



Appendix D

Air Quality Analysis Technical Memorandum

MEMORANDUM

To: Joseph Onyebuchi, Associate Planner, City of Burbank
From: Noemi Wyss, AICP, Kimley-Horn and Associates, Inc.
Tanay Pradhan, Kimley-Horn and Associates, Inc.
Date: July 8, 2025
Subject: Burbank Soil Vapor Extraction System Upgrade Project – Air Quality Analysis

1.0 Purpose

The purpose of this memorandum is to assess potential impacts due to air pollutant emissions associated with construction and operation of the Soil Vapor Extraction (SVE) System Upgrade Project (Project), proposed to be located in the City of Burbank (City), California.

2.0 Proposed Project Description

Implementation of the Project would require development at 1234 North Victory Place and within the parking lots of the adjacent Burbank Empire Center (1501 North Victory Place, 1800 West Empire Avenue, and 1301 North Victory Place); see **Figure 1: Regional Vicinity Map**. The Project Site is generally surrounded by commercial and industrial uses bounded between the Metrolink Antelope Valley line railroad tracks and Interstate 5 (I-5); see **Figure 2: Local Vicinity Map**. The 1234 North Victory Place portion of the Project Site is currently improved with a building that contains the legacy SVE treatment system, and five parking spaces. The SVE well field is located within the parking lots of the Burbank Empire Center.

The Proposed Project would consist of four primary elements: 1) dismantling and removal of the existing legacy SVE treatment plant and associated structures; 2) installation of a new SVE treatment plant at 1234 Victory Place; 3) installation of 27 additional SVE wells beneath the Burbank Empire Center parking lots within the SVE well field; and 4) installation of an underground piping network to connect the new wells to the proposed SVE treatment system. The new SVE treatment system would be located on the northern portion of the SVE treatment plant property and would extract soil vapors containing concentrations of volatile organic compounds (VOCs) from beneath the SVE well field and treat the vapors prior to release to the atmosphere.

The 27 additional SVE wells would be installed to develop a focused SVE network for targeted VOC mass removal in source areas VMP-3 and VMP-5. The proposed wells would be drilled to a maximum depth of 145 feet and would be connected to underground conveyance piping that would convey vapors from the proposed wells to the proposed SVE treatment system. All but three of the proposed

wells would be within the SVE well field; three of the proposed wells surrounding the VMP-5 source area would be in the City's right-of-way (ROW) for North Victory Place to the north.

The proposed SVE treatment plant would be accessed via the existing driveway off North Victory Place located in the adjacent parcel (APN 2462-017-032) west of the SVE treatment plant property of the Project Site. The Proposed Project would provide two parking places within the Project Site, for employees, visitors, and vendors performing periodic monitoring or other activities during operation of the SVE facility. The proposed SVE wells within the SVE well field would be accessed via the existing parking lots of the Burbank Empire Center.

Project construction is anticipated to start in early 2026 and conclude in the spring of 2027 (assumed to be up to 16 months). Project construction activities would consist of demolition of the existing legacy SVE treatment plant, Project Site grading, installation of new electrical infrastructure, and construction of the proposed SVE treatment system and associated wells and piping. Based on information provided by the applicant, construction of the proposed SVE Phase I C3 system would not overlap with construction of the proposed SVE wells and piping.



SOURCE: Google Earth, 2024



FIGURE 2: Local Vicinity Map

SOIL VAPOR EXTRACTION SYSTEM UPGRADE PROJECT

3.0 Regulatory

Federal

Federal Clean Air Act

At the national level air quality is regulated by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the United States Environmental Protection Agency (U.S. EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter less than 10 micrometers in diameter (PM₁₀), particulate matter less than 2.5 micrometers in diameter (PM_{2.5}), and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each State to prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a State fails to correct these planning deficiencies within two years of Federal notification, the U.S. EPA is required to develop a Federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan.

State

California Air Resources Board

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. The CAAQS, included with the NAAQS in **Table 1: State and National Ambient Air Quality Standards**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting NAAQS for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a CAAQS for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not

considered violations of a CAAQS, and are not used as a basis for designating areas as nonattainment. The applicable CAAQS are summarized in **Table 1**.

Table 1: State and National Ambient Air Quality Standards			
Pollutant	Averaging Time	State Standards¹	National Standards²
Ozone (O ₃) ^{2, 5, 7}	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm
	1 Hour	0.09 ppm (180 µg/m ³)	NA
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)
	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	0.10 ppm ¹¹
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)
Sulfur Dioxide (SO ₂) ⁸	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)
	Annual Arithmetic Mean	NA	0.03 ppm (80 µg/m ³)
Particulate Matter (PM ₁₀) ^{1, 3, 6}	24-Hour	50 µg/m ³	150 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	NA
Fine Particulate Matter (PM _{2.5}) ^{3, 4, 6, 9}	24-Hour	NA	35 µg/m ³
	Annual Arithmetic Mean	12 µg/m ³	9.0 µg/m ³
Sulfates (SO ₄₋₂)	24 Hour	25 µg/m ³	NA
Lead (Pb) ^{10, 11}	30-Day Average	1.5 µg/m ³	NA
	Calendar Quarter	NA	1.5 µg/m ³
	Rolling 3-Month Average	NA	0.15 µg/m ³
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (0.15 µg/m ³)	NA
Vinyl Chloride (C ₂ H ₃ Cl) ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	NA
Notes: ppm = parts per million; µg/m ³ = micrograms per cubic meter; mg/m ³ = milligrams per cubic meter; NA = no information available. 1. California standards for O ₃ , carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter – PM ₁₀ , and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe CO, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM ₁₀ annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard. 2. National standards shown are the "primary standards" designed to protect public health. National standards other than for O ₃ , particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O ₃ standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour O ₃ standard is attained when the 3-year average of the 4 th highest daily concentrations is 0.070 ppm or less. The 24-hour PM ₁₀ standard is attained when the 3-year average of the 99 th percentile of monitored concentrations is less than 150 µg/m ³ . The 24-hour PM _{2.5} standard is attained when the 3-year average of 98 th percentiles is less than 35 µg/m ³ . 3. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM ₁₀ is met if the 3-year average falls below the standard at every site. The annual PM _{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the U.S. EPA at levels determined to be protective of public health with an adequate margin of safety.			

