2026	6.1848	28.1173	221.0925	0.4978	1.7611	0.8063	2.5675	0.4429	0.8050	1.2479	0.0000	48,390.7918	48,390.7918	15.0144	0.2256	48,833.3950
<b>Maximum</b>	<b>6.1848</b>	<b>28.1173</b>	<b>221.0925</b>	<b>0.4978</b>	<b>12.4439</b>	<b>0.8063</b>	<b>12.4920</b>	<b>4.9698</b>	<b>0.8050</b>	<b>5.0178</b>	<b>0.0000</b>	<b>48,390.7918</b>	<b>48,390.7918</b>	<b>15.0144</b>	<b>0.2256</b>	<b>48,833.3950</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Percent Reduction	73.14	88.32	-19.49	0.00	48.53	91.03	67.25	50.41	90.26	76.56	0.00	0.00	0.00	0.00	0.00	0.00
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**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2023	10/10/2023	5	7	
2	Grading	Grading	10/11/2023	8/25/2026	6	900	
3	Paving	Paving	3/26/2026	6/17/2026	5	60	

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Scrapers	30	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	0.00	130	0.42
Paving	Paving Equipment	2	0.00	132	0.36
Paving	Rollers	2	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	35	88.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	1,300.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.1563	0.0000	27.1563	10.9122	0.0000	10.9122			0.0000			0.0000
Off-Road	2.2054	22.9171	11.5504	0.0287		1.0386	1.0386		0.9555	0.9555		2,782.5786	2,782.5786	0.8999		2,805.0772
<b>Total</b>	<b>2.2054</b>	<b>22.9171</b>	<b>11.5504</b>	<b>0.0287</b>	<b>27.1563</b>	<b>1.0386</b>	<b>28.1948</b>	<b>10.9122</b>	<b>0.9555</b>	<b>11.8677</b>		<b>2,782.5786</b>	<b>2,782.5786</b>	<b>0.8999</b>		<b>2,805.0772</b>

**Unmitigated Construction Off-Site**

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0639	0.0429	0.7016	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0604		197.9185	197.9185	4.8000e-003	4.5200e-003	199.3856
<b>Total</b>	<b>0.0639</b>	<b>0.0429</b>	<b>0.7016</b>	<b>1.9600e-003</b>	<b>0.2236</b>	<b>1.2600e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1600e-003</b>	<b>0.0604</b>		<b>197.9185</b>	<b>197.9185</b>	<b>4.8000e-003</b>	<b>4.5200e-003</b>	<b>199.3856</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2203	0.0000	12.2203	4.9105	0.0000	4.9105			0.0000			0.0000
Off-Road	0.3516	1.5238	13.8428	0.0287		0.0469	0.0469		0.0469	0.0469	0.0000	2,782.5786	2,782.5786	0.8999		2,805.0772
<b>Total</b>	<b>0.3516</b>	<b>1.5238</b>	<b>13.8428</b>	<b>0.0287</b>	<b>12.2203</b>	<b>0.0469</b>	<b>12.2672</b>	<b>4.9105</b>	<b>0.0469</b>	<b>4.9574</b>	<b>0.0000</b>	<b>2,782.5786</b>	<b>2,782.5786</b>	<b>0.8999</b>		<b>2,805.0772</b>

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0639	0.0429	0.7016	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0604		197.9185	197.9185	4.8000e-003	4.5200e-003	199.3856
<b>Total</b>	<b>0.0639</b>	<b>0.0429</b>	<b>0.7016</b>	<b>1.9600e-003</b>	<b>0.2236</b>	<b>1.2600e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1600e-003</b>	<b>0.0604</b>		<b>197.9185</b>	<b>197.9185</b>	<b>4.8000e-003</b>	<b>4.5200e-003</b>	<b>199.3856</b>

**3.3 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	23.7916	250.0508	187.3682	0.4607		9.8195	9.8195		9.0339	9.0339		44,603.9696	44,603.9696	14.4258		44,964.6152
<b>Total</b>	<b>23.7916</b>	<b>250.0508</b>	<b>187.3682</b>	<b>0.4607</b>	<b>0.3889</b>	<b>9.8195</b>	<b>10.2083</b>	<b>0.0420</b>	<b>9.0339</b>	<b>9.0759</b>		<b>44,603.9696</b>	<b>44,603.9696</b>	<b>14.4258</b>		<b>44,964.6152</b>

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2809	0.1885	3.0869	8.6200e-003	0.9836	5.5200e-003	0.9892	0.2609	5.0800e-003	0.2660		870.8415	870.8415	0.0211	0.0199	877.2965
<b>Total</b>	<b>0.2809</b>	<b>0.1885</b>	<b>3.0869</b>	<b>8.6200e-003</b>	<b>0.9836</b>	<b>5.5200e-003</b>	<b>0.9892</b>	<b>0.2609</b>	<b>5.0800e-003</b>	<b>0.2660</b>		<b>870.8415</b>	<b>870.8415</b>	<b>0.0211</b>	<b>0.0199</b>	<b>877.2965</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4607		0.7541	0.7541		0.7541	0.7541	0.0000	44,603.9695	44,603.9695	14.4258		44,964.6152
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4607</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,603.9695</b>	<b>44,603.9695</b>	<b>14.4258</b>		<b>44,964.6152</b>

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2809	0.1885	3.0869	8.6200e-003	0.9836	5.5200e-003	0.9892	0.2609	5.0800e-003	0.2660		870.8415	870.8415	0.0211	0.0199	877.2965
<b>Total</b>	<b>0.2809</b>	<b>0.1885</b>	<b>3.0869</b>	<b>8.6200e-003</b>	<b>0.9836</b>	<b>5.5200e-003</b>	<b>0.9892</b>	<b>0.2609</b>	<b>5.0800e-003</b>	<b>0.2660</b>		<b>870.8415</b>	<b>870.8415</b>	<b>0.0211</b>	<b>0.0199</b>	<b>877.2965</b>

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	22.9823	232.2737	182.2751	0.4604		9.1943	9.1943		8.4587	8.4587		44,573.2051	44,573.2051	14.4159		44,933.6021
<b>Total</b>	<b>22.9823</b>	<b>232.2737</b>	<b>182.2751</b>	<b>0.4604</b>	<b>0.3889</b>	<b>9.1943</b>	<b>9.5831</b>	<b>0.0420</b>	<b>8.4587</b>	<b>8.5007</b>		<b>44,573.2051</b>	<b>44,573.2051</b>	<b>14.4159</b>		<b>44,933.6021</b>

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2622	0.1684	2.8748	8.3600e-003	0.9836	5.2800e-003	0.9889	0.2609	4.8600e-003	0.2657		845.3836	845.3836	0.0191	0.0185	851.3800
<b>Total</b>	<b>0.2622</b>	<b>0.1684</b>	<b>2.8748</b>	<b>8.3600e-003</b>	<b>0.9836</b>	<b>5.2800e-003</b>	<b>0.9889</b>	<b>0.2609</b>	<b>4.8600e-003</b>	<b>0.2657</b>		<b>845.3836</b>	<b>845.3836</b>	<b>0.0191</b>	<b>0.0185</b>	<b>851.3800</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4604		0.7541	0.7541		0.7541	0.7541	0.0000	44,573.2051	44,573.2051	14.4159		44,933.6020
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4604</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,573.2051</b>	<b>44,573.2051</b>	<b>14.4159</b>		<b>44,933.6020</b>

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2622	0.1684	2.8748	8.3600e-003	0.9836	5.2800e-003	0.9889	0.2609	4.8600e-003	0.2657		845.3836	845.3836	0.0191	0.0185	851.3800
<b>Total</b>	<b>0.2622</b>	<b>0.1684</b>	<b>2.8748</b>	<b>8.3600e-003</b>	<b>0.9836</b>	<b>5.2800e-003</b>	<b>0.9889</b>	<b>0.2609</b>	<b>4.8600e-003</b>	<b>0.2657</b>		<b>845.3836</b>	<b>845.3836</b>	<b>0.0191</b>	<b>0.0185</b>	<b>851.3800</b>

**3.3 Grading - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	20.3212	192.3451	164.6773	0.4602		7.5828	7.5828		6.9762	6.9762		44,544.7515	44,544.7515	14.4067		44,904.9184

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Total	20.3212	192.3451	164.6773	0.4602	0.3889	7.5828	7.9717	0.0420	6.9762	7.0182		44,544.7515	44,544.7515	14.4067		44,904.9184
													5			

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2455	0.1514	2.6781	8.0800e-003	0.9836	5.0300e-003	0.9887	0.2609	4.6300e-003	0.2655		816.5703	816.5703	0.0173	0.0173	822.1621
<b>Total</b>	<b>0.2455</b>	<b>0.1514</b>	<b>2.6781</b>	<b>8.0800e-003</b>	<b>0.9836</b>	<b>5.0300e-003</b>	<b>0.9887</b>	<b>0.2609</b>	<b>4.6300e-003</b>	<b>0.2655</b>		<b>816.5703</b>	<b>816.5703</b>	<b>0.0173</b>	<b>0.0173</b>	<b>822.1621</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	5.6560	24.5094	208.9754	0.4602		0.7541	0.7541		0.7541	0.7541	0.0000	44,544.7514	44,544.7514	14.4067		44,904.9183
												4	4			
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4602</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,544.7514</b>	<b>44,544.7514</b>	<b>14.4067</b>		<b>44,904.9183</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2455	0.1514	2.6781	8.0800e-003	0.9836	5.0300e-003	0.9887	0.2609	4.6300e-003	0.2655		816.5703	816.5703	0.0173	0.0173	822.1621
<b>Total</b>	<b>0.2455</b>	<b>0.1514</b>	<b>2.6781</b>	<b>8.0800e-003</b>	<b>0.9836</b>	<b>5.0300e-003</b>	<b>0.9887</b>	<b>0.2609</b>	<b>4.6300e-003</b>	<b>0.2655</b>		<b>816.5703</b>	<b>816.5703</b>	<b>0.0173</b>	<b>0.0173</b>	<b>822.1621</b>

**3.3 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	20.3212	192.3451	164.6773	0.4602		7.5828	7.5828		6.9762	6.9762		44,544.7515	44,544.7515	14.4067		44,904.9184
<b>Total</b>	<b>20.3212</b>	<b>192.3451</b>	<b>164.6773</b>	<b>0.4602</b>	<b>0.3889</b>	<b>7.5828</b>	<b>7.9717</b>	<b>0.0420</b>	<b>6.9762</b>	<b>7.0182</b>		<b>44,544.7515</b>	<b>44,544.7515</b>	<b>14.4067</b>		<b>44,904.9184</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2311	0.1375	2.5146	7.8300e-003	0.9836	4.7700e-003	0.9884	0.2609	4.3900e-003	0.2653		791.4972	791.4972	0.0157	0.0163	796.7566
<b>Total</b>	<b>0.2311</b>	<b>0.1375</b>	<b>2.5146</b>	<b>7.8300e-003</b>	<b>0.9836</b>	<b>4.7700e-003</b>	<b>0.9884</b>	<b>0.2609</b>	<b>4.3900e-003</b>	<b>0.2653</b>		<b>791.4972</b>	<b>791.4972</b>	<b>0.0157</b>	<b>0.0163</b>	<b>796.7566</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	lb/day										lb/day				
	Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000	
Off-Road	5.6560	24.5094	208.9754	0.4602		0.7541	0.7541		0.7541	0.7541	0.0000	44,544.7514	44,544.7514	14.4067	44,904.9183
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4602</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,544.7514</b>	<b>44,544.7514</b>	<b>14.4067</b>	<b>44,904.9183</b>

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2311	0.1375	2.5146	7.8300e-003	0.9836	4.7700e-003	0.9884	0.2609	4.3900e-003	0.2653		791.4972	791.4972	0.0157	0.0163	796.7566
<b>Total</b>	<b>0.2311</b>	<b>0.1375</b>	<b>2.5146</b>	<b>7.8300e-003</b>	<b>0.9836</b>	<b>4.7700e-003</b>	<b>0.9884</b>	<b>0.2609</b>	<b>4.3900e-003</b>	<b>0.2653</b>		<b>791.4972</b>	<b>791.4972</b>	<b>0.0157</b>	<b>0.0163</b>	<b>796.7566</b>

**3.4 Paving - 2026**

Unmitigated Construction On-Site

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6097	4.2012	5.4151	0.0163		0.1565	0.1565		0.1440	0.1440		1,581.7313	1,581.7313	0.5116		1,594.5204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6097</b>	<b>4.2012</b>	<b>5.4151</b>	<b>0.0163</b>		<b>0.1565</b>	<b>0.1565</b>		<b>0.1440</b>	<b>0.1440</b>		<b>1,581.7313</b>	<b>1,581.7313</b>	<b>0.5116</b>		<b>1,594.5204</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0455	2.5741	0.7616	0.0117	0.3790	0.0197	0.3987	0.1039	0.0189	0.1227		1,292.9262	1,292.9262	0.0769	0.2056	1,356.1187
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0525	0.0313	0.5715	1.7800e-003	0.2236	1.0800e-003	0.2246	0.0593	1.0000e-003	0.0603		179.8857	179.8857	3.5600e-003	3.7100e-003	181.0810
<b>Total</b>	<b>0.0980</b>	<b>2.6053</b>	<b>1.3331</b>	<b>0.0135</b>	<b>0.6025</b>	<b>0.0208</b>	<b>0.6233</b>	<b>0.1632</b>	<b>0.0199</b>	<b>0.1830</b>		<b>1,472.8119</b>	<b>1,472.8119</b>	<b>0.0805</b>	<b>0.2093</b>	<b>1,537.1997</b>

