Attachment 3: Air Quality Impact Analysis and Greenhouse Gas Study

Plantel Nurseries Eastside Expansion Project

Air Quality Impact Analysis and Greenhouse Gas Study

prepared for

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1 Project Description

1.1 Introduction

This study analyzes the potential air quality and greenhouse gas (GHG) impacts of the Plantel Nurseries Eastside Expansion Project (herein referred to as “proposed project” or “project”) in unincorporated Santa Barbara County. The project would include the construction of a new seed transplant facility comprised of 13 additional greenhouses on the site adjacent to an existing Plantel Nurseries agricultural facility (herein referred to as the “existing facility”). Rincon Consultants, Inc. (Rincon) prepared this study under contract to Rich-Grow Nursery Products Inc. (Client) in support of environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project’s air quality and greenhouse gas (GHG) impacts related to both temporary construction activity and long-term operation of the project.

1.2 Project Summary

Project Location

The project site is located at 2775 Clark Avenue in an unincorporated area of Santa Barbara County. The project site is near to, but outside of, the town of Orcutt. The regional location of the project site is shown in Figure 1. The 136.75-acre project site (Assessor’s Parcel Number 129-170-004) is located on the north side of Clark Avenue, approximately two miles east of the Highway 101/Clark Avenue interchange. The project location is depicted in Figure 2. Surrounding land uses include agricultural uses (including farmhouses) to the north, south, east, and west, and north. Additionally, a residential development is located 0.5 miles west of the project site.

Project Description

The project includes development of a new seed transplant facility (i.e., Eastside Expansion) adjacent to an existing facility. The proposed project would consist of a 24,000 square foot germination building and 13 greenhouses, which would include three 106,560 square foot greenhouses, nine 120,960 square foot greenhouses, and one 164,160 square foot greenhouse. Site improvements also include a paved area with 10 parking spots and 93,000 square feet of equipment and trailer parking. The proposed expansion would require up to 10 employees.

Construction

The first phase of construction is anticipated to occur between July 2025 and July 2030 and would include construction of the germination building, water/irrigation system, and the first four greenhouses. Between the years 2025 through 2030, the remaining nine greenhouses would be constructed with approximately two greenhouses built per year. Overall construction activities are anticipated to occur over the course of 62 months from July 2025 to August 2030.

The project would include removal of existing hoop structures and open growing areas. The project would require cut and fill of approximately 780,000 cubic yards (CY) of soil; as cut and fill would be balanced, no import or export of soil would be required. No driveway improvements or any other road right-of-way improvements are proposed. The project site plan is shown in Figure 3.