Table 1: State and National Ambient Air Quality Standards			
Pollutant	Averaging Time	State Standards ¹	National Standards ²
4. On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour O₃ concentration per year, averaged over three years, is equal to or less than 0.070 ppm. U.S. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O₃ level in the area. 5. The national 1-hour O₃ standard was revoked by the U.S. EPA on June 15, 2005. 6. In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀. 7. The 8-hour California O₃ standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006. 8. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO₂ NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO₂ NAAQS. 9. In December 2012, U.S. EPA strengthened the annual PM_{2.5} NAAQS from 15.0 to 12.0 µg/m³. In December 2014, the U.S. EPA issued final area designations for the 2012 primary annual PM_{2.5} NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015. 10. CARB has identified lead and vinyl chloride as toxic air contaminants (TAC) with no threshold level of exposure below which there are no adverse health effects determined. 11. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.			
Source: California Air Resources Board, <i>Table of Ambient Air Quality Standards</i> , July 16, 2024.			

Regional

South Coast Air Quality Management District

Regionally, air quality is governed by the South Coast Air Quality Management District (SCAQMD), the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD’s primary responsibility is ensuring that California Ambient Air Quality Standards (CAAQS) and NAAQS are attained and maintained in the South Coast Air Basin (SoCAB). The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities.

The SCAQMD is the lead agency in charge of developing the Air Quality Management Plan (AQMP), with input from the Southern California Association of Governments (SCAG) and the CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for some on-road and off-road mobile sources. SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under State law as a Regional Transportation Planning Agency and a Council of Governments. SCAG has the primary

responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the AQMP is to set forth a comprehensive and integrated program that would lead the air basin into compliance with the federal 24-hour PM_{2.5} air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the 8-hour O₃ NAAQS. Specifically, the 2016 AQMP covers the following NAAQS: 1979 1-hour O₃ NAAQS, 1997 8-hour O₃ NAAQS, 2006 24-hour PM_{2.5} NAAQS, 2008 8-hour O₃ NAAQS, and the 2012 annual PM_{2.5} NAAQS.

The 2022 AQMP, adopted by the SCAQMD Governing Board on December 2, 2022, was developed to address the requirements for meeting the 2015 8-hour O₃ standard. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulations, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other FCAA measures to achieve the 2015 8-hour O₃ standard. An AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the EPA. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), entitled *Connect SoCal 2024 RTP/SCS* (referred to as "Connect SoCal") and updated emission inventory methodologies for various source categories. Connect SoCal was approved by SCAG regional council on April 4, 2024, however CARB must formally approve the plan.

The SCAQMD has published the *CEQA Air Quality Handbook* (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Localized Significance Thresholds [LSTs] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by California Environmental Quality Act (CEQA) and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the *CEQA Air Quality Handbook* and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

The State and federal attainment status designations for the SoCAB are summarized in **Table 2: South Coast Air Basin Attainment Status**. The SoCAB is currently designated as a nonattainment area for

the O₃, PM₁₀, and PM_{2.5} CAAQS, as well as the 8-hour O₃ and PM_{2.5} NAAQS. The SoCAB is designated as attainment or unclassified for the remaining CAAQS and NAAQS.

Table 2: South Coast Air Basin Attainment Status		
Pollutant	State	Federal
Ozone (O ₃) (1 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Ozone (O ₃) (8 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Particulate Matter (PM _{2.5}) (24 Hour Standard)	–	Non-Attainment (Serious)
Particulate Matter (PM _{2.5}) (Annual Standard)	Non-Attainment	Non-Attainment (Serious)
Particulate Matter (PM ₁₀) (24 Hour Standard)	Non-Attainment	Attainment (Maintenance)
Particulate Matter (PM ₁₀) (Annual Standard)	Non-Attainment	–
Carbon Monoxide (CO) (1 Hour Standard)	Attainment	Attainment (Maintenance)
Carbon Monoxide (CO) (8 Hour Standard)	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (NO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO ₂) (Annual Standard)	Attainment	Attainment (Maintenance)
Sulfur Dioxide (SO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO ₂) (24 Hour Standard)	Attainment	–
Lead (Pb) (30 Day Average)	Attainment	–
Lead (Pb) (3 Month Standard)	–	Nonattainment (Partial)
Sulfates (SO ₄₋₂) (24 Hour Standard)	Attainment	–
Hydrogen Sulfide (H ₂ S) (1 Hour Standard)	Attainment	–
Source: South Coast Air Quality Management District, Air Quality Management Plan, 2022; United States Environmental Protection Agency, Nonattainment Areas for Criteria Pollutants (Green Book), 2022.		

The following is a list of SCAQMD rules that are required of construction and operational activities associated with the Project:

- **Rule 402 (Nuisance)** – This rule 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM10 suppression techniques are summarized below.
 - Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1166 (Volatile Organic Compound Emissions from Decontamination of Soil)** – This rule sets requirements to control the emission of VOCs from excavating, grading, handling and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition. The rule requires that an approved mitigation plan be obtained from SCAQMD prior to commencing any of the following activities:
 - The excavation of an underground storage tank or piping which has stored VOCs.
 - The excavation or grading of soil containing VOC material including gasoline, diesel, crude oil, lubricant, waste oil, adhesive, paint, stain, solvent, resin, monomer, and/or any other material containing VOCs.

- The handling or storage of VOC-contaminated soil (>50 parts per million or greater using an organic vapor analyzer calibrated with hexane) at or from an excavation or grading site.
 - The treatment of VOC contaminated soil at a facility.
- **Rule 1401 (New Source Review of Toxic Air Contaminants)** – This rule establishes limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit applicable toxic air contaminants. Diesel Particulate Matter (DPM) is a substance listed in Table 1 of the Rule.¹ Therefore, the requirements to allow the construction and use of the new generators are as follows:
 - **MICR and Cancer Burden:** The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:
 - an increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;
 - an increased MICR greater than ten in one million (10×10^{-6}) at any receptor location, if the permit unit is constructed with T-BACT;
 - a cancer burden greater than 0.5.
 - **Chronic Hazard Index:** The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by the state Office of Environmental Health Hazard Assessment (OEHHA) will not exceed 1.0 at any receptor location.
 - **Acute Hazard Index:** The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by OEHHA will not exceed 1.0 at any receptor location.
- **Rule 1402 (Control of Toxic Air Contaminants From Existing Sources)** – This rule reduces the health risk associated with emissions of TACs from existing sources by specifying notification risk levels, action risk levels, and significant risk levels for MICR, cancer burden, and non-cancer acute and chronic HI applicable to total facility emissions. The rule establishes requirements to implement Risk Reduction Plans to achieve specified risk limits, as required by the Hot Spots Act and this rule.