**Mitigated Construction On-Site**

San Timoteo Landfill - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1996	0.8651	8.2694	0.0163		0.0266	0.0266		0.0266	0.0266	0.0000	1,581.7313	1,581.7313	0.5116		1,594.5204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1996</b>	<b>0.8651</b>	<b>8.2694</b>	<b>0.0163</b>		<b>0.0266</b>	<b>0.0266</b>		<b>0.0266</b>	<b>0.0266</b>	<b>0.0000</b>	<b>1,581.7313</b>	<b>1,581.7313</b>	<b>0.5116</b>		<b>1,594.5204</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0455	2.5741	0.7616	0.0117	0.3790	0.0197	0.3987	0.1039	0.0189	0.1227		1,292.9262	1,292.9262	0.0769	0.2056	1,356.1187
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0525	0.0313	0.5715	1.7800e-003	0.2236	1.0800e-003	0.2246	0.0593	1.0000e-003	0.0603		179.8857	179.8857	3.5600e-003	3.7100e-003	181.0810
<b>Total</b>	<b>0.0980</b>	<b>2.6053</b>	<b>1.3331</b>	<b>0.0135</b>	<b>0.6025</b>	<b>0.0208</b>	<b>0.6233</b>	<b>0.1632</b>	<b>0.0199</b>	<b>0.1830</b>		<b>1,472.8119</b>	<b>1,472.8119</b>	<b>0.0805</b>	<b>0.2093</b>	<b>1,537.1997</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**San Timoteo Landfill  
South Coast AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	55.00	Acre	55.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2025
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - 55 acres of which 22.1 represent stock pile area
- Construction Phase - Phases and phase length provided by engineer
- Off-road Equipment - Equipment and operating hours provided by engineer
- Off-road Equipment - Equipment provided and operating hours provided by engineer
- Off-road Equipment - Equipment and operating hours provided by engineer
- Grading - Grading estimated by CalEEMod
- Construction Off-road Equipment Mitigation - Engine Tier 4 Interim (mix of Tier 3 and Tier 4 engines)
- Off-road Equipment - No Building Construction
- Trips and VMT - Trips based on number of workers provided by engineer



San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstructionPhase	NumDays	110.00	900.00
tblConstructionPhase	NumDays	75.00	60.00
tblConstructionPhase	NumDays	40.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	AcresOfGrading	27,000.00	330.00
tblGrading	AcresOfGrading	10.50	60.00
tblLandUse	LandUseSquareFeet	2,395,800.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,300.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Year	lb/day										lb/day					
	2023	24.0882	250.2569	190.1618	0.4688	27.3798	9.8250	28.4197	10.9715	9.0390	11.9281	0.0000	45,424.2756	45,424.2756	14.4472	0.0211
2024	23.2599	232.4578	184.8779	0.4683	1.3725	9.1996	10.5720	0.3029	8.4636	8.7664	0.0000	45,369.5626	45,369.5626	14.4353	0.0196	45,736.2957
2025	20.5819	192.5106	167.1037	0.4678	1.3725	7.5878	8.9603	0.3029	6.9808	7.2837	0.0000	45,314.0304	45,314.0304	14.4242	0.0184	45,680.1055
2026	21.2755	199.4280	173.6617	0.4973	1.9750	7.7649	9.7400	0.4660	7.1445	7.6105	0.0000	48,336.0856	48,336.0856	15.0146	0.2271	48,779.1215
<b>Maximum</b>	<b>24.0882</b>	<b>250.2569</b>	<b>190.1618</b>	<b>0.4973</b>	<b>27.3798</b>	<b>9.8250</b>	<b>28.4197</b>	<b>10.9715</b>	<b>9.0390</b>	<b>11.9281</b>	<b>0.0000</b>	<b>48,336.0856</b>	<b>48,336.0856</b>	<b>15.0146</b>	<b>0.2271</b>	<b>48,779.1215</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9526	24.7156	211.7690	0.4688	12.4439	0.7597	12.4920	4.9698	0.7592	5.0178	0.0000	45,424.2756	45,424.2756	14.4472	0.0211	45,791.7433
2024	5.9337	24.6935	211.5783	0.4683	1.1586	0.7594	1.9180	0.2798	0.7590	1.0388	0.0000	45,369.5626	45,369.5626	14.4353	0.0196	45,736.2957
2025	5.9168	24.6748	211.4018	0.4678	1.1586	0.7592	1.9178	0.2798	0.7588	1.0385	0.0000	45,314.0304	45,314.0304	14.4242	0.0184	45,680.1055
2026	6.2002	28.2562	220.8141	0.4973	1.7611	0.8064	2.5675	0.4429	0.8050	1.2480	0.0000	48,336.0856	48,336.0856	15.0146	0.2271	48,779.1214
<b>Maximum</b>	<b>6.2002</b>	<b>28.2562</b>	<b>220.8141</b>	<b>0.4973</b>	<b>12.4439</b>	<b>0.8064</b>	<b>12.4920</b>	<b>4.9698</b>	<b>0.8050</b>	<b>5.0178</b>	<b>0.0000</b>	<b>48,336.0856</b>	<b>48,336.0856</b>	<b>15.0146</b>	<b>0.2271</b>	<b>48,779.1214</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2023	10/10/2023	5	7	
2	Grading	Grading	10/11/2023	8/25/2026	6	900	
3	Paving	Paving	3/26/2026	6/17/2026	5	60	

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Scrapers	30	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	0.00	130	0.42
Paving	Paving Equipment	2	0.00	132	0.36
Paving	Rollers	2	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading	35	88.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	1,300.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.1563	0.0000	27.1563	10.9122	0.0000	10.9122			0.0000			0.0000
Off-Road	2.2054	22.9171	11.5504	0.0287		1.0386	1.0386		0.9555	0.9555		2,782.5786	2,782.5786	0.8999		2,805.0772
<b>Total</b>	<b>2.2054</b>	<b>22.9171</b>	<b>11.5504</b>	<b>0.0287</b>	<b>27.1563</b>	<b>1.0386</b>	<b>28.1948</b>	<b>10.9122</b>	<b>0.9555</b>	<b>11.8677</b>		<b>2,782.5786</b>	<b>2,782.5786</b>	<b>0.8999</b>		<b>2,805.0772</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0674	0.0469	0.6349	1.8400e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0604		186.4332	186.4332	4.8600e-003	4.7900e-003	187.9837
<b>Total</b>	<b>0.0674</b>	<b>0.0469</b>	<b>0.6349</b>	<b>1.8400e-003</b>	<b>0.2236</b>	<b>1.2600e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1600e-003</b>	<b>0.0604</b>		<b>186.4332</b>	<b>186.4332</b>	<b>4.8600e-003</b>	<b>4.7900e-003</b>	<b>187.9837</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2203	0.0000	12.2203	4.9105	0.0000	4.9105			0.0000			0.0000
Off-Road	0.3516	1.5238	13.8428	0.0287		0.0469	0.0469		0.0469	0.0469	0.0000	2,782.5786	2,782.5786	0.8999		2,805.0772
<b>Total</b>	<b>0.3516</b>	<b>1.5238</b>	<b>13.8428</b>	<b>0.0287</b>	<b>12.2203</b>	<b>0.0469</b>	<b>12.2672</b>	<b>4.9105</b>	<b>0.0469</b>	<b>4.9574</b>	<b>0.0000</b>	<b>2,782.5786</b>	<b>2,782.5786</b>	<b>0.8999</b>		<b>2,805.0772</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0674	0.0469	0.6349	1.8400e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0604	186.4332	186.4332	4.8600e-003	4.7900e-003	187.9837	
<b>Total</b>	<b>0.0674</b>	<b>0.0469</b>	<b>0.6349</b>	<b>1.8400e-003</b>	<b>0.2236</b>	<b>1.2600e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1600e-003</b>	<b>0.0604</b>	<b>186.4332</b>	<b>186.4332</b>	<b>4.8600e-003</b>	<b>4.7900e-003</b>	<b>187.9837</b>	

**3.3 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	23.7916	250.0508	187.3682	0.4607		9.8195	9.8195		9.0339	9.0339		44,603.9696	44,603.9696	14.4258		44,964.6152
<b>Total</b>	<b>23.7916</b>	<b>250.0508</b>	<b>187.3682</b>	<b>0.4607</b>	<b>0.3889</b>	<b>9.8195</b>	<b>10.2083</b>	<b>0.0420</b>	<b>9.0339</b>	<b>9.0759</b>		<b>44,603.9696</b>	<b>44,603.9696</b>	<b>14.4258</b>		<b>44,964.6152</b>

**Unmitigated Construction Off-Site**

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2966	0.2062	2.7936	8.1200e-003	0.9836	5.5200e-003	0.9892	0.2609	5.0800e-003	0.2660		820.3060	820.3060	0.0214	0.0211	827.1281
<b>Total</b>	<b>0.2966</b>	<b>0.2062</b>	<b>2.7936</b>	<b>8.1200e-003</b>	<b>0.9836</b>	<b>5.5200e-003</b>	<b>0.9892</b>	<b>0.2609</b>	<b>5.0800e-003</b>	<b>0.2660</b>		<b>820.3060</b>	<b>820.3060</b>	<b>0.0214</b>	<b>0.0211</b>	<b>827.1281</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4607		0.7541	0.7541		0.7541	0.7541	0.0000	44,603.9695	44,603.9695	14.4258		44,964.6152
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4607</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,603.9695</b>	<b>44,603.9695</b>	<b>14.4258</b>		<b>44,964.6152</b>

**Mitigated Construction Off-Site**

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2966	0.2062	2.7936	8.1200e-003	0.9836	5.5200e-003	0.9892	0.2609	5.0800e-003	0.2660		820.3060	820.3060	0.0214	0.0211	827.1281
<b>Total</b>	<b>0.2966</b>	<b>0.2062</b>	<b>2.7936</b>	<b>8.1200e-003</b>	<b>0.9836</b>	<b>5.5200e-003</b>	<b>0.9892</b>	<b>0.2609</b>	<b>5.0800e-003</b>	<b>0.2660</b>		<b>820.3060</b>	<b>820.3060</b>	<b>0.0214</b>	<b>0.0211</b>	<b>827.1281</b>

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	22.9823	232.2737	182.2751	0.4604		9.1943	9.1943		8.4587	8.4587		44,573.2051	44,573.2051	14.4159		44,933.6021
<b>Total</b>	<b>22.9823</b>	<b>232.2737</b>	<b>182.2751</b>	<b>0.4604</b>	<b>0.3889</b>	<b>9.1943</b>	<b>9.5831</b>	<b>0.0420</b>	<b>8.4587</b>	<b>8.5007</b>		<b>44,573.2051</b>	<b>44,573.2051</b>	<b>14.4159</b>		<b>44,933.6021</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2776	0.1841	2.6028	7.8800e-003	0.9836	5.2800e-003	0.9889	0.2609	4.8600e-003	0.2657		796.3575	796.3575	0.0194	0.0196	802.6937
<b>Total</b>	<b>0.2776</b>	<b>0.1841</b>	<b>2.6028</b>	<b>7.8800e-003</b>	<b>0.9836</b>	<b>5.2800e-003</b>	<b>0.9889</b>	<b>0.2609</b>	<b>4.8600e-003</b>	<b>0.2657</b>		<b>796.3575</b>	<b>796.3575</b>	<b>0.0194</b>	<b>0.0196</b>	<b>802.6937</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4604		0.7541	0.7541		0.7541	0.7541	0.0000	44,573.2051	44,573.2051	14.4159		44,933.6020
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4604</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,573.2051</b>	<b>44,573.2051</b>	<b>14.4159</b>		<b>44,933.6020</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2776	0.1841	2.6028	7.8800e-003	0.9836	5.2800e-003	0.9889	0.2609	4.8600e-003	0.2657		796.3575	796.3575	0.0194	0.0196	802.6937
<b>Total</b>	<b>0.2776</b>	<b>0.1841</b>	<b>2.6028</b>	<b>7.8800e-003</b>	<b>0.9836</b>	<b>5.2800e-003</b>	<b>0.9889</b>	<b>0.2609</b>	<b>4.8600e-003</b>	<b>0.2657</b>		<b>796.3575</b>	<b>796.3575</b>	<b>0.0194</b>	<b>0.0196</b>	<b>802.6937</b>