Figure 1 Regional Location

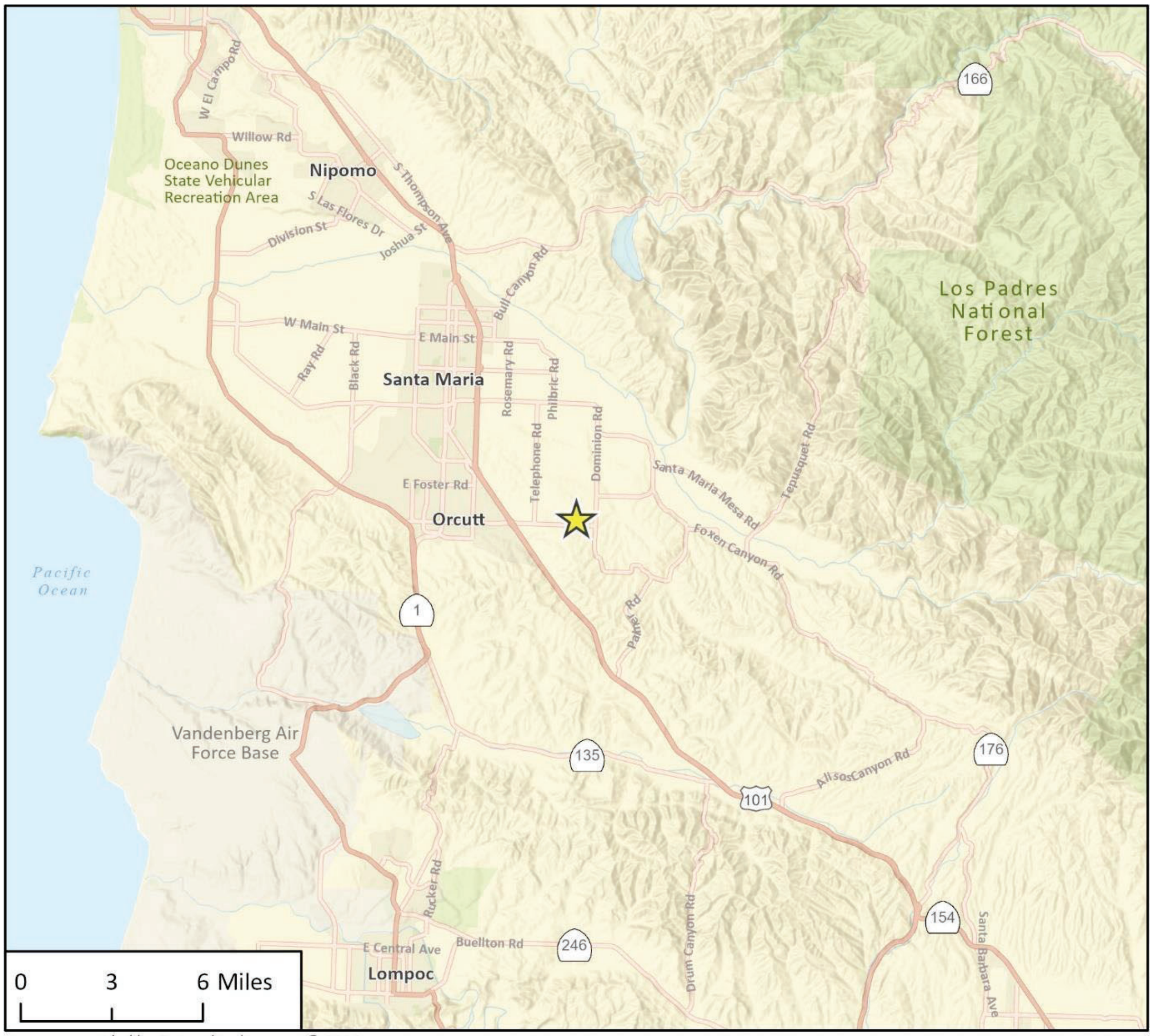

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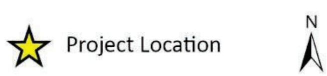
Fig 1 Regional Location