¹ SCAQMD, Rule 1401, page 1401-17, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf?sfvrsn=4>.

- **Rule 1403 (Asbestos Emissions From Demolition/Renovation Activities)** – This rule applies to owners and operators of any demolition or renovation activity, and the associated disturbance of asbestos-containing material (ACM), any asbestos storage facility, or any active waste disposal site. This rule includes requirements for activities, handling and clean-up procedures, storage, disposal and landfill requirements.
- **Rule 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants)** – This rule applies to projects with earth-moving activities of soil with applicable toxic air contaminants (TACs) that have been identified as contaminants of concern at a site.

Ambient Air Quality

The SCAQMD maintains a network of air quality monitoring stations located throughout the South Coast Air Basin to measure ambient pollutant concentrations. The Project Site is located in SCAQMD Source Receptor Area (SRA) 7; therefore, the monitoring station most representative of the Project Site is the East San Fernando Valley Monitoring Station. Criteria pollutants monitored at this station include ozone (O₃) and NO₂. The West San Fernando Valley Monitoring Station, west of the Project Site, was used to report data for CO and PM_{2.5}. The Central LA Station, south of the Project Site, is the nearest, most representative station with recorded data for SO₂, PM₁₀, and lead. The most recent pollutant concentration data available from the SCAQMD for these monitoring stations are from years 2021 to 2023 and are summarized in **Table 3: Ambient Air Quality Data**.

Table 3: Ambient Air Quality Data				
Pollutant/Standard^{1,2}		2021	2022	2023
O₃ (1-hour)				
Maximum Concentration (ppm)		0.110	0.106	0.120
Number of Days > CAAQS (0.09 ppm)		6	6	11
O₃ (8-hour)				
Maximum Concentration (ppm)		0.089	0.091	0.096
4 th High 8-hour Concentration (ppm)		0.079	0.082	0.085
Number of Days > CAAQS (0.070 ppm)		17	15	25
Number of Days > NAAQS (0.070 ppm)		17	13	25
NO₂ (1-hour)				
Maximum Concentration (ppm)		0.065	0.054	0.051
98 th Percentile Concentration (ppm)		0.049	0.047	0.046
NO₂ (Annual)				
Annual Arithmetic Mean (0.030 ppm)		0.014	0.013	0.012
CO (1-hour)				
Maximum Concentration (ppm)		2.6	2.2	2.3
CO (8-hour)				
Maximum Concentration (ppm)		1.9	1.8	1.7

Table 3: Ambient Air Quality Data			
Pollutant/Standard^{1,2}	2021	2022	2023
SO₂ (1-hour)			
Maximum Concentration (ppm)	0.002	0.007	0.008
99 th Percentile Concentration (ppm)	0.002	0.002	0.002
SO₂ (24-hour)			
Maximum Concentration (ppm)	--	--	--
PM₁₀ (24-hour)			
Maximum Concentration (µg/m ³)	64	60	57
Number of Samples > CAAQS (50 µg/m ³)	3	4	2
Number of Samples > NAAQS (150 µg/m ³)	0	0	0
PM₁₀ (Annual Average)³			
Annual Arithmetic Mean (20 µg/m ³)	25.5	28.9	24.3
PM_{2.5} (24-hour)			
Maximum Concentration (µg/m ³)	55.5	20.5	21.9
98 th Percentile Concentration (µg/m ³)	36.1	19.5	19.2
Number of Samples > NAAQS (35 µg/m ³)	3	0	0
PM_{2.5} (Annual)⁴			
Annual Arithmetic Mean (12 µg/m ³)	10.06	8.81	8.81
Lead			
Maximum 30-day average (µg/m ³)	0.012	0.008	0.007
ppm = parts per million; µg/m ³ = micrograms per cubic meter			
1. The California Ambient Air Quality Standards (CAAQS) are based on a not to exceed standard. The National Ambient Air Quality Standards (NAAQS) are based on a 3-year average of the annual 4 th highest daily maximum 8-hour concentration for O ₃ ; 98 th percentile of 1-hour daily maximum concentrations averaged over 3 years for 1-hr NO ₂ ; and not to be exceeded more than once per year on average over 3 years for 24-hr PM.			
Source: SCAQMD, Historical Data by Year, https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year ; USEPA, AirData, www.epa.gov/airdata/ad_rep_mon.html . Accessed May 22, 2025.			

Local

City of Burbank Park General Plan

The City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City's General Plan has multiple elements that contain the following policies specific to air quality potentially applicable to the Project:

Air Quality and Climate Change Element

Goal 1: Reduction of Air Pollution. The health and sustainability of the city, county, and Basin are improved by planning and programs that reduce air pollutants. Policies that reduce fossil

fuel combustion (by reducing vehicle miles traveled and promoting conservation and use of renewable energy) lessen adverse impacts on both air quality and climate change.

Policy 1.6: Require measures to control air pollutant emissions at construction sites and during soil-disturbing or dust-generating activities (i.e., tilling, landscaping) for projects requiring such activities.

Goal 2: Sensitive Receptors. Burbank is committed to reducing the exposure of sensitive receptors to toxic air contaminants and odors.

Policy 2.2 Separate sensitive uses such as residences, schools, parks, and day care facilities from sources of air pollution and toxic chemicals. Provide proper site planning and design features to buffer and protect when physical separation of these uses is not feasible.

4.0 Significance Criteria and Methodology

Air Quality Thresholds

Based on the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan,
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard,
- Expose sensitive receptors to substantial pollutant concentrations, or
- Result in other emissions (such as leading to odors) adversely affecting a substantial number of people.

SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if a Project would violate an ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established numeric thresholds of significance for air pollutants resulting from construction and operational activities of land use development projects, as shown in **Table 4: South Coast Air Quality Management District Significance Thresholds**.

Table 4: South Coast Air Quality Management District Regional Significance Thresholds		
Pollutant	Mass Daily Thresholds (pounds per day)	
	Construction	Operations
Nitrogen Oxides (NO _x)	100	55
Volatile Organic Compounds (VOC) ¹	75	55
Particulate Matter up to 10 Microns (PM10)	150	150
Particulate Matter up to 2.5 Microns (PM2.5)	55	55
Sulphur Oxides (SO _x)	150	150
Carbon Monoxide (CO)	550	550
1. VOCs and Reactive Organic Gases (ROGs) are subsets of organic gases that are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Although they represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.		
Source: South Coast Air Quality Management District, <i>SCAQMD Air Quality Significance Thresholds</i> , March 2023.		

Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the Project would also be subject to the CAAQS and NAAQS. These are addressed through an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project are above CAAQS and NAAQS for CO (the more stringent CAAQS are 20 ppm for 1-hour and 9 ppm for 8-hour). The SoCAB has been designated as attainment of the 1-hour and 8-hour CO CAAQSs.

Localized Significance Thresholds

The SCAQMD developed Localized Significance Thresholds (LSTs) for emissions of NO₂, CO, PM10, and PM2.5 generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project without expecting to cause or substantially contribute to an exceedance of the most stringent state or federal ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for projects that disturb 5 acres or less on a single day. The City of Burbank is located within SCAQMD SRA 7 (East San Fernando Valley). The nearest sensitive receptors are located approximately 440 feet from the Project Site (approximately 134 meters).² Therefore, the lowest threshold distance of 134 meters was interpolated and used for analysis based on the SCAQMD LST methodology guidance. The construction LST acreage is determined based on daily acreage disturbed. The operational LST acreage

² Per the SCAQMD LSTs Methodology, a sensitive receptor is classified as a residence, hospital, convalescent facility where it is possible that an individual could remain for 24 hours.

is based on the total area of the Project site. LSTs associated with the interpolated 134-meter threshold are provided in **Table 5: Local Significance Thresholds for Construction/Operations** for informational purposes and to demonstrate that the thresholds increase as acreages increase.

Table 5: Local Significance Thresholds for Construction and Operations								
Project Size	Maximum Pounds Per Day^{1,2}							
	Construction				Operations			
	NO_x	CO	PM10	PM2.5	NO_x	CO	PM10	PM2.5
1 Acre	104	1,521	36	11	104	1,521	9	3
2 Acres	129	1,999	44	14	129	1,999	11	4
5 Acres	182	3,116	66	19	182	3,116	16	5
1. NO _x = Nitrogen Oxides; CO = Carbon Monoxide; PM10 = Particulate Matter 10 microns in diameter or less; PM2.5 = Particulate Matter 2.5 microns in diameter or less								
2. Based on receptor distance of 134 meters based on SRA 7.								
Source: South Coast Air Quality Management District, Localized Significance Threshold Methodology, July 2008.								

Methodology

The Project's construction emissions were calculated using the California Emissions Estimator Model version 2022.1 (CalEEMod). Details of the modeling assumptions and emission factors are provided in **Appendix A**. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. For operations, emissions associated with the Project would be generated by the effluent of the SVE system and mobile trips associated with the Project. Operation and maintenance visits would be made at least one day per week to collect operational data such as flow rates, temperatures, and pressures, and to monitor the influent and effluent VOC concentrations at the proposed facility. Further, other special treatment system operations, such as restarting the system after shutdown or unscheduled maintenance, would necessitate an operator trip to the Project site.

5.0 Impact Analysis

Threshold (a) Conflict with or obstruct implementation of the applicable air quality plan.

As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the state and federal ambient air

quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. To reduce such emissions, the SCAQMD adopted the 2022 AQMP. The AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The Project is subject to the SCAQMD's 2022 AQMP.

Criteria for determining project consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1:** The Project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The Project will not exceed the assumptions in the AQMP or increments based on the years of the Project build-out phase.

According to the SCAQMD's *CEQA Air Quality Handbook*, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As discussed in Threshold B below, the Project would not exceed construction or operational emissions standards. Therefore, the Project would not contribute to an existing air quality violation, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP. Thus, the Project is consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMPs contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. As discussed in the City's General Plan, the Project Site is within the Regional Commercial land use designation. According to the Land Use Element of the General Plan, the primary uses allowed within this land use designation include retail, service, dining, entertainment, and convention uses. The Project proposes to develop a new SVE plant which does not match land use designation. The Project Site is zoned as General Industrial. Pursuant to MPMC Chapter 10-1-501, the General Industrial land use allows for hazardous waste facilities with a conditional use permit (CUP). As discussed in the *Soil Vapor Extraction System Upgrade Project*

Supplemental EIR, the Project would seek approval of an updated CUP to be consistent with the zoning for the Project Site. Although, the Project is not consistent with the land use designation presented in the City's General Plan, it would only require one to two employees for routine maintenance and would not induce any population growth in the area. Thus, the Project would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP, and the Project is consistent with the second criterion.

Based on these criteria, the Project would not conflict with or obstruct implementation of the AQMP and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

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

As shown on **Table 2** above, the SoCAB is classified as non-attainment of the applicable NAAQS and or CAAQS for pollutants: O₃ (precursor pollutants VOC and NO_x), PM₁₀, PM_{2.5}, and lead (for the Los Angeles County portion only, and is expected to be redesignated to attainment based on recent monitoring³). The SoCAB is classified as attainment, maintenance, or unclassifiable for all other criteria pollutants. Nonetheless, the analysis below discloses emissions and applicable thresholds for O₃ precursors, NO₂, PM₁₀, PM_{2.5}, CO, and SO₂. Emissions of lead, hydrogen sulfide, sulfates, and vinyl chloride are not reported, because they would be minimal from the construction and operation of the SVE plant.