**3.3 Grading - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	20.3212	192.3451	164.6773	0.4602		7.5828	7.5828		6.9762	6.9762		44,544.7515	44,544.7515	14.4067		44,904.9184
<b>Total</b>	<b>20.3212</b>	<b>192.3451</b>	<b>164.6773</b>	<b>0.4602</b>	<b>0.3889</b>	<b>7.5828</b>	<b>7.9717</b>	<b>0.0420</b>	<b>6.9762</b>	<b>7.0182</b>		<b>44,544.7515</b>	<b>44,544.7515</b>	<b>14.4067</b>		<b>44,904.9184</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2607	0.1655	2.4264	7.6100e-003	0.9836	5.0300e-003	0.9887	0.2609	4.6300e-003	0.2655		769.2790	769.2790	0.0175	0.0184	775.1871
<b>Total</b>	<b>0.2607</b>	<b>0.1655</b>	<b>2.4264</b>	<b>7.6100e-003</b>	<b>0.9836</b>	<b>5.0300e-003</b>	<b>0.9887</b>	<b>0.2609</b>	<b>4.6300e-003</b>	<b>0.2655</b>		<b>769.2790</b>	<b>769.2790</b>	<b>0.0175</b>	<b>0.0184</b>	<b>775.1871</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4602		0.7541	0.7541		0.7541	0.7541	0.0000	44,544.7514	44,544.7514	14.4067		44,904.9183
<b>Total</b>	<b>5.6560</b>	<b>24.5094</b>	<b>208.9754</b>	<b>0.4602</b>	<b>0.1750</b>	<b>0.7541</b>	<b>0.9291</b>	<b>0.0189</b>	<b>0.7541</b>	<b>0.7730</b>	<b>0.0000</b>	<b>44,544.7514</b>	<b>44,544.7514</b>	<b>14.4067</b>		<b>44,904.9183</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2607	0.1655	2.4264	7.6100e-003	0.9836	5.0300e-003	0.9887	0.2609	4.6300e-003	0.2655		769.2790	769.2790	0.0175	0.0184	775.1871
<b>Total</b>	<b>0.2607</b>	<b>0.1655</b>	<b>2.4264</b>	<b>7.6100e-003</b>	<b>0.9836</b>	<b>5.0300e-003</b>	<b>0.9887</b>	<b>0.2609</b>	<b>4.6300e-003</b>	<b>0.2655</b>		<b>769.2790</b>	<b>769.2790</b>	<b>0.0175</b>	<b>0.0184</b>	<b>775.1871</b>

**3.3 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3889	0.0000	0.3889	0.0420	0.0000	0.0420			0.0000			0.0000
Off-Road	20.3212	192.3451	164.6773	0.4602		7.5828	7.5828		6.9762	6.9762		44,544.7515	44,544.7515	14.4067		44,904.9184
<b>Total</b>	<b>20.3212</b>	<b>192.3451</b>	<b>164.6773</b>	<b>0.4602</b>	<b>0.3889</b>	<b>7.5828</b>	<b>7.9717</b>	<b>0.0420</b>	<b>6.9762</b>	<b>7.0182</b>		<b>44,544.7515</b>	<b>44,544.7515</b>	<b>14.4067</b>		<b>44,904.9184</b>

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2462	0.1502	2.2793	7.3800e-003	0.9836	4.7700e-003	0.9884	0.2609	4.3900e-003	0.2653		745.6980	745.6980	0.0160	0.0173	751.2546
<b>Total</b>	<b>0.2462</b>	<b>0.1502</b>	<b>2.2793</b>	<b>7.3800e-003</b>	<b>0.9836</b>	<b>4.7700e-003</b>	<b>0.9884</b>	<b>0.2609</b>	<b>4.3900e-003</b>	<b>0.2653</b>		<b>745.6980</b>	<b>745.6980</b>	<b>0.0160</b>	<b>0.0173</b>	<b>751.2546</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189			0.0000			0.0000
Off-Road	5.6560	24.5094	208.9754	0.4602		0.7541	0.7541		0.7541	0.7541	0.0000	44,544.7514	44,544.7514	14.4067		44,904.9183

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Total	5.6560	24.5094	208.9754	0.4602	0.1750	0.7541	0.9291	0.0189	0.7541	0.7730	0.0000	44,544.7514	44,544.7514	14.4067		44,904.9183
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2462	0.1502	2.2793	7.3800e-003	0.9836	4.7700e-003	0.9884	0.2609	4.3900e-003	0.2653		745.6980	745.6980	0.0160	0.0173	751.2546
<b>Total</b>	<b>0.2462</b>	<b>0.1502</b>	<b>2.2793</b>	<b>7.3800e-003</b>	<b>0.9836</b>	<b>4.7700e-003</b>	<b>0.9884</b>	<b>0.2609</b>	<b>4.3900e-003</b>	<b>0.2653</b>		<b>745.6980</b>	<b>745.6980</b>	<b>0.0160</b>	<b>0.0173</b>	<b>751.2546</b>

**3.4 Paving - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6097	4.2012	5.4151	0.0163		0.1565	0.1565		0.1440	0.1440		1,581.7313	1,581.7313	0.5116		1,594.5204

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.6097</b>	<b>4.2012</b>	<b>5.4151</b>	<b>0.0163</b>		<b>0.1565</b>	<b>0.1565</b>		<b>0.1440</b>	<b>0.1440</b>			<b>1,581.7313</b>	<b>1,581.7313</b>	<b>0.5116</b>	<b>1,594.5204</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0424	2.6973	0.7720	0.0117	0.3790	0.0198	0.3987	0.1039	0.0189	0.1228		1,294.4281	1,294.4281	0.0767	0.2059	1,357.6884
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0560	0.0341	0.5180	1.6800e-003	0.2236	1.0800e-003	0.2246	0.0593	1.0000e-003	0.0603		169.4768	169.4768	3.6300e-003	3.9300e-003	170.7397
<b>Total</b>	<b>0.0983</b>	<b>2.7315</b>	<b>1.2900</b>	<b>0.0134</b>	<b>0.6025</b>	<b>0.0208</b>	<b>0.6234</b>	<b>0.1632</b>	<b>0.0199</b>	<b>0.1831</b>		<b>1,463.9049</b>	<b>1,463.9049</b>	<b>0.0804</b>	<b>0.2098</b>	<b>1,528.4281</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

San Timoteo Landfill - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	0.1996	0.8651	8.2694	0.0163		0.0266	0.0266		0.0266	0.0266	0.0000	1,581.7313	1,581.7313	0.5116		1,594.5204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1996</b>	<b>0.8651</b>	<b>8.2694</b>	<b>0.0163</b>		<b>0.0266</b>	<b>0.0266</b>		<b>0.0266</b>	<b>0.0266</b>	<b>0.0000</b>	<b>1,581.7313</b>	<b>1,581.7313</b>	<b>0.5116</b>		<b>1,594.5204</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0424	2.6973	0.7720	0.0117	0.3790	0.0198	0.3987	0.1039	0.0189	0.1228			1,294.4281	1,294.4281	0.0767	0.2059	1,357.6884
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0560	0.0341	0.5180	1.6800e-003	0.2236	1.0800e-003	0.2246	0.0593	1.0000e-003	0.0603			169.4768	169.4768	3.6300e-003	3.9300e-003	170.7397
<b>Total</b>	<b>0.0983</b>	<b>2.7315</b>	<b>1.2900</b>	<b>0.0134</b>	<b>0.6025</b>	<b>0.0208</b>	<b>0.6234</b>	<b>0.1632</b>	<b>0.0199</b>	<b>0.1831</b>			<b>1,463.9049</b>	<b>1,463.9049</b>	<b>0.0804</b>	<b>0.2098</b>	<b>1,528.4281</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**San Timoteo Landfill  
South Coast AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	55.00	Acre	55.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2025
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - 55 acres of which 22.1 represent stock pile area
- Construction Phase - Phases and phase length provided by engineer
- Off-road Equipment - No Building Construction
- Off-road Equipment - Equipment and operating hours provided by engineer
- Off-road Equipment - Equipment provided and operating hours provided by engineer
- Off-road Equipment - Equipment and operating hours provided by engineer
- Trips and VMT - Trips based on number of workers provided by engineer
- Grading - Grading estimated by CalEEMod
- Construction Off-road Equipment Mitigation - Engine Tier 4 Interim (mix of Tier 3 and Tier 4 engines)

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	30.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	110.00	900.00
tblConstructionPhase	NumDays	75.00	60.00
tblConstructionPhase	NumDays	40.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	AcresOfGrading	27,000.00	330.00
tblGrading	AcresOfGrading	10.50	60.00
tblLandUse	LandUseSquareFeet	2,395,800.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,300.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.8502	8.8395	6.7011	0.0165	0.3046	0.3475	0.6521	0.0663	0.3197	0.3860	0.0000	1,452.1220	1,452.1220	0.4616	7.0000e-004	1,463.8692
2024	3.6485	36.4965	29.0372	0.0735	0.3266	1.4443	1.7709	0.0592	1.3288	1.3879	0.0000	6,463.6303	6,463.6303	2.0560	2.8400e-003	6,515.8764
2025	3.2179	30.1285	26.1622	0.0732	0.3261	1.1875	1.5136	0.0590	1.0925	1.1515	0.0000	6,435.0992	6,435.0992	2.0479	2.6500e-003	6,487.0845
2026	2.1067	19.7471	17.1539	0.0484	0.2908	0.7755	1.0662	0.0497	0.7134	0.7632	0.0000	4,254.2919	4,254.2919	1.3441	7.3300e-003	4,290.0783
<b>Maximum</b>	<b>3.6485</b>	<b>36.4965</b>	<b>29.0372</b>	<b>0.0735</b>	<b>0.3266</b>	<b>1.4443</b>	<b>1.7709</b>	<b>0.0663</b>	<b>1.3288</b>	<b>1.3879</b>	<b>0.0000</b>	<b>6,463.6303</b>	<b>6,463.6303</b>	<b>2.0560</b>	<b>7.3300e-003</b>	<b>6,515.8764</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2087	0.8671	7.4657	0.0165	0.1561	0.0266	0.1826	0.0349	0.0266	0.0614	0.0000	1,452.1203	1,452.1203	0.4616	7.0000e-004	1,463.8675
2024	0.9282	3.8775	33.2291	0.0735	0.2303	0.1192	0.3496	0.0488	0.1192	0.1679	0.0000	6,463.6228	6,463.6228	2.0560	2.8400e-003	6,515.8688
2025	0.9228	3.8622	33.0949	0.0732	0.2298	0.1188	0.3487	0.0486	0.1188	0.1674	0.0000	6,435.0917	6,435.0917	2.0479	2.6500e-003	6,487.0769
2026	0.6038	2.5853	21.7383	0.0484	0.1945	0.0774	0.2719	0.0394	0.0774	0.1167	0.0000	4,254.2870	4,254.2870	1.3441	7.3300e-003	4,290.0734
<b>Maximum</b>	<b>0.9282</b>	<b>3.8775</b>	<b>33.2291</b>	<b>0.0735</b>	<b>0.2303</b>	<b>0.1192</b>	<b>0.3496</b>	<b>0.0488</b>	<b>0.1192</b>	<b>0.1679</b>	<b>0.0000</b>	<b>6,463.6228</b>	<b>6,463.6228</b>	<b>2.0560</b>	<b>7.3300e-003</b>	<b>6,515.8688</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>72.89</b>	<b>88.24</b>	<b>-20.84</b>	<b>0.00</b>	<b>35.04</b>	<b>90.89</b>	<b>76.96</b>	<b>26.72</b>	<b>90.10</b>	<b>86.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	8-20-2023	11-19-2023	4.7932	0.5289
4	11-20-2023	2-19-2024	10.4179	1.2083
5	2-20-2024	5-19-2024	9.8627	1.1807
6	5-20-2024	8-19-2024	10.0814	1.2064
7	8-20-2024	11-19-2024	10.0820	1.2070

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

8	11-20-2024	2-19-2025	9.1692	1.2068
9	2-20-2025	5-19-2025	8.1273	1.1662
10	5-20-2025	8-19-2025	8.4008	1.2050
11	8-20-2025	11-19-2025	8.4014	1.2057
12	11-20-2025	2-19-2026	8.4013	1.2055
13	2-20-2026	5-19-2026	8.2741	1.2208
14	5-20-2026	8-19-2026	8.4775	1.2331
15	8-20-2026	9-30-2026	0.5478	0.0785
		Highest	10.4179	1.2331

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2023	10/10/2023	5	7	
2	Grading	Grading	10/11/2023	8/25/2026	6	900	
3	Paving	Paving	3/26/2026	6/17/2026	5	60	

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	7.7200e-003	0.0802	0.0404	1.0000e-004		3.6400e-003	3.6400e-003		3.3400e-003	3.3400e-003	0.0000	8.8351	8.8351	2.8600e-003	0.0000	8.9065
<b>Total</b>	<b>7.7200e-003</b>	<b>0.0802</b>	<b>0.0404</b>	<b>1.0000e-004</b>	<b>0.0951</b>	<b>3.6400e-003</b>	<b>0.0987</b>	<b>0.0382</b>	<b>3.3400e-003</b>	<b>0.0415</b>	<b>0.0000</b>	<b>8.8351</b>	<b>8.8351</b>	<b>2.8600e-003</b>	<b>0.0000</b>	<b>8.9065</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	2.2800e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6010	0.6010	2.0000e-005	2.0000e-005	0.6060
<b>Total</b>	<b>2.2000e-004</b>	<b>1.7000e-004</b>	<b>2.2800e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6010</b>	<b>0.6010</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.6060</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Fugitive Dust					0.0428	0.0000	0.0428	0.0172	0.0000	0.0172	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	1.7300e-003	0.0487	1.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	8.8351	8.8351	2.8600e-003	0.0000	8.9065
<b>Total</b>	<b>9.3000e-004</b>	<b>1.7300e-003</b>	<b>0.0487</b>	<b>1.0000e-004</b>	<b>0.0428</b>	<b>0.0000</b>	<b>0.0428</b>	<b>0.0172</b>	<b>0.0000</b>	<b>0.0172</b>	<b>0.0000</b>	<b>8.8351</b>	<b>8.8351</b>	<b>2.8600e-003</b>	<b>0.0000</b>	<b>8.9065</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	2.2800e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6010	0.6010	2.0000e-005	2.0000e-005	0.6060
<b>Total</b>	<b>2.2000e-004</b>	<b>1.7000e-004</b>	<b>2.2800e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6010</b>	<b>0.6010</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.6060</b>