Construction Emissions

Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the amount of pollutants generated exceeds the SCAQMD's thresholds of significance. Sources of emissions during construction include site grading, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water. Sensitive land uses surrounding the Project Site consist mostly of residential

³ SCAQMD, "National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin"; <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=23> ; Accessed May 23, 2025.

communities located 440 feet from the Project Site, including single-family residences to the northeast and southwest of the Project Site.

Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod, which is designed to model emissions based on typical project construction requirements. See **Attachment A: Air Quality Data** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the Project are identified in **Table 6: Project Construction Emissions**. The modeling emissions include truck idling time and emissions from heavy-duty diesel equipment.

Table 6: Project Construction Emissions						
Calendar Year	Emissions (pounds per day)¹					
	VOCs²	NO_x	CO	SO₂	PM10	PM2.5
2026	1.46	12.97	14.70	0.03	3.49	1.90
2027	1.43	10.87	8.70	0.02	0.84	0.64
SCAQMD Threshold	75	100	550	150	150	55
SCAQMD Threshold Exceeded?	No	No	No	No	No	No
1. Emissions were calculated using the CalEEMod version 2022.1, as recommended by the SCAQMD. Worst-case seasonal maximum daily emissions are reported.						
2. Although VOCs and ROGs represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.						
Source: CalEEMod version 2022. Refer to Attachment A for model outputs.						

The Project is subject to SCAQMD Rules 402, 403, and 1113, which prohibit nuisances, require dust mitigation, and limit VOC content in paints, respectively. It has been assumed that these rules will be followed using watering the site and low VOC paints during construction. In addition, the Project would follow Rule 1166 to control VOC emissions from contaminated soil during construction, Rule 1403 to limit asbestos emissions from building demolition, and Rule 1466, which limits and controls particulate emissions from soils with toxic air contaminants. The results of the emissions modeling, as summarized on **Table 6**, show that construction criteria pollutant emissions would remain below the applicable thresholds, and construction impacts on short-term regional air quality would be less than significant.

Operational Emissions

Operation of the SVE system would generate varying levels of VOC emissions over 24-hour period seven days a week. The operation, testing, and maintenance of the SVE system and wells would be limited under the terms of SCAQMD operating permits to be obtained by the Applicant. Consistent monitoring and testing would be done to ensure that VOC emissions do not exceed allowable limits.

As part of the regulatory compliance process, the Applicant will obtain Permits to Operate (PTO) from the SCAQMD prior to installation of the SVE system and wells, which will identify the permitted process equipment, the minimum vapor treatment equipment required, the maximum vapor flow rate, the maximum concentrations of total VOCs and individual VOC compounds allowed in the treated vapor effluent and monitoring and sampling requirements. Depending on results of the effluent sampling, extraction flowrates and/or influent dilution air may be manually adjusted to ensure that VOC emissions remain below allowable limits. Further, the PTO will verify that the system complies with SCAQMD Rule 1166 (Volatile Organic Compound Emissions from Decontamination of Soil) and Rule 1401 (New Source Review of Toxic Air Contaminants). Thus, the facility would not result in a violation of the ambient air standards or result in exposure to TAC emissions in excess of SCAQMD thresholds.

Additional operational emissions would be generated by vehicles traveling to and from the site for maintenance, testing, monitoring, and loading. These trips would be infrequent and would only require one or two vehicle trips per visit. Conservatively, mobile emissions were modeled for a scenario in which two passenger cars and one heavy duty truck would travel to the site simultaneously for testing and loading. See **Table 7: Project Mobile Operational Emissions** for the mobile emissions generated by the scenario.

Table 7: Project Mobile Operational Emissions						
Source	Emissions (pounds per day)¹					
	VOCs	NO_x	CO	SO₂	PM10	PM2.5
Mobile	0.01	0.12	0.16	0.001	0.07	0.02
SCAQMD Threshold	55	55	550	150	150	55
SCAQMD Threshold Exceeded?	No	No	No	No	No	No
1. Emissions were calculated using CalEEMod version 2022.1, as recommended by the SCAQMD. Worst-case seasonal maximum daily emissions are reported.						
2. Although VOCs and ROGs represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis						
Source: CalEEMod version 2022.1. Refer to Attachment A for model outputs.						

Since the SVE system would be required to adhere to the requirements of the PTO obtained from the SCAQMD and the mobile emissions generated by the Project are minimal, the Project's overall regional operational emissions would not exceed applicable SCAQMD thresholds. Thus, operational impacts on long-term regional air quality would be less than significant.

Mitigation Measure: No mitigation is required.

Level of Significance: Less Than Significant Impact.

Threshold (c) Expose sensitive receptors to substantial pollutant concentrations.Localized Construction Impacts

The nearest sensitive receptors to the Project Site are single-family residences located approximately 440 feet (approximately 134 meters) northeast of the Project Site. To assess potential impacts to nearby sensitive receptors, the SCAQMD established Localized Significance Thresholds (LSTs). LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) to assist lead agencies in analyzing project-specific localized impacts. The SCAQMD established LSTs for certain pollutants with localized effects, specifically NO_x, CO, PM₁₀, and PM_{2.5}.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 8: Equipment-Specific Grading Rates** is used to determine the maximum daily disturbed acreage for comparison to LSTs. A conversion from equipment number to the maximum daily disturbed acreage is calculated. The appropriate source receptor area (SRA) for the localized significance thresholds is the East San Fernando Valley (SRA 7) area since this area includes the Project Site. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Project construction is anticipated to disturb approximately 2.0 acres in a single day. As the LST guidance provides thresholds for projects disturbing 1-, 2-, and 5-acres in size and the thresholds increase with the size of the site. The LSTs for a 2.0-acre threshold were utilized for this analysis.

Table 8: Equipment-Specific Grading Rates					
Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractor	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
Total Acres Graded per Day					2.0
Source: CalEEMod version 2022.1.					

As stated in the SCAQMD's *Finalized Localized Significance Threshold Methodology*, "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest sensitive receptors are the residences located

approximately 440 feet (approximately 134 meters) to the northeast of the Project Site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for 100 meters were utilized in this analysis. **Table 9: Localized Significance of Construction Emissions** shows the results of localized emissions during construction activity. This table represents the worse-case scenario and are based on peak earthwork volumes anticipated. As shown in **Table 9**, localized Project construction emissions would not exceed SCAQMD thresholds and impacts would be less than significant.

Table 9: Localized Significance of Construction Emissions				
Source/Activity	Emissions (pounds per day)¹			
	NO_x	CO	PM10	PM2.5
Construction Emissions				
Demolition (2026)	9.08	8.58	1.26	0.46
Site Grading (2026)	12.86	14.03	3.34	1.69
Infrastructure (2026)	4.84	5.51	0.19	0.18
SVE Construction (2026)	2.26	3.88	0.07	0.07
Treatment Plant Construction (2026)	10.99	7.80	0.65	0.60
Treatment Plant Construction (2027)	10.80	7.80	0.64	0.59
<i>Maximum Daily Emissions</i>	<i>12.86</i>	<i>14.03</i>	<i>3.34</i>	<i>1.69</i>
SCAQMD Localized Screening Threshold (2.0 acres of disturbance at 100 meters)	121	1,594	34	10
Exceed SCAQMD Threshold?	No	No	No	No
1. Maximum emissions may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Attachment A . 2. SCAQMD Rule 403 Fugitive Dust applied for construction emissions. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; water all haul roads three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment.				
Source: CalEEMod version 2022.1. Refer to Attachment A for model outputs.				

Localized Operational Impacts

According to the SCAQMD localized significance threshold methodology, operational LSTs apply to on-site sources. The Project does not have any on-site sources of NO_x, CO, PM10, and PM2.5. The only pollutant generated on-site is VOC due to the operation of the SVE plant. As such, the Project would result in a less than significant impact concerning LSTs during operational activities.

Construction Toxic Air Contaminants

Construction would generate DPM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the

primary TAC of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site potentially poses a health risk to nearby sensitive receptors. For more information on DPM from construction and its subsequent health risk impacts, see the *Burbank Soil Vapor Extraction System Upgrade Project – Construction and Operation Health Risk Assessment*.

Operational Toxic Air Contaminants

The SVE system effluent would contain pollutants listed in the SCAQMD Rule 401 list of TACs and Appendix A of the OEHHA's 2009 Technical Support Document for Cancer Potency Factors. These pollutants were derived from the results of the Soil Vapor Extraction Pilot Test Report for Source Area Remove Action prepared by Lockheed Martin in 2008. For a list of the analyzed operation TACs and the operational health risk impacts, see the *Burbank Soil Vapor Extraction System Upgrade Project – Construction and Operation Health Risk Assessment*.

Carbon Monoxide Hot Spots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The SoCAB was re-designated as attainment in 2007 and is no longer addressed in the SCAQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection, even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections as

the Project would result in a minimal number of daily trips. Therefore, impacts would be less than significant.

Mitigation Measure: No mitigation is required.

Level of Significance: Less than Significant Impact.

Threshold (d): Create objectionable odors affecting a substantial number of people.

Construction

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

A person shall not 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.

During construction, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people and would disperse rapidly. Therefore, impacts related to odors associated with the Project's construction-related activities would be less than significant.

Operations

The SCAQMD *CEQA Air Quality Handbook* identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. There is potential for odors to be generated by the SVE system effluent. However, the SVE plant and PTO would be required to adhere to SCAQMD Rule 402 which prohibits the discharge of any air contaminant which would cause injury, detriment, nuisance, or annoyance to any considerable number of persons. Further, an operational SVE facility and associated wells already exist on-site. Therefore, the Project would not create any new objectionable odors in the local area.

Mitigation Measures: No mitigation is required.

Level of Significance: No Impact.

6.0 Conclusion

Project implementation would result in less than significant construction and operational air quality impacts, and no mitigation is required.

7.0 References

1. California Air Resources Board, *Ambient Air Quality Standards*, July 16, 2024.
2. South Coast Air Quality Management District, *2016 Air Quality Management Plan*, March 2017.
3. South Coast Air Quality Management District, *2022 Air Quality Management Plan*, December 2022.
4. South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.
5. South Coast Air Quality Management District, *Localized Significance Threshold Methodology*, 2008.
6. South Coast Air Quality Management District, *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin*. 2016.
7. South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, March 2023.
8. United States Environmental Protection Agency, *National Ambient Air Quality Standards Table*, 2024.
9. United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants (Green Book)*, 2022.

Attachment A

CalEEMod Modeling Results

Burbank Lockheed - SVE Treatment System Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Demolition (2026) - Unmitigated
 - 3.3. Site Grading (2026) - Unmitigated
 - 3.5. Infrastructure (2026) - Unmitigated
 - 3.7. SVE Well Construction (2026) - Unmitigated
 - 3.9. Treatment Plant Construction (2026) - Unmitigated
 - 3.11. Treatment Plant Construction (2027) - Unmitigated
- 4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Burbank Lockheed - SVE Treatment System
Construction Start Date	3/31/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	23.8
Location	1705 N Victory Pl, Burbank, CA 91502, USA
County	Los Angeles-South Coast
City	Burbank
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3923
EDFZ	18
Electric Utility	Burbank Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1.86	1000sqft	1.92	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	1.46	13.0	14.7	0.02	0.64	2.91	3.49	0.59	1.37	1.90	—	2,643	2,643	0.11	0.03	0.62	2,656
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	1.46	13.0	14.6	0.03	0.65	2.91	3.49	0.60	1.37	1.90	—	3,435	3,435	0.16	0.20	0.08	3,499
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.72	0.60	5.27	5.73	0.01	0.23	0.58	0.81	0.21	0.21	0.42	—	1,489	1,489	0.06	0.04	0.30	1,502
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.11	0.96	1.05	< 0.005	0.04	0.11	0.15	0.04	0.04	0.08	—	247	247	0.01	0.01	0.05	249

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.74	1.46	13.0	14.7	0.02	0.58	2.91	3.49	0.53	1.37	1.90	—	2,643	2,643	0.11	0.03	0.61	2,656