**3.3 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
	Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8327	8.7518	6.5579	0.0161		0.3437	0.3437		0.3162	0.3162	0.0000	1,416.2414	1,416.2414	0.4580	0.0000	1,427.6925
<b>Total</b>	<b>0.8327</b>	<b>8.7518</b>	<b>6.5579</b>	<b>0.0161</b>	<b>0.1750</b>	<b>0.3437</b>	<b>0.5187</b>	<b>0.0189</b>	<b>0.3162</b>	<b>0.3351</b>	<b>0.0000</b>	<b>1,416.2414</b>	<b>1,416.2414</b>	<b>0.4580</b>	<b>0.0000</b>	<b>1,427.6925</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-003	7.3800e-003	0.1005	2.9000e-004	0.0338	1.9000e-004	0.0340	8.9700e-003	1.8000e-004	9.1500e-003	0.0000	26.4445	26.4445	6.8000e-004	6.8000e-004	26.6643
<b>Total</b>	<b>9.6000e-003</b>	<b>7.3800e-003</b>	<b>0.1005</b>	<b>2.9000e-004</b>	<b>0.0338</b>	<b>1.9000e-004</b>	<b>0.0340</b>	<b>8.9700e-003</b>	<b>1.8000e-004</b>	<b>9.1500e-003</b>	<b>0.0000</b>	<b>26.4445</b>	<b>26.4445</b>	<b>6.8000e-004</b>	<b>6.8000e-004</b>	<b>26.6643</b>

**Mitigated Construction On-Site**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0787	0.0000	0.0787	8.5000e-003	0.0000	8.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1980	0.8578	7.3141	0.0161		0.0264	0.0264		0.0264	0.0264	0.0000	1,416.2397	1,416.2397	0.4580	0.0000	1,427.6908
<b>Total</b>	<b>0.1980</b>	<b>0.8578</b>	<b>7.3141</b>	<b>0.0161</b>	<b>0.0787</b>	<b>0.0264</b>	<b>0.1051</b>	<b>8.5000e-003</b>	<b>0.0264</b>	<b>0.0349</b>	<b>0.0000</b>	<b>1,416.2397</b>	<b>1,416.2397</b>	<b>0.4580</b>	<b>0.0000</b>	<b>1,427.6908</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-003	7.3800e-003	0.1005	2.9000e-004	0.0338	1.9000e-004	0.0340	8.9700e-003	1.8000e-004	9.1500e-003	0.0000	26.4445	26.4445	6.8000e-004	6.8000e-004	26.6643
<b>Total</b>	<b>9.6000e-003</b>	<b>7.3800e-003</b>	<b>0.1005</b>	<b>2.9000e-004</b>	<b>0.0338</b>	<b>1.9000e-004</b>	<b>0.0340</b>	<b>8.9700e-003</b>	<b>1.8000e-004</b>	<b>9.1500e-003</b>	<b>0.0000</b>	<b>26.4445</b>	<b>26.4445</b>	<b>6.8000e-004</b>	<b>6.8000e-004</b>	<b>26.6643</b>

**3.3 Grading - 2024**

**Unmitigated Construction On-Site**

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6082	36.4670	28.6172	0.0723		1.4435	1.4435		1.3280	1.3280	0.0000	6,348.4726	6,348.4726	2.0532	0.0000	6,399.8033
<b>Total</b>	<b>3.6082</b>	<b>36.4670</b>	<b>28.6172</b>	<b>0.0723</b>	<b>0.1750</b>	<b>1.4435</b>	<b>1.6185</b>	<b>0.0189</b>	<b>1.3280</b>	<b>1.3469</b>	<b>0.0000</b>	<b>6,348.4726</b>	<b>6,348.4726</b>	<b>2.0532</b>	<b>0.0000</b>	<b>6,399.8033</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0402	0.0296	0.4200	1.2600e-003	0.1516	8.3000e-004	0.1524	0.0403	7.6000e-004	0.0410	0.0000	115.1577	115.1577	2.7600e-003	2.8400e-003	116.0731
<b>Total</b>	<b>0.0402</b>	<b>0.0296</b>	<b>0.4200</b>	<b>1.2600e-003</b>	<b>0.1516</b>	<b>8.3000e-004</b>	<b>0.1524</b>	<b>0.0403</b>	<b>7.6000e-004</b>	<b>0.0410</b>	<b>0.0000</b>	<b>115.1577</b>	<b>115.1577</b>	<b>2.7600e-003</b>	<b>2.8400e-003</b>	<b>116.0731</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0787	0.0000	0.0787	8.5000e-003	0.0000	8.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8880	3.8480	32.8091	0.0723		0.1184	0.1184		0.1184	0.1184	0.0000	6,348.4651	6,348.4651	2.0532	0.0000	6,399.7957
<b>Total</b>	<b>0.8880</b>	<b>3.8480</b>	<b>32.8091</b>	<b>0.0723</b>	<b>0.0787</b>	<b>0.1184</b>	<b>0.1971</b>	<b>8.5000e-003</b>	<b>0.1184</b>	<b>0.1269</b>	<b>0.0000</b>	<b>6,348.4651</b>	<b>6,348.4651</b>	<b>2.0532</b>	<b>0.0000</b>	<b>6,399.7957</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0402	0.0296	0.4200	1.2600e-003	0.1516	8.3000e-004	0.1524	0.0403	7.6000e-004	0.0410	0.0000	115.1577	115.1577	2.7600e-003	2.8400e-003	116.0731
<b>Total</b>	<b>0.0402</b>	<b>0.0296</b>	<b>0.4200</b>	<b>1.2600e-003</b>	<b>0.1516</b>	<b>8.3000e-004</b>	<b>0.1524</b>	<b>0.0403</b>	<b>7.6000e-004</b>	<b>0.0410</b>	<b>0.0000</b>	<b>115.1577</b>	<b>115.1577</b>	<b>2.7600e-003</b>	<b>2.8400e-003</b>	<b>116.0731</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1803	30.1020	25.7720	0.0720		1.1867	1.1867		1.0918	1.0918	0.0000	6,324.2149	6,324.2149	2.0454	0.0000	6,375.3494
<b>Total</b>	<b>3.1803</b>	<b>30.1020</b>	<b>25.7720</b>	<b>0.0720</b>	<b>0.1750</b>	<b>1.1867</b>	<b>1.3617</b>	<b>0.0189</b>	<b>1.0918</b>	<b>1.1107</b>	<b>0.0000</b>	<b>6,324.2149</b>	<b>6,324.2149</b>	<b>2.0454</b>	<b>0.0000</b>	<b>6,375.3494</b>

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0376	0.0265	0.3902	1.2100e-003	0.1511	7.9000e-004	0.1519	0.0401	7.2000e-004	0.0409	0.0000	110.8843	110.8843	2.4900e-003	2.6500e-003	111.7351
<b>Total</b>	<b>0.0376</b>	<b>0.0265</b>	<b>0.3902</b>	<b>1.2100e-003</b>	<b>0.1511</b>	<b>7.9000e-004</b>	<b>0.1519</b>	<b>0.0401</b>	<b>7.2000e-004</b>	<b>0.0409</b>	<b>0.0000</b>	<b>110.8843</b>	<b>110.8843</b>	<b>2.4900e-003</b>	<b>2.6500e-003</b>	<b>111.7351</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0787	0.0000	0.0787	8.5000e-003	0.0000	8.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8852	3.8357	32.7046	0.0720		0.1180	0.1180		0.1180	0.1180	0.0000	6,324.2074	6,324.2074	2.0454	0.0000	6,375.3418
<b>Total</b>	<b>0.8852</b>	<b>3.8357</b>	<b>32.7046</b>	<b>0.0720</b>	<b>0.0787</b>	<b>0.1180</b>	<b>0.1968</b>	<b>8.5000e-003</b>	<b>0.1180</b>	<b>0.1265</b>	<b>0.0000</b>	<b>6,324.2074</b>	<b>6,324.2074</b>	<b>2.0454</b>	<b>0.0000</b>	<b>6,375.3418</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0376	0.0265	0.3902	1.2100e-003	0.1511	7.9000e-004	0.1519	0.0401	7.2000e-004	0.0409	0.0000	110.8843	110.8843	2.4900e-003	2.6500e-003	111.7351
<b>Total</b>	<b>0.0376</b>	<b>0.0265</b>	<b>0.3902</b>	<b>1.2100e-003</b>	<b>0.1511</b>	<b>7.9000e-004</b>	<b>0.1519</b>	<b>0.0401</b>	<b>7.2000e-004</b>	<b>0.0409</b>	<b>0.0000</b>	<b>110.8843</b>	<b>110.8843</b>	<b>2.4900e-003</b>	<b>2.6500e-003</b>	<b>111.7351</b>

San Timoteo Landfill - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Grading - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1750	0.0000	0.1750	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0626	19.5230	16.7147	0.0467		0.7697	0.7697		0.7081	0.7081	0.0000	4,101.6474	4,101.6474	1.3266	0.0000	4,134.8113
<b>Total</b>	<b>2.0626</b>	<b>19.5230</b>	<b>16.7147</b>	<b>0.0467</b>	<b>0.1750</b>	<b>0.7697</b>	<b>0.9446</b>	<b>0.0189</b>	<b>0.7081</b>	<b>0.7270</b>	<b>0.0000</b>	<b>4,101.6474</b>	<b>4,101.6474</b>	<b>1.3266</b>	<b>0.0000</b>	<b>4,134.8113</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0230	0.0156	0.2377	7.6000e-004	0.0980	4.8000e-004	0.0985	0.0260	4.5000e-004	0.0265	0.0000	69.7094	69.7094	1.4700e-003	1.6200e-003	70.2283
<b>Total</b>	<b>0.0230</b>	<b>0.0156</b>	<b>0.2377</b>	<b>7.6000e-004</b>	<b>0.0980</b>	<b>4.8000e-004</b>	<b>0.0985</b>	<b>0.0260</b>	<b>4.5000e-004</b>	<b>0.0265</b>	<b>0.0000</b>	<b>69.7094</b>	<b>69.7094</b>	<b>1.4700e-003</b>	<b>1.6200e-003</b>	<b>70.2283</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0787	0.0000	0.0787	8.5000e-003	0.0000	8.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5741	2.4877	21.2110	0.0467		0.0765	0.0765		0.0765	0.0765	0.0000	4,101.6425	4,101.6425	1.3266	0.0000	4,134.8063
<b>Total</b>	<b>0.5741</b>	<b>2.4877</b>	<b>21.2110</b>	<b>0.0467</b>	<b>0.0787</b>	<b>0.0765</b>	<b>0.1553</b>	<b>8.5000e-003</b>	<b>0.0765</b>	<b>0.0850</b>	<b>0.0000</b>	<b>4,101.6425</b>	<b>4,101.6425</b>	<b>1.3266</b>	<b>0.0000</b>	<b>4,134.8063</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0230	0.0156	0.2377	7.6000e-004	0.0980	4.8000e-004	0.0985	0.0260	4.5000e-004	0.0265	0.0000	69.7094	69.7094	1.4700e-003	1.6200e-003	70.2283



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Worker	1.5400e-003	1.0500e-003	0.0160	5.0000e-005	6.5800e-003	3.0000e-005	6.6200e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	4.6827	4.6827	1.0000e-004	1.1000e-004	4.7175
<b>Total</b>	<b>2.8700e-003</b>	<b>0.0824</b>	<b>0.0389</b>	<b>4.0000e-004</b>	<b>0.0178</b>	<b>6.2000e-004</b>	<b>0.0184</b>	<b>4.8200e-003</b>	<b>6.0000e-004</b>	<b>5.4200e-003</b>	<b>0.0000</b>	<b>39.8875</b>	<b>39.8875</b>	<b>2.1900e-003</b>	<b>5.7100e-003</b>	<b>41.6430</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	-0.0004	0.2506	4.9000e-004		-0.0003	-0.0003		-0.0002	-0.0002	0.0000	43.0476	43.0476	0.0139	0.0000	43.3957
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.8700e-003</b>	<b>-0.0004</b>	<b>0.2506</b>	<b>4.9000e-004</b>		<b>-0.0003</b>	<b>-0.0003</b>		<b>-0.0002</b>	<b>-0.0002</b>	<b>0.0000</b>	<b>43.0476</b>	<b>43.0476</b>	<b>0.0139</b>	<b>0.0000</b>	<b>43.3957</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3300e-003	0.0814	0.0230	3.5000e-004	0.0112	5.9000e-004	0.0118	3.0700e-003	5.7000e-004	3.6400e-003	0.0000	35.2049	35.2049	2.0900e-003	5.6000e-003	36.9255

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e-003	1.0500e-003	0.0160	5.0000e-005	6.5800e-003	3.0000e-005	6.6200e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	4.6827	4.6827	1.0000e-004	1.1000e-004	4.7175
<b>Total</b>	<b>2.8700e-003</b>	<b>0.0824</b>	<b>0.0389</b>	<b>4.0000e-004</b>	<b>0.0178</b>	<b>6.2000e-004</b>	<b>0.0184</b>	<b>4.8200e-003</b>	<b>6.0000e-004</b>	<b>5.4200e-003</b>	<b>0.0000</b>	<b>39.8875</b>	<b>39.8875</b>	<b>2.1900e-003</b>	<b>5.7100e-003</b>	<b>41.6430</b>



**Aquatic Resources Delineation  
Stockpile 3 Project  
San Timoteo Sanitary Landfill  
San Bernardino County, California**



**301 E. Vanderbilt Way, Suite 450  
San Bernardino, California 92408**  
TC# 102-ENV-T43188 Task 01  
August 2023

**Aquatic Resources Delineation  
Stockpile 3 Project, San Timoteo Sanitary Landfill  
San Bernardino County, California**

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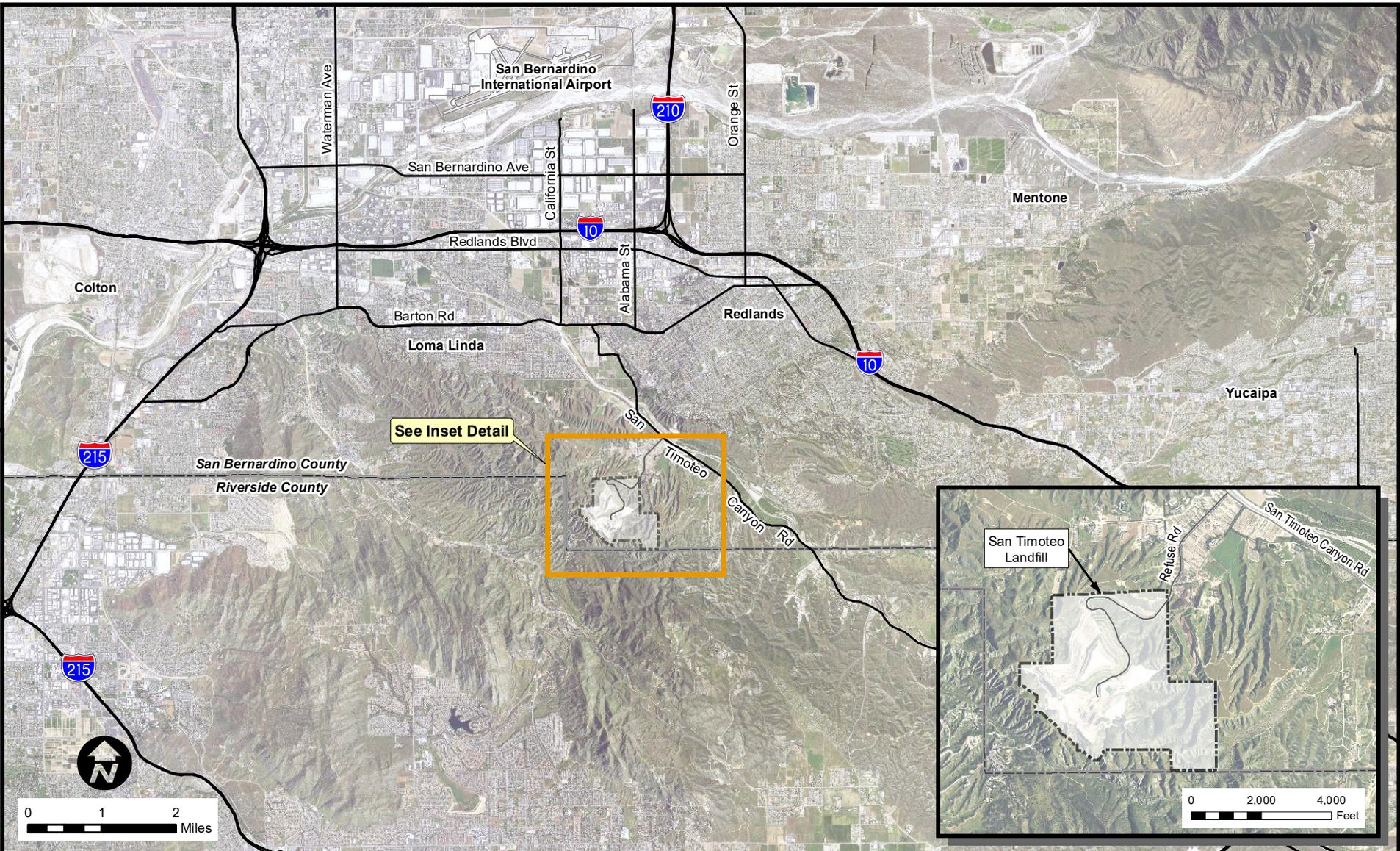
**APPENDIX**

Appendix A           Fauna Compendia

Appendix B           ENG Form 6250 and Photograph Log

## **SECTION 1 PROJECT LOCATION AND SETTING**

Tetra Tech was contracted to conduct an aquatic resources delineation (ARD) of an unnamed drainage associated with the San Timoteo Sanitary Landfill (SLF) in San Bernardino County, California (Figure 1). The San Bernardino County Department of Public Works Solid Waste Management Division is proposing to stockpile earthen material excavated onsite at the San Timoteo Sanitary Landfill (SLF), located in Redlands, California. This ARD has been conducted to determine possible aquatic resources present in an unnamed drainage where earthen material removed from the excavation of the Phase 5 area associated with Unit 2 of the San Timoteo SLF is proposed to be stockpiled (Figure 2). In order to use Phase 5 for future landfilling of refuse, approximately 2,619,250 cubic yards of earthen material must be excavated and would be stockpiled for future use as cover. Identified as Stockpile 3, earthen material is proposed to be stockpiled in an area that would expand the area of disturbance associated with the landfill although the stockpile would be within the current landfill property limits. The San Timoteo SLF is located with the Redlands 7.5 minute topographic U.S. Geological Survey quadrangle (United States Geological Survey 2021). The unnamed drainage associated with the Stockpile 3 project area originates immediately adjacent to Refuse Road within the landfill and terminates near the northeast within the landfill boundary. The unnamed drainage is one of a series of extensively eroded ravines with steep slopes found at the landfill. No natural stream courses have been identified within the drainage (United States Geological Survey, 2021; United States Fish and Wildlife Service, 2023).



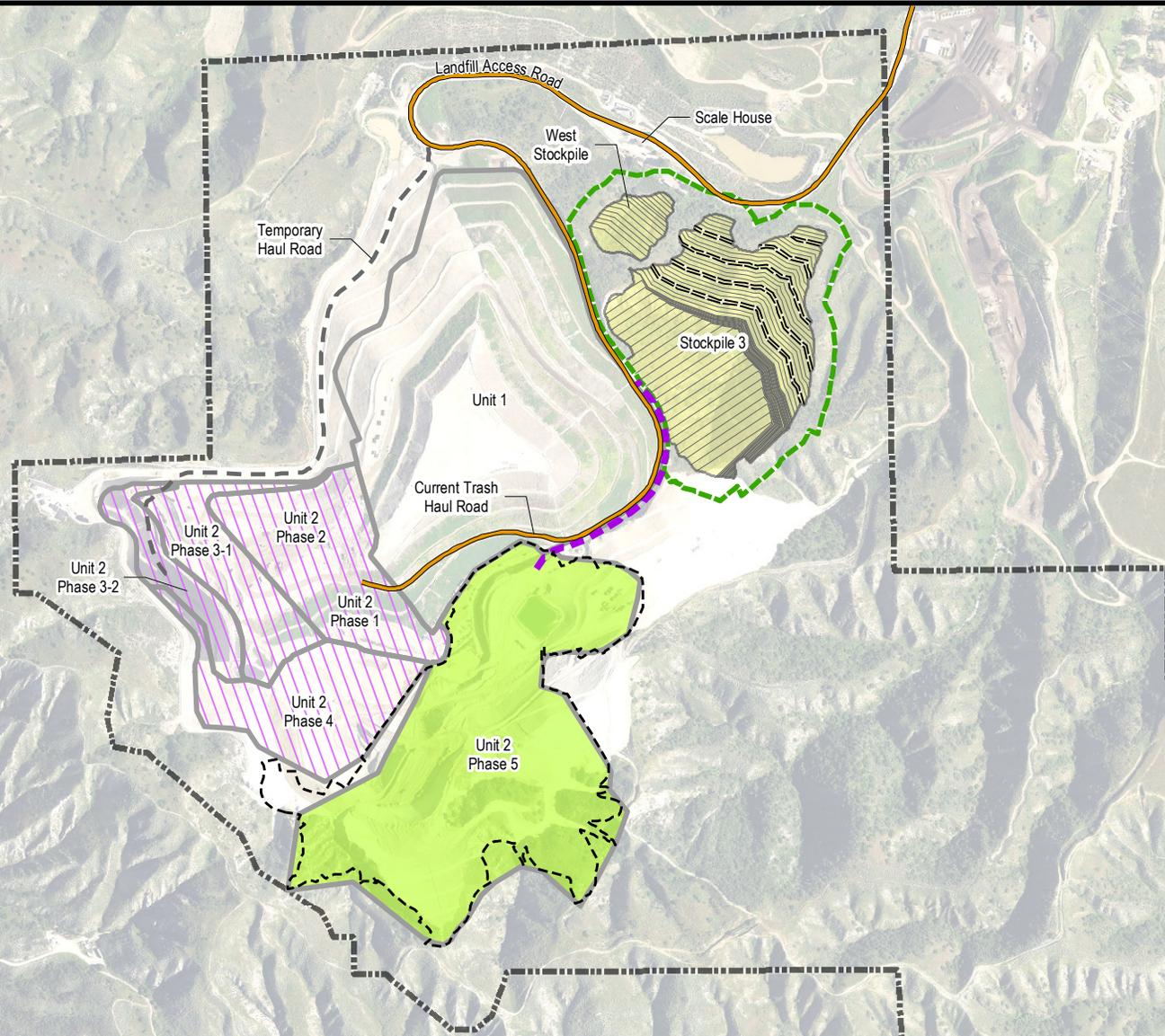
— County Line  
 - - - Landfill Boundary

SAN TIMOTEO LANDFILL

**Figure 1**  
**Regional Location of**  
**San Timoteo Sanitary Landfill**



SAN BERNARDINO COUNTY  
RIVERSIDE COUNTY



- Scraper Route from Excavation to Stockpile
- Temporary Haul Road
- Current Trash Haul Road
- County Line
- Stockpiles
- Approximate Area of Excavation (material placed in Stockpile 3)
- Biological Clearance Buffer (100-ft)
- Active Landfill Face
- Limit of Disturbance
- Landfill Unit/Phase
- Landfill Property Boundary

SAN TIMOTEO LANDFILL

**Figure 2**  
**Landfill Operations and**  
**Stockpile Location-**  
**San Timoteo Sanitary Landfill**



## **SECTION 2 REGULATORY SETTING**

### **2.1 WATERS OF THE UNITED STATES**

The Clean Water Act (CWA) Sections 404 and 401 have provisions for protecting biological resources within the aquatic environment through prohibitions on discharges of fill in wetlands or other Waters of the U.S. and identification of beneficial uses. Other waters include non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses. The Army Corps of Engineers (USACE) jurisdiction for Waters of the U.S. is the Ordinary High Water Mark (OHWM). The USACE defines OHWM as “the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR Section 329.11(a)(1)). The primary functions of the CWA in protecting biological resources are to ensure that any impacts to wetlands or other waters are compensated for and to provide a framework for ensuring that water quality is maintained or improved.

Discharge of dredged or fill material is regulated by the USACE under Section 404 of the CWA. Impacts caused by the addition of fill material into Waters of the U.S., including but not limited to the placement of fill (rock, sand, dirt, or other material as necessary) to construct structures, fill for intake or outfall pipes, and roadway fills. The presence of an OHWM helps to define the boundaries of aquatic features for a variety of federal, state, and local regulatory purposes. Under the Clean Water Act, the OHWM defines the lateral limits of federal jurisdiction for non-tidal waters of the U.S. in the absence of adjacent wetlands (including Section 404, which regulates the discharge of dredge and fill material into Waters of the U.S.) (Wetlands Regulatory Assistance Program 2022). In addition, Section 401 of the CWA requires a Water Quality Certification or waiver when a permit is authorized for discharge of a pollutant (fill) into Waters of the U.S. In California, the Regional Water Quality Control Board (RWQCB) has oversight over Section 401.

***Definition of a Waters of the U.S. (WOTUS) wetland.*** Wetlands are areas where water covers the soil or where water is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Water saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on

**Aquatic Resources Delineation  
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the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils.

***Definition of non-wetland WOTUS.*** Other WOTUS include navigable waters of the United States which are those waters that are subject to the ebb and flow of the tide and or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

## **2.2 WATERS OF THE STATE**

Under the Porter-Cologne Water Quality Control Act, all Waters of the U.S. that are within the borders of California are also Waters of the State. The State Water Resources Control Board (SWRCB) delegates authority to the RWQCBs, which take Section 401 water quality certification actions for activities subject to any permit issued by the USACE pursuant to Section 404 of the CWA. Under Section 401 of the CWA and the Porter-Cologne Water Quality Act, the RWQCB exercises jurisdiction over discharges that may affect jurisdictional wetlands and those non-isolated waters associated with Traditional Navigable Waters (TNW).