2027	1.70	1.43	10.9	8.70	0.02	0.64	0.20	0.84	0.59	0.05	0.64	—	1,985	1,985	0.08	0.02	0.62	1,994
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.74	1.46	13.0	14.6	0.03	0.65	2.91	3.49	0.60	1.37	1.90	—	3,435	3,435	0.16	0.20	0.08	3,499
2027	1.70	1.43	10.9	8.57	0.02	0.64	0.20	0.84	0.59	0.05	0.64	—	1,974	1,974	0.08	0.02	0.02	1,983
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.72	0.60	5.27	5.73	0.01	0.23	0.58	0.81	0.21	0.21	0.42	—	1,489	1,489	0.06	0.04	0.30	1,502
2027	0.40	0.34	2.55	2.02	< 0.005	0.15	0.05	0.20	0.14	0.01	0.15	—	464	464	0.02	0.01	0.06	466
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13	0.11	0.96	1.05	< 0.005	0.04	0.11	0.15	0.04	0.04	0.08	—	247	247	0.01	0.01	0.05	249
2027	0.07	0.06	0.47	0.37	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	76.9	76.9	< 0.005	< 0.005	0.01	77.2

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.87	9.08	8.58	0.02	0.36	—	0.36	0.33	—	0.33	—	2,192	2,192	0.09	0.02	—	2,199
Demolition	—	—	—	—	—	—	0.90	0.90	—	0.14	0.14	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.12	0.10	1.04	0.99	< 0.005	0.04	—	0.04	0.04	—	0.04	—	252	252	0.01	< 0.005	—	253
Demoliti on	—	—	—	—	—	—	0.10	0.10	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.02	0.02	0.19	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	41.8	41.8	< 0.005	< 0.005	—	41.9
Demoliti on	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	0.02	1.39	0.53	0.01	0.01	0.30	0.32	0.01	0.08	0.10	—	1,115	1,115	0.06	0.18	0.06	1,169
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.02	15.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	128	128	0.01	0.02	0.12	135
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.2	21.2	< 0.005	< 0.005	0.02	22.3

3.3. Site Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.9	14.0	0.02	0.58	—	0.58	0.53	—	0.53	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.9	14.0	0.02	0.58	—	0.58	0.53	—	0.53	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.20	0.17	1.55	1.69	< 0.005	0.07	—	0.07	0.06	—	0.06	—	296	296	0.01	< 0.005	—	297
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.04	0.03	0.28	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.0	49.0	< 0.005	< 0.005	—	49.2
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.6	52.6	< 0.005	0.01	0.12	55.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.6	52.6	< 0.005	0.01	< 0.005	55.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.02	15.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.34	6.34	< 0.005	< 0.005	0.01	6.65
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.60	2.60	< 0.005	< 0.005	< 0.005	2.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.10

3.5. Infrastructure (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.84	5.51	0.01	0.19	—	0.19	0.18	—	0.18	—	1,354	1,354	0.05	0.01	—	1,359
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.06	0.57	0.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	160	160	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.4	26.4	< 0.005	< 0.005	—	26.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	0.02	15.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.54	2.54	< 0.005	< 0.005	< 0.005	2.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. SVE Well Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.26	3.88	0.01	0.07	—	0.07	0.07	—	0.07	—	1,296	1,296	0.05	0.01	—	1,301
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.26	3.88	0.01	0.07	—	0.07	0.07	—	0.07	—	1,296	1,296	0.05	0.01	—	1,301
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.54	0.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	313	313	0.01	< 0.005	—	314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.7	51.7	< 0.005	< 0.005	—	51.9

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.0	68.0	< 0.005	0.01	0.15	71.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.0	68.0	< 0.005	0.01	< 0.005	71.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.4	31.4	< 0.005	< 0.005	0.05	31.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.02	17.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.20	5.20	< 0.005	< 0.005	0.01	5.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.72	2.72	< 0.005	< 0.005	< 0.005	2.85

3.9. Treatment Plant Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.65	1.38	11.0	7.80	0.02	0.65	—	0.65	0.60	—	0.60	—	1,786	1,786	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.20	0.17	1.33	0.95	< 0.005	0.08	—	0.08	0.07	—	0.07	—	217	217	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.04	0.03	0.24	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.9	35.9	< 0.005	< 0.005	—	36.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.7	23.7	< 0.005	< 0.005	0.04	24.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.93	3.93	< 0.005	< 0.005	0.01	3.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Treatment Plant Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.8	7.80	0.02	0.64	—	0.64	0.59	—	0.59	—	1,785	1,785	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.8	7.80	0.02	0.64	—	0.64	0.59	—	0.59	—	1,785	1,785	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.54	1.83	< 0.005	0.15	—	0.15	0.14	—	0.14	—	419	419	0.02	< 0.005	—	421
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	69.4	69.4	< 0.005	< 0.005	—	69.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	0.01	0.01	0.62	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	191
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.0	45.0	< 0.005	< 0.005	0.06	45.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	2/28/2026	5.00	42.0	—
Site Grading	Grading	3/1/2026	4/30/2026	5.00	44.0	—
Infrastructure	Building Construction	5/1/2026	6/30/2026	5.00	43.0	Phase type: Infrastructure
SVE Well Construction	Building Construction	7/1/2026	10/30/2026	5.00	88.0	Combination of SVE Wall Installation, VMP-3 Trenching and Piping, and VMP-5 Trenching and Piping
Treatment Plant Construction	Building Construction	10/31/2026	4/30/2027	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Excavators	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Skid Steer Loaders	Diesel	Average	1.00	8.00	367	0.40
Demolition	Off-Highway Trucks	Diesel	Average	1.00	8.00	33.0	0.73
Site Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	7.00	84.0	0.37
Site Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Infrastructure	Excavators	Diesel	Average	1.00	8.00	84.0	0.37
Infrastructure	Cranes	Diesel	Average	1.00	8.00	367	0.29
Infrastructure	Off-Highway Trucks	Diesel	Average	1.00	4.00	82.0	0.20
SVE Well Construction	Bore/Drill Rigs	Diesel	Average	1.00	8.00	84.0	0.37
SVE Well Construction	Excavators	Diesel	Average	1.00	8.00	367	0.29
SVE Well Construction	Off-Highway Trucks	Diesel	Average	1.00	1.00	82.0	0.20
Treatment Plant Construction	Excavators	Diesel	Average	1.00	8.00	367	0.29
Treatment Plant Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	82.0	0.20
Treatment Plant Construction	Skid Steer Loaders	Diesel	Average	1.00	8.00	84.0	0.37
Treatment Plant Construction	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Treatment Plant Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Treatment Plant Construction	Off-Highway Trucks	Diesel	Average	1.00	1.00	376	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	16.4	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Infrastructure	—	—	—	—
Infrastructure	Worker	10.0	18.5	LDA,LDT1,LDT2
Infrastructure	Vendor	0.00	10.2	HHDT,MHDT
Infrastructure	Hauling	0.00	20.0	HHDT
Infrastructure	Onsite truck	—	—	HHDT
SVE Well Construction	—	—	—	—
SVE Well Construction	Worker	10.0	18.5	LDA,LDT1,LDT2
SVE Well Construction	Vendor	0.00	10.2	HHDT,MHDT
SVE Well Construction	Hauling	1.00	20.0	HHDT
SVE Well Construction	Onsite truck	—	—	HHDT
Site Grading	—	—	—	—
Site Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Site Grading	Vendor	—	10.2	HHDT,MHDT
Site Grading	Hauling	0.77	20.0	HHDT
Site Grading	Onsite truck	—	—	HHDT
Treatment Plant Construction	—	—	—	—
Treatment Plant Construction	Worker	15.0	18.5	LDA,LDT1,LDT2
Treatment Plant Construction	Vendor	0.00	10.2	HHDT,MHDT
Treatment Plant Construction	Hauling	0.00	20.0	HHDT