The SWRCB regulates Waters of the State (WOS) which are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code 13050(e)). WOS also include various wetlands habitats plus all waters considered to be WOTUS. The SWRCB will regulate fill (discharge) into Waters of the State which are not regulated by the USACE due to a lack of connectivity with a TNW through the Waste Discharge Requirements (WDR) program.

In addition, under Sections 1600-1616 of the State of California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which support fish or wildlife (i.e., bed to bank). The CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” The CDFW has interpreted the term “streambed” to encompass all portions of the bed, banks, and channel of any stream, including intermittent and ephemeral streams, extending laterally to the upland edge of riparian vegetation. Construction and maintenance actions that may affect the streambed would be subject to creation of a Streambed

**Aquatic Resources Delineation  
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Alteration Agreement under Section 1602. This agreement would include measures to protect fish, wildlife, and vegetation that may be affected during construction in the streambed.

***Definition of WOS of California.*** WOS for the State of California include any surface or groundwater (including saline waters) within the boundaries of the state, various wetlands, plus all waters considered to be WOTUS.

## **SECTION 3 METHODOLOGY**

### **3.1 AERIAL PHOTOGRAPH REVIEW**

Prior to mobilizing into the field, Tetra Tech conducted a review of the 1995, 2002, 2004, 2009, 2010, 2011, 2012, 2015, 2016, 2017, 2018, 2019, 2020, and 2022 images of San Timoteo SL to include the Stockpile 3 project area for sign of past extreme flooding events (Google Earth 2022).

### **3.2 OTHER READILY AVAILABLE INFORMATION**

The National Wetland Inventory (NWI) Mapper on-line access tool was used to map aquatic resources within the landfill limits (United States Fish and Wildlife Agency 2023). In addition, soil resources found within the landfill limits were mapped using the on-line soil survey mapper (United States Department of Agriculture 2023).

The delineation of potential jurisdictional aquatic resources within the unnamed drainage was conducted according to methodology described in the following publications:

- *U.S. Corps of Engineers Wetlands Delineation Manual* (U.S. Corps of Engineers 1987)
- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Corps of Engineers 2008)
- *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams, Interim Version* (Wetland Regulatory Assistance Program 2022).

## **SECTION 4 RESULTS**

An ARD of the unnamed drainage located within the proposed Stockpile 3 project area was conducted and concluded on June 14, 2023. Weather conditions were cool and with clear skies. Weather conditions for temperature and wind speed were obtained using a web-based application for weather in the region and were recorded at the start and conclusion of the reconnaissance survey (AccuWeather 2023). Cloud cover was recorded based on visual observations. No rain had occurred within five days of the reconnaissance survey. Weather conditions at the start and conclusion of the survey are summarized in the table below.

	<b>Time</b>	<b>Temperature (F°)</b>	<b>Cloud Cover (percent)</b>	<b>Wind Speed (miles per hour)</b>
Start of the Reconnaissance Survey (06/14/23)	1030	72	Clear	0 to 1
Conclusion of the Reconnaissance Survey (06/24/23)	1200	74	Clear	2 to 4

View of the origins of the drainage were made from Refuse Road that is used to access the active landfill area. Due to the extreme slope of drainage, observations of the drainage were conducted. The terminal end of the drainage located to the northeast was access using an on-site unimproved road and was limited by the extremely dense short pod mustard (*Hirschfeldia incana*) plants which is a non-native invasive weed. It could be observed that the short-pod mustard plants dominated the base of the drainage. Plants outside the base of the drainage were observed to be a mixture of plants that characterize coastal sage scrub habitat with a non-native grassland and forb understory. Plants associated with coastal sage scrub habitat are characterized by low growing aromatic shrubs. These plants tend to be drought-deciduous shrubs adapted to semi-arid environments. Characteristic plants found in coastal sage scrub habitat include chemise (*Adenostoma fasciculatum*), black sage (*Salvia mellifera*) and lemonade berry (*Rhus integrifolia*) which were observed scattered throughout the unnamed drainage. Short pod mustard appeared to be the dominate understory forb within this plant community.

**Aquatic Resources Delineation  
Stockpile 3 Project, San Timoteo Sanitary Landfill  
San Bernardino County, California**

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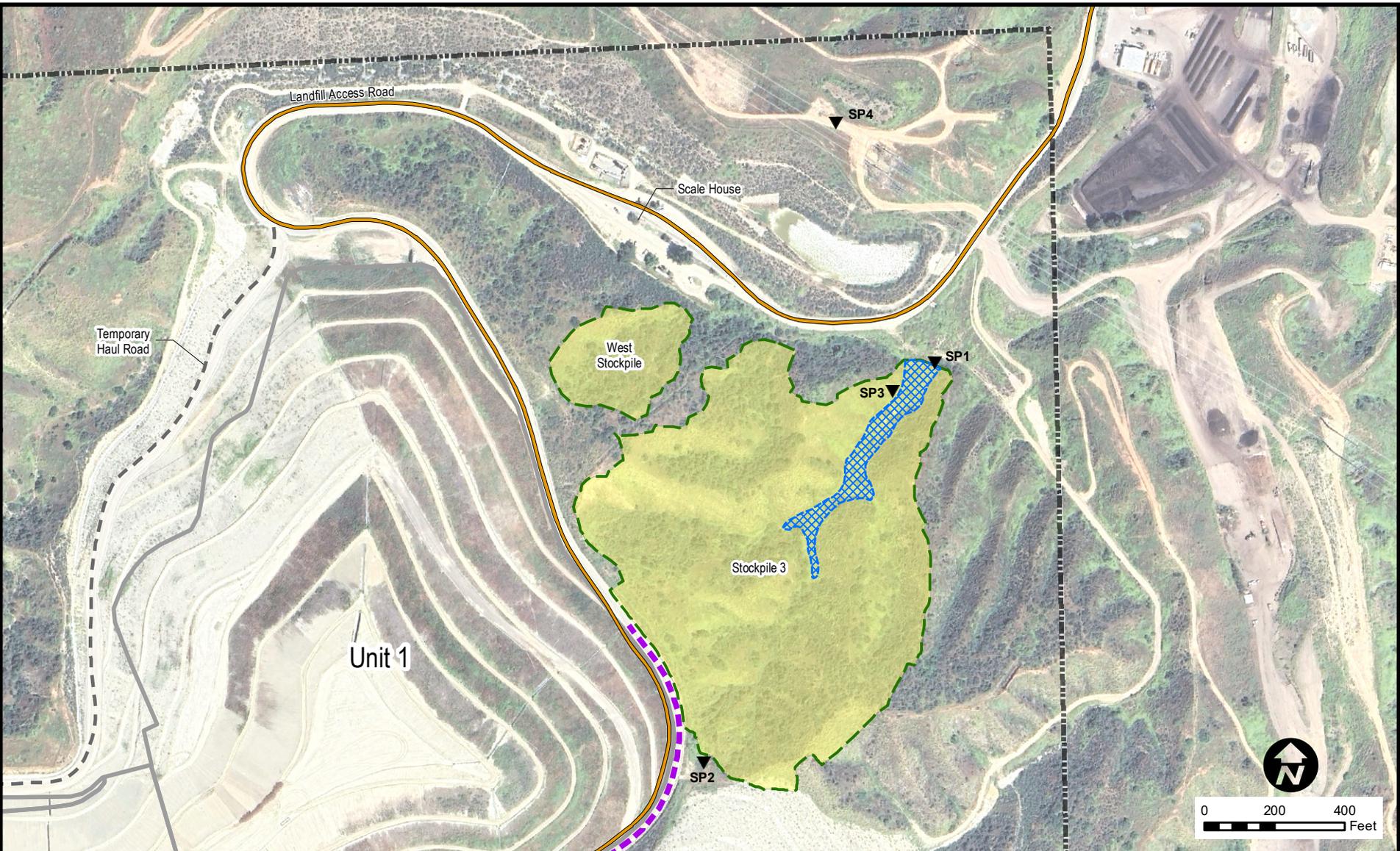
Based on the relative absence of coastal sage scrub plants in the base of the drainage, OHWM was determined to be represented by change in plant communities between the base and sides of the drainage. During a review of Google Earth images of the unnamed drainage, the 2011 image depicted evidence of soil erosion and sign of water movement that appeared to have been confined to the lower elevations. No sign of flow past the terminus of the drainage was observed in any past aerial image or during the June field investigation.

Plant communities and sampling points within the Stockpile 3 project area are illustrated in Figure 3. A compendium of plants observed during the delineation is provided in Appendix A. Using the Rapid OHWM Field Identification Data Sheet (US Army Corps of Engineers 2022), observations of OHWM characteristics within the unnamed drainage were documented (Appendix B).

#### **4.1 SOILS AND VEGETATION**

*Soils.* The Saugus sandy loam, 30 to 50 percent slope series has been mapped as the dominate soil series within the landfill including the unnamed drainage associated with the Stockpile 3 project area (United States Department of Agriculture 2023). The field reconnaissance confirmed mapping conducted by the United States Department of Agriculture. The soils within the unnamed drainage area were noted as having a sandy loam texture.

*Vegetation.* As noted earlier, plants within the unnamed drainage were noted as dominated by non-native ruderal weeds. Ruderal plants are those that are first to colonize disturbed lands and tend to be non-native invasive species. No emergent wetland plants or riparian habitat were observed. Plants on the unnamed drainage slope were observed to be occupied by disturbed coastal sage scrub habitat.



- ▼ Sampling Point
- — — Temporary Haul Road
- Current Trash Haul Road
- ▨ Riverine Habitat/Non-Native Forbs (0.91 acre)
- ▭ Stockpile Boundary
- ▭ Disturbed Coastal Sage Scrub (22.1 acres)
- ▭ Landfill Unit/Phase
- ▭ Landfill Property Boundary

SAN TIMOTEO LANDFILL

**Figure 3**  
**Regulated Waters**



## **4.2 HYDROLOGY**

The unnamed drainage directs water flow from the southwest to the northeast. Between the unnamed drainage and San Timoteo SL is landfill infrastructure, Refuse Road, a commercial nursery and San Timoteo Canyon Road. Beyond these developments lies San Timoteo Creek. A clear hydrological connection between the unnamed channel and San Timoteo Creek could not be established during the ARD. No clear sign of water movement past the northeastern terminus of the unnamed drainage was observed.

## **4.3 NATIONAL WETLAND INVENTORY**

The objective of the NWI is to produce reconnaissance level information about the location, area, and type of the wetlands in a given location. No aquatic resources associated with the unnamed drainage have been identified by the NWI (U.S. Fish and Wildlife Service 2023).

## **4.4 POTENTIAL WATERS OF THE U.S.**

### **4.4.1 Wetlands**

No emergent macrophytic plants typically observed in or near wetlands were observed in the unnamed drainage. The Saugus sandy loam soil series have been identified as not having hydric characteristics. Hydric soils are those formed under conditions of flooding or ponding long enough during the growing season to develop anaerobic conditions (U.S. Army Corps of Engineers 1987). No flowing or standing water was observed within the unnamed drainage. Based on the absence of plants other than short-pod mustard, do jurisdictional wetlands as defined by the USACE were inferred to be present within the unnamed drainage

### **4.4.2 Non-Wetland Waters (Other Waters)**

Using the steps provided in the Rapid OHWM Field Identification Data Sheet, a total of 0.91 acres of aquatic habitat associated with the unnamed drainage was identified during the field effort (Figure 3). Based on the lack of clear connection to San Timoteo Wash located to east, the unnamed drainage is likely an isolated water and not subject to Section 404 of the Clean Water Act.

## **4.5 POTENTIAL WATERS OF THE STATE**

### **4.5.1 Riverine Habitat**

The unnamed drainage area and adjacent areas associated with the landfill have been subject to past water flow that has resulted in a deeply incised topography. The incised areas were observed to be vegetated by the same mixture of native coastal chaparral habitat mixed and non-native plants as observed in undeveloped areas of the landfill. Past streambed water flow characteristics were observed to coincide with OHWM indicators. A total of 0.91 acres of disturbed riverine habitat potentially subject to regulation as a WOS was determined within the unnamed drainage (Figure 3). Within the Stockpile 3 project area outside the identified riverine habitat within the unnamed drainage, a total of 22.1 acres of disturbed coastal sage scrub habitat was determined to be present.

## **SECTION 5 RECOMMENDATIONS**

The following recommendations are provided for project-related work that would directly or indirectly impact riverine habitat within the unnamed drainage associated with the Stockpile 3 project area.

- Seek a California Department of Fish and Game Code 1600 et. seq. Streambed Alteration Agreement. For any project-related impacts to the unnamed drainage, a Streambed Alteration Agreement permit will be required. This permit details all project impacts to the unnamed drainage plus mitigation for compensating those losses. An analysis of project impacts as per the California Environmental Quality Act (CEQA) would be required prior to issuance of the Streambed Alteration Agreement permit by the CDFW.
- Request concurrence from the U.S. Army Corps of Engineers that the unnamed drainage is an isolated water and not subject to Section 404/401 under the CWA. A recent decision from the Supreme Court narrowed protection for wetlands that only directly adjoin rivers, lakes or other bodies of water subject to Sections 404/10 of the CWA (*Sackett et ux v. Environmental Protection Agency et. al*). As a result, the USACOE is limiting their decision on the regulatory status of an aquatic resource pending direction from the Department of Justice to issuance of Preliminary Jurisdictional Determinations.

## **SECTION 6 REFERENCES**

### AccuWeather

2023 Weather for Lancaster, California. <https://www.accuweather.com/en/us>

Baldwin, B.G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D.H. Wilkin, editors.

2012 *The Jepson manual: Vascular plants of California, second edition*. University of California Press.

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2009 A Manual of California Vegetation, Second Edition.

### United States Army Corps of Engineers

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### United States Fish and Wildlife Service

2023 National Wetlands Inventory Mapper. [National Wetlands Inventory \(usgs.gov\)](https://www.fws.gov/nwmi). accessed 5/9/23.

### United States Department of Agriculture

2023 Custom Soil Resources Report for San Bernardino County Southwestern Part, California. <https://websoilsurvey.nrcs.usda.gov/app/> Natural Resources Conservation Service. <https://websoilsurvey.nrcs.usda.gov>, accessed 7/31/23

### United States Geological Survey

2021 Redlands 7.5-minute topographic quadrangle.

### Wetland Regulatory Assistance Program

2022 National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams

Whitson, T. D., ed., L. C. Burrill, S. A. Dewey, D. W. Cudney, B. E. Nelson, R. D. Lee, and R. Parker

1997 *Weeds of the West*. Western Society of Weed Science in cooperation with the Western United States Land Grant Universities Cooperative Extension Services.

**Appendix A**  
**Aquatic Resources Delineation**  
**Floral Compendium**  
**San Timoteo Sanitary Landfill**

Flora	Flowering Plants
<b>Angiospermae: Monocotyledonae</b>	<b>Monocot Flowering Plants</b>
<b>Liliacea</b>	<b>Lily Family</b>
<i>Calochortus plummerae</i>	Plummer's mariposa lily
<b>Poaceae</b>	<b>Grass Family</b>
<i>Bromus diandrus</i>	Ripgut grass*
<i>Bromus madritensis.</i>	Red brome*
<b>Angiospermae: Dicotyledonae</b>	<b>Dicot Flowering Plants</b>
<b>Anacardiaceae</b>	<b>Sumac Family</b>
<i>Rhus integrifolia</i>	Lemonade berry
<i>Rhus trilobata</i>	Skunkbush
<i>Toxicodendron diversilobum</i>	Poison oak
<b>Asteraceae</b>	<b>Aster Family</b>
<i>Artemisia dracunculus</i>	Tarragon
<i>Cnicus benedictus</i>	Blessed thistle*
<i>Encelia farinosa</i>	Brittlebush
<i>Helianthus annuus</i>	Common sunflower
<i>Matricaria discoidea</i>	Pineapple weed*
<i>Pseudognaphalium californicum</i>	California everlasting
<b>Boraginaceae</b>	<b>Borage Family</b>
<i>Amsinkia menziesii</i> var. <i>intermedia</i>	Common fiddleneck
<i>Phacelia</i> sp.	Phacelia
<b>Brassicaceae</b>	<b>Mustard Family</b>
<i>Hirschfeldia incana</i>	Shortpod mustard*
<b>Caprifoliaceae</b>	<b>Honeysuckle Family</b>
<i>Sambucus mexicanus</i>	Blue elderberry
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>
<i>Salsola tragus</i>	Russian thistle*
<b>Convolvulaceae</b>	<b>Morning Glory Family</b>
<i>Cuscuta</i> sp.	California dodder
<b>Fabaceae</b>	<b>Legume Family</b>
<i>Acmispon glaber</i>	Common deerweed
<i>Astragalus</i> sp.	Milkvetch
<i>Lupinus bicolor</i>	Annual lupine
<b>Geraniaceae</b>	<b>Geranium Family</b>
<i>Erodium cicutarium</i>	Common stork's-bill*
<b>Lamiaceae</b>	<b>Mint Family</b>
<i>Salvia mellifera</i>	Black sage
<b>Polygonaceae</b>	<b>Buckwheat Family</b>
<i>Eriogonum fasciculatum</i>	California buckwheat
<b>Rosaceae</b>	<b>Rose Family</b>
<i>Adenostoma fasciculatum</i>	Chamise
<b>Solanaceae</b>	<b>Nightshade Family</b>
<i>Nicotiana glauca</i>	Tobacco tree
<b>Utricaceae</b>	<b>Nettle Family</b>
<i>Urtica dioica</i>	Common nettle

\* Denotes non-native plants

Baldwin, B.G., D. H. Goldman, D. J. Ke

il, R, Patterson, T. J. Rosatti, and D.H. Wilkin, editors.

2012 *The Jepson manual: Vascular plants of California, second edition.* University of California Press.

Whitson, T. D., ed., L. C. Burrill, S. A. Dewey, D. W. Cudney, B. E. Nelson, R. D. Lee, and R. Parker

1997 *Weeds of the West.* Western Society of Weed Science in cooperation with the Western United States Land Grant Universities Cooperative Extension Services.

U.S. Army Corps of Engineers (USACE)  
**RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET**

The proponent agency is Headquarters USACE CECW-CO-R.

*From Approved -  
 OMB No. 0710-0025  
 Expires: 01-31-2025*

**AGENCY DISCLOSURE NOTICE**

The public reporting burden for this collection of information, 0710-OHWM, is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at [whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil](mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

Project ID #: 102-ENV-T43188	Site Name: San Timoteo SLF	Date and Time: 6/14/23, 1030
Location (lat/long): 34.014641, -117.210256		Investigator(s): S. Pacheco/K. Simon

<p><b>Step 1 Site overview from remote and online resources</b>  <b>Check boxes for online resources used to evaluate site:</b></p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> gage data</td> <td><input type="checkbox"/> LiDAR</td> <td><input type="checkbox"/> geologic maps</td> </tr> <tr> <td><input type="checkbox"/> climatic data</td> <td><input checked="" type="checkbox"/> satellite imagery</td> <td><input type="checkbox"/> land use maps</td> </tr> <tr> <td><input type="checkbox"/> aerial photos</td> <td><input checked="" type="checkbox"/> topographic maps</td> <td><input type="checkbox"/> Other: _____</td> </tr> </table>	<input type="checkbox"/> gage data	<input type="checkbox"/> LiDAR	<input type="checkbox"/> geologic maps	<input type="checkbox"/> climatic data	<input checked="" type="checkbox"/> satellite imagery	<input type="checkbox"/> land use maps	<input type="checkbox"/> aerial photos	<input checked="" type="checkbox"/> topographic maps	<input type="checkbox"/> Other: _____	<p><b>Describe land use and flow conditions from online resources.</b>                  Were there any recent extreme events (floods or drought)?                  2010 Google Earth image showed sign of water movement/erosion in drainage; no spill out to lined ditch located to the northeast. Possible rain event(s) caused erosion in 2011. No sign of erosion past lowest contour of drainage.</p>
<input type="checkbox"/> gage data	<input type="checkbox"/> LiDAR	<input type="checkbox"/> geologic maps								
<input type="checkbox"/> climatic data	<input checked="" type="checkbox"/> satellite imagery	<input type="checkbox"/> land use maps								
<input type="checkbox"/> aerial photos	<input checked="" type="checkbox"/> topographic maps	<input type="checkbox"/> Other: _____								

**Step 2 Site conditions during field assessment.** First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

The unnamed drainage is dominated by *H. incana* that has made access impassible. Upland to the drainage is dominated by *H. incana* and coastal chaparral habitat. No sign of recent sediment movement/erosion observed.

**Step 3 Check the boxes next to the indicators used to identify the location of the OHWM.**  
**OHWM is at a transition point**, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below 'b', at 'x', or just above 'a' the OHWM.  
 Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

**Geomorphic indicators**

<input checked="" type="checkbox"/> <b>Break in slope:</b> <input type="checkbox"/> on the bank: <input type="checkbox"/> undercut bank: <input checked="" type="checkbox"/> valley bottom: x <input type="checkbox"/> Other: _____  <input type="checkbox"/> <b>Shelving:</b> <input type="checkbox"/> shelf at top of bank: <input type="checkbox"/> natural levee: <input type="checkbox"/> man-made berms or levees: <input type="checkbox"/> other berms: _____	<input type="checkbox"/> <b>Channel bar:</b> <input type="checkbox"/> shelving (berms) on bar: <input type="checkbox"/> unvegetated: <input type="checkbox"/> vegetation transition (go to veg. indicators) <input type="checkbox"/> sediment transition (go to sed. indicators) <input type="checkbox"/> upper limit of deposition on bar:  <input type="checkbox"/> <b>Instream bedforms and other bedload transport evidence:</b> deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.) <input type="checkbox"/> bedforms (e.g., pools, riffles, steps, etc.):	<input type="checkbox"/> erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) <input type="checkbox"/> <b>Secondary channels:</b>  <p><b>Sediment indicators</b></p> <input type="checkbox"/> <b>Soil development:</b> <input type="checkbox"/> <b>Changes in character of soil:</b> <input type="checkbox"/> <b>Mudcracks:</b> <input type="checkbox"/> <b>Changes in particle-sized distribution:</b> <input type="checkbox"/> transition from _____ to _____ <input type="checkbox"/> upper limit of sand-sized particles <input type="checkbox"/> silt deposits:
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**Vegetation Indicators**

<input checked="" type="checkbox"/> <b>Change in vegetation type and/or density:</b> x Check the appropriate boxes and select the general vegetation change (e.g., <i>graminoids</i> to <i>woody shrubs</i> ). <b>Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.</b>  <input type="checkbox"/> vegetation absent to: <input type="checkbox"/> moss to:	<input checked="" type="checkbox"/> forbs to: woody shrubs <input type="checkbox"/> graminoids to: <input type="checkbox"/> woody shrubs to: <input type="checkbox"/> deciduous trees to: <input type="checkbox"/> coniferous trees to: <input type="checkbox"/> <b>Vegetation matted down and/or bent:</b>	<input type="checkbox"/> <b>Exposed roots below intact soil layer:</b>  <p><b>Ancillary indicators</b></p> <input type="checkbox"/> <b>Wracking/presence of organic litter:</b> <input type="checkbox"/> <b>Presence of large wood:</b> <input type="checkbox"/> <b>Leaf litter disturbed or washed away:</b> <input type="checkbox"/> <b>Water staining:</b> <input type="checkbox"/> <b>Weathered clasts or bedrock:</b>
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**Other observed indicators? Describe:**  
 Non-native forbs within the base of the drainage; disturbed coastal chaparral habitat in upland areas beyond the base of the drainage. Chaparral understory dominated by non-native forbs and grasses.



**OHWM Field Identification Datasheet Instructions and Field Procedure**

**Step 1 Site overview from remote and online resources**

Complete Step 1 prior to site visit.

Online Resources: Identify what information is available for the site. Check boxes on datasheet next to the resources used to assess this site.

- |                      |  |
|----------------------|--|
| a. gage data         | e. topographic maps                              |
| b. aerial photos     | f. geologic maps                                 |
| c. satellite imagery | g. land use maps                                 |
| d. LiDAR             | h. climatic data (precipitation and temperature) |

Landscape context: Use the online resources to put the site in the context of the surrounding landscape.

a. Note on the datasheet under Step 1:

- i. Overall land use and change if known
- ii. Recent extreme events if known (e.g., flood, drought, landslides, debris flows, wildfires)

b. Consider the following to inform weighting of evidence observed during field visit.

- i. What physical characteristics are likely to be observed in specific environments?
- ii. Was there a recent flood or drought? Are you expecting to see recently formed or obscured indicators?
- iii. How will land use affect specific stream characteristics? How natural is the hydrologic regime? How stable has the landscape been over the last year, decade, century?

**Step 2 Site conditions during the field assessment (assemble evidence)**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>a. Identify the assessment area.</li> <li>b. Walk up and down the assessment area noting all the potential OHWM indicators.</li> <li>c. Note broad trends in channel shape, vegetation, and sediment characteristics.                             <ul style="list-style-type: none"> <li>i. Is this a single thread or multi-thread system? Is this a stream-wetland complex?</li> <li>ii. Are there any secondary and/or floodplain channels?</li> <li>iii. Are there obvious man-made alterations to the system?</li> <li>iv. Are there man-made (e.g., bridges, dams, culverts) or natural structures (e.g., bedrock outcrops, Large Wood jams) that will influence or control flow?</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>d. Look for signs of recurring fluvial action.                             <ul style="list-style-type: none"> <li>i. Where does the flow converge on the landscape?</li> <li>ii. Are there signs of fluvial action (sediment sorting, bedforms, etc.) at the convergence zone?</li> </ul> </li> <li>e. Look for indicators on both banks. If the opposite bank is not accessible, then look across the channel at the bank.</li> <li>f. In Step 2 of the datasheet describe any adjacent land use or flow conditions that may influence interpretation of each line of evidence.                             <ul style="list-style-type: none"> <li>i. What land use and flow conditions may be affecting your ability to observe indicators at the site?</li> <li>ii. What recent extreme events may have caused changes to the site and affected your ability to observe indicators?</li> </ul> </li> </ul> |
|---|--|

**Step 3a List evidence**

Assemble evidence by checking the boxes next to each line of evidence:

- a. If needed, use a separate scratch datasheet to check boxes next to possible indicators, or check boxes of possible indicators in pencil and use pen for final decision.
- b. If using fillable form, then follow the instructions for filling in the fillable form.