Treatment Plant Construction	Onsite truck	—	—	HHDT
------------------------------	--------------	---	---	------

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
------------	--	--	--	--	-----------------------------

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,750	—
Site Grading	42.0	272	10.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	1.92	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	1,130	0.03	< 0.005
2027	0.00	1,130	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.5	annual days of extreme heat
Extreme Precipitation	7.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	84.6
AQ-PM	61.2

AQ-DPM	89.4
Drinking Water	87.9
Lead Risk Housing	71.9
Pesticides	0.00
Toxic Releases	81.5
Traffic	89.0
Effect Indicators	—
CleanUp Sites	94.7
Groundwater	96.9
Haz Waste Facilities/Generators	93.8
Impaired Water Bodies	58.7
Solid Waste	0.00
Sensitive Population	—
Asthma	42.4
Cardio-vascular	38.5
Low Birth Weights	94.4
Socioeconomic Factor Indicators	—
Education	53.1
Housing	85.8
Linguistic	48.2
Poverty	63.6
Unemployment	67.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	35.86552034

Employed	59.16848454
Median HI	40.02309765
Education	—
Bachelor's or higher	56.92287951
High school enrollment	3.387655588
Preschool enrollment	35.76286411
Transportation	—
Auto Access	28.53843193
Active commuting	58.12909021
Social	—
2-parent households	73.60451687
Voting	35.87835237
Neighborhood	—
Alcohol availability	56.60207879
Park access	54.08700115
Retail density	73.97664571
Supermarket access	45.0019248
Tree canopy	50.53252919
Housing	—
Homeownership	6.351854228
Housing habitability	11.12536892
Low-inc homeowner severe housing cost burden	8.828435776
Low-inc renter severe housing cost burden	49.22366226
Uncrowded housing	19.45335558
Health Outcomes	—
Insured adults	31.25882202
Arthritis	88.1
Asthma ER Admissions	61.3

High Blood Pressure	92.0
Cancer (excluding skin)	71.8
Asthma	65.7
Coronary Heart Disease	79.3
Chronic Obstructive Pulmonary Disease	74.0
Diagnosed Diabetes	62.8
Life Expectancy at Birth	74.5
Cognitively Disabled	7.9
Physically Disabled	25.6
Heart Attack ER Admissions	67.9
Mental Health Not Good	47.3
Chronic Kidney Disease	79.8
Obesity	46.0
Pedestrian Injuries	62.1
Physical Health Not Good	50.9
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	19.3
Current Smoker	49.4
No Leisure Time for Physical Activity	55.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	81.3
English Speaking	21.1
Foreign-born	86.9
Outdoor Workers	84.7

Climate Change Adaptive Capacity	—
Impervious Surface Cover	16.7
Traffic Density	82.5
Traffic Access	87.4
Other Indices	—
Hardship	61.0
Other Decision Support	—
2016 Voting	24.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	92.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
 b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
--------	---------------

Construction: Construction Phases	Combined three SVE construction into one phase
Construction: Off-Road Equipment	Operating hours for each construction equipment is 8 hours/day. Treatment plant construction requires 6 types of construction equipment.
Construction: Dust From Material Movement	Import/export quantities provided in construction schedule
Land Use	Lot Acreage expands across well excavation areas
Construction: Trips and VMT	Per Construction Questionnaire, approximately 3 construction round trips for SVE Construction and Infrastructure and 5 construction round trips for Treatment Plant construction. Using 10 one-way trips for SVE Construction and Infrastructure and 15 one-way trips for Treatment Plant Construction as a conservative estimate for the necessary worker trips per day. Including 1 one-way truck trip for SVE construction.

Burbank Lockheed - SVE Treatment System Mobile Custom Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
- 5. Activity Data
 - 5.9. Operational Mobile Sources
 - 5.9.1. Unmitigated

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Burbank Lockheed - SVE Treatment System Mobile
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	23.8
Location	1705 N Victory Pl, Burbank, CA 91502, USA
County	Los Angeles-South Coast
City	Burbank
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3923
EDFZ	18
Electric Utility	Burbank Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1.86	1000sqft	1.92	0.00	0.00	—	—	—

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.01	0.01	0.12	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	137	137	0.01	0.02	0.37	142
Total	0.01	0.01	0.12	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	137	137	0.01	0.02	0.37	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.01	0.01	0.13	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	135	135	0.01	0.02	0.01	140
Total	0.01	0.01	0.13	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	135	135	0.01	0.02	0.01	140
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.03	23.3
Total	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.03	23.3

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Non-Asphalt Surfaces	3.00	3.00	3.00	1,095	90.0	90.0	90.0	32,850