*Context is important when assembling evidence. For instance, pool development may be an indicator of interest on the bed of a dry stream, but may not be a useful indicator to take note of in a flowing stream. On the other hand, if the pool is found in a secondary channel adjacent to the main channel, it could provide a line of evidence for a minimum elevation of high flows. Therefore, consider the site context when deciding which indicators provide evidence for identifying the OHWM. Explain reasoning in Step 5.*

Questions to consider while making observations and listing evidence at a site:

Geomorphic indicators	Sediment and soil indicators	Vegetation Indicators	Ancillary indicators
Where are the breaks in slope? Are there identifiable banks? Is there an easily identifiable top of bank? Are the banks actively eroding? Are the banks undercut? Are the banks armored? Is the channel confined by the surrounding hillslopes? Are there natural or man-made berms and levees? Are there fluvial terraces? Are there channel bars?	Where does evidence of soil formation appear?  Are there mudcracks present?  Is there evidence of sediment sorting by grain size?	Where are the significant transitions in vegetation species, density, and age?  Is there vegetation growing on the channel bed?  If no, how long does it take for the non-tolerant vegetation to establish relative to how often flows occur in the channel?  Where are the significant transitions in vegetation?  Is the vegetation tolerant of flowing water?  Has any vegetation been flattened by flowing water?	Is there organic litter present?  Is there any leaf litter disturbed or washed away?  Is there large wood deposition?  Is there evidence of water staining?

Are the following features of fluvial transport present?  
*Evidence of erosion: obstacle marks, scour, armoring  
 Bedforms; riffles, pools, steps, knickpoints/headcuts  
 Evidence of deposition: imbricated clasts, gravel sheets, etc.*

In some cases, it may be helpful to explain why an indicator was NOT at the OHWM elevation, but found above or below. It can also be useful to note if specific indicators (e.g., vegetation) are NOT present. For instance, note if the site has no clear vegetation zonation.

## OHWM Field Identification Datasheet Instructions and Field Procedure

### Step 3b Weight each line of evidence and weigh body of evidence

Weight each indicator by considering its importance based upon:

#### a. Relevance:

- i. Is this indicator left by low, high, or extreme flows?

**Tips on how to assess the indicator relative to type of flow:**

*Consider the elevation of the indicator relative to the channel bed.*

*What is the current flow level based on season or nearby gages?*

*Consider the elevation of the indicator relative to the current flow.*

*If the stream is currently at baseflow and indicator is adjacent to that, then it is likely a low flow indicator. The difference between high and extreme flow indicators can sometimes be difficult to determine.*

- ii. Did recent extreme events and/or land use affect this indicator?

1. Recent floods may have left many extreme flow indicators, or temporarily altered channel form.

Other resources will likely be needed to support any OHWM identification at this site. Field evidence of the OHWM may have to wait for the site to recover from the recent flood.

2. Droughts may cause field evidence of OHWM to be obscured, because there has been an extended time since the last high flow event. There can be overgrowth of vegetation or deposition of material from surrounding landscape that can obscure indicators.

3. Both man-made (e.g., dams, construction, mining activities, urbanization, agriculture, grazing) and natural (e.g., fires, floods, debris flows, beaver dams) disturbances can all alter how indicators are expected to appear at a site. Chapter 6 and Chapter 7 of the OHWM field manual provides specific case-studies that can help in interpreting evidence at these sites.

#### b. Strength:

- i. Is this indicator persistent across the landscape?

1. Look up and downstream and across the channel to see if you see the same indicator at multiple locations.

2. Does the indicator occur at the same elevation as other indicators?

#### c. Reliability:

- i. Is this indicator persistent on the landscape over time? Will this indicator still persist across seasons?

1. This can be difficult to determine for some indicators and may be specific to climatic region (in terms of persistence of vegetation) and history of land use or other natural disturbances.

2. Chapter 2, Chapter 6, and Chapter 7 of the OHWM field manual describes each indicator in detail and provides examples of areas where indicators are difficult to interpret.

#### d. Weigh body of evidence:

- i. Combine weights: integrate the weighted line of evidence (relevance, strength, reliability) of each indicator.

- ii. For each of the observed indicators, which are more heavily weighted? Where do high value indicators co-occur along the stream reach? Do they co-occur at a similar elevation along the banks relative to water surface (or channel bed if there is no water).

- iii. On datasheet, select the indicators used to identify the OHWM. Information in Chapter 2 of the OHWM field manual provides descriptions of specific indicators which can assist in putting these in context and determining relevance, strength, and reliability.

#### e. Take photographs of indicators and attach a log using either page 2 of datasheet or another method of logging photos.

- i. Annotate photos with descriptions of indicators.

\*Landscape context from Step 1 can help determine the relevance, strength, and reliability of the indicators observed in the field.

\*Information in Chapter 2 of the OHWM field manual provides information on specific indicators which can assist in putting these in context and determining relevance, strength, and reliability.

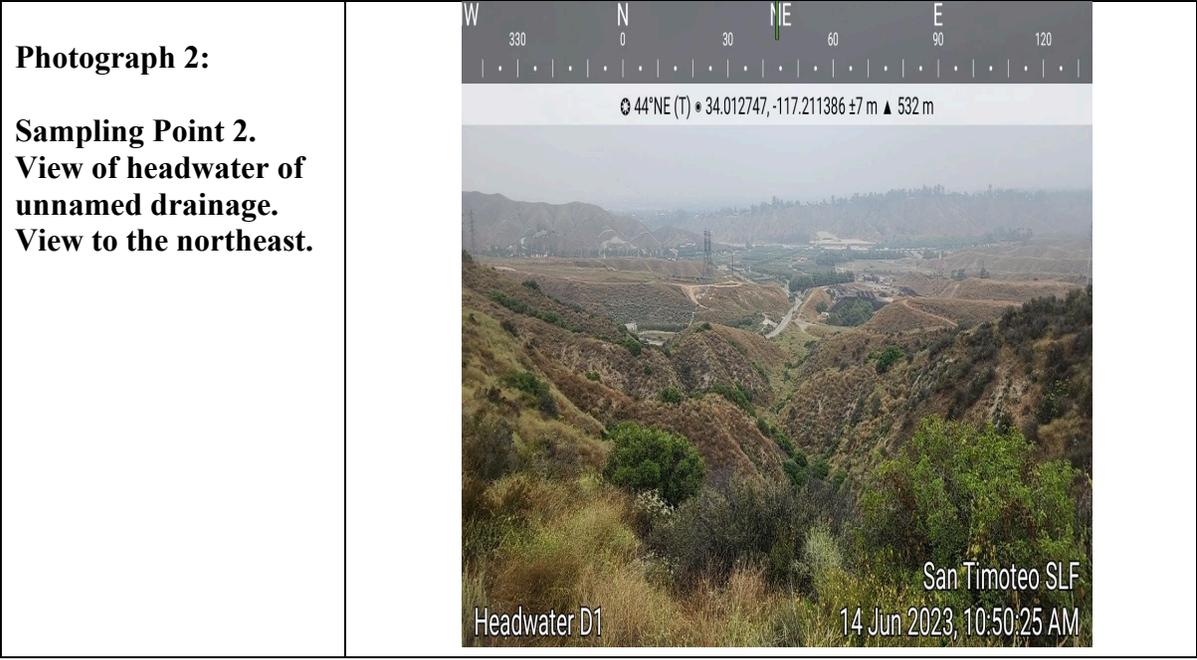
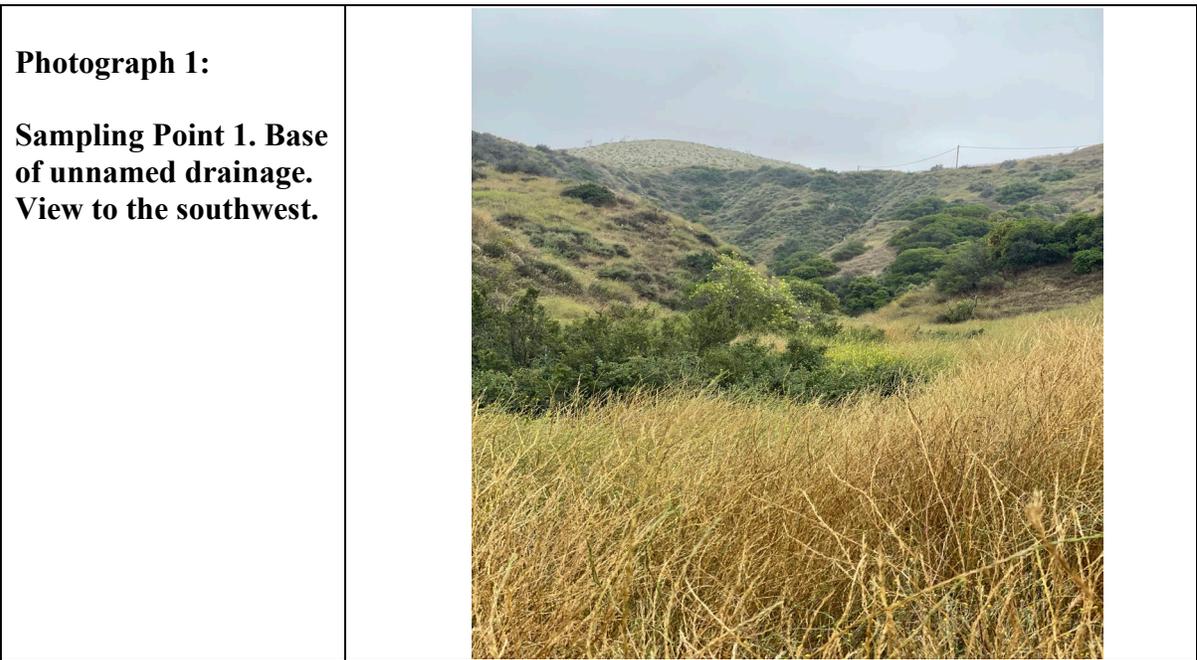
### Step 4 Is additional information needed? Are other resources needed to support the lines of evidence observed in the field?

- a. If additional resources are needed, then repeat steps 3a and 3b for the resources selected in Step 1 of assembling, weighting, and weighing evidence collected from online resources. Chapter 5 of the OHWM field manual provides information on using online resources.
- b. Any data collected from online tools have strengths and weaknesses. Make sure these are clear when determining relevance, strength, and reliability of the remotely collected data. Clearly describe why other resources were needed to support the lines of evidence observed in the field, as well as the relevance, strength, and reliability of the supporting data and/or resources.
- c. Attach any remote data and data analysis to the datasheet.

### Step 5 Describe rationale for location of OHWM:

- a. Why do the combination of indicators represent the OHWM?
- b. If there are multiple possibilities for the OHWM, explain why there are two (or more) possibilities. Include any relevant discussion on why specific indicators were not included in the final decision.
- c. If needed, add additional site notes on page 2 of the datasheet under Step 5.

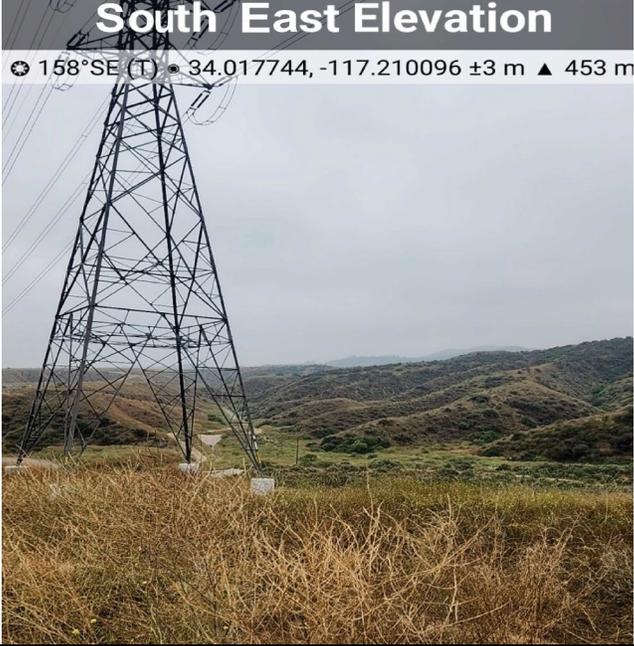
**Photograph Log ENG Form 6250**  
**Stockpile 3 Project**  
**San Timoteo Sanitary Landfill**  
**San Bernardino, California**



**Photograph Log ENG Form 6250**  
**Stockpile 3 Project**  
**San Timoteo Sanitary Landfill**  
**San Bernardino, California**



<p><b>Photograph 3:</b></p> <p><b>Sampling Point 3.</b> <b>View of the base of the unnamed drainage.</b> <b>View to the southwest</b></p>	<p>Date &amp; Time: Wed, Jun 14, 2023 at 11:19:10 PDT Position: 11 N 480648 3763910 (±4.6m) Altitude: 477m (±3.6m) Datum: WGS-84 Azimuth/Bearing: 214° 534W 3604mils True (±12°) Elevation Grade: +011% Horizon Grade: -001% Zoom: 8.5X</p> 
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<p><b>Photograph 4:</b></p> <p><b>Sampling Point 4.</b> <b>View of the base of the unnamed drainage in the distance. View to the southeast</b></p>	<p><b>South East Elevation</b></p> <p>📍 158°SE (T) • 34.017744, -117.210096 ±3 m ▲ 453 m</p> 
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