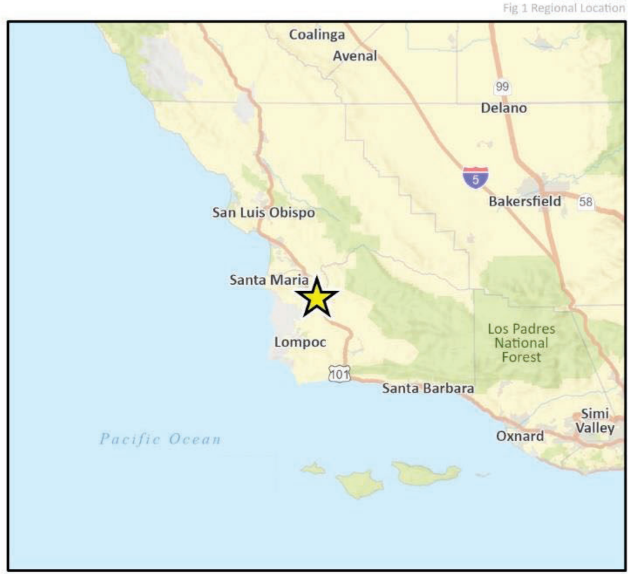


Figure 2 Project Site Location

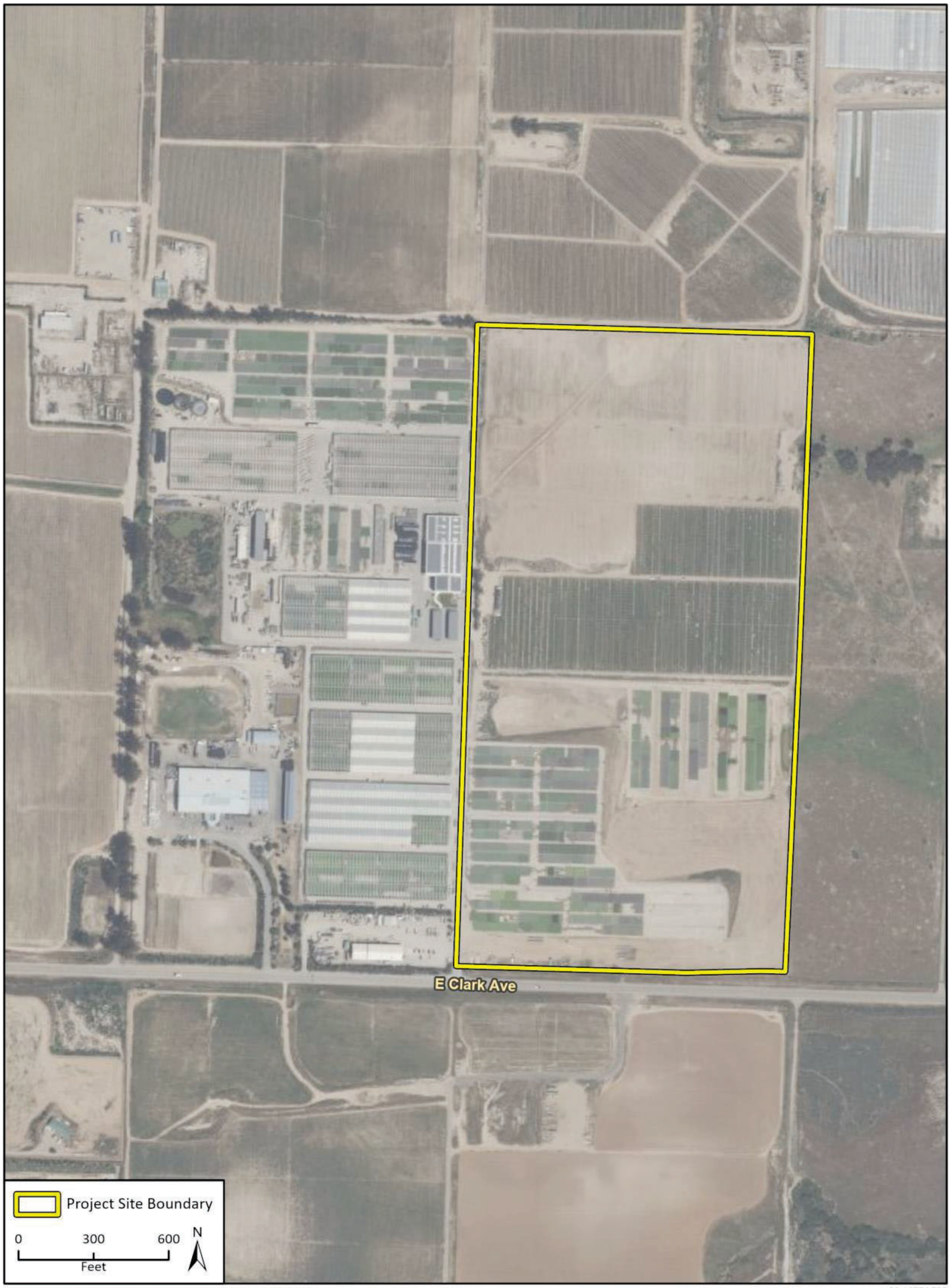


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Fig 2 Project Site

Figure 3 Project Site Plans

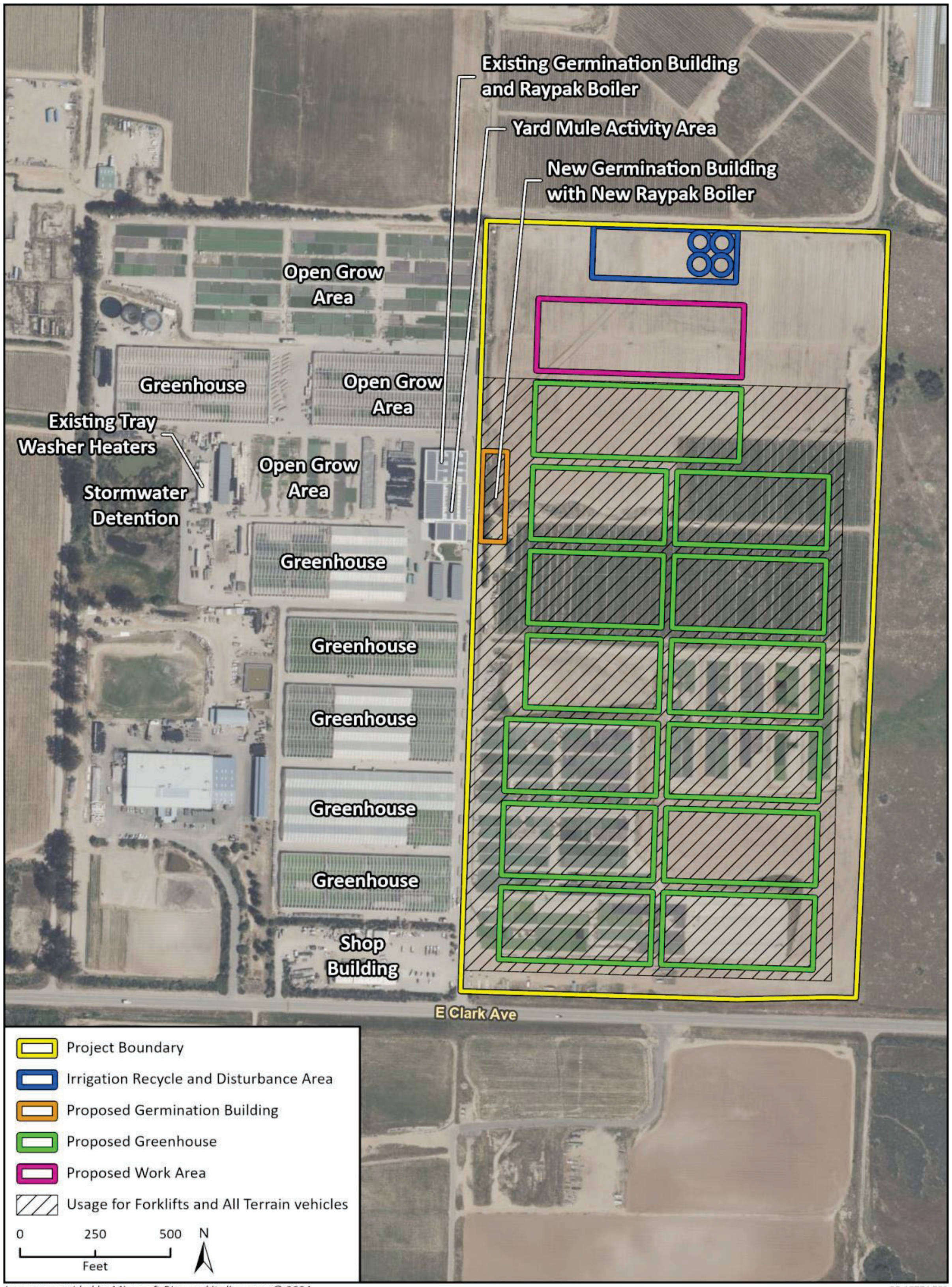

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Fig 3 Project Site Plans

Operational

The proposed project would involve substantially similar operation as the existing facility; the primary purpose of the project is to scale up the growing area and optimize the existing operation. thereby reducing fluctuations in seasonal work. As such, the project would have similar equipment needs as the existing facility. Equipment use at the existing facility includes the following:

- 208 Holland Heaters (HHB120; 0.41 MMBtu) for space heating in existing greenhouses.
- 24 Lennox Heaters for frost-protection of germination beds.
- 21 propane-fueled forklifts for moving product between the germination building, growing areas, and shipment trailer.
- 6 gasoline-fueled all-terrain vehicles for staff mobility.
- Two 1.95 MMBtu RBI Dominator Series Boilers for a circulation system that provides radiant heat to grow beds in existing greenhouses.
- Two 1.0 MMBtu Boilers that provides hot water for tray washing
- One 3.0 million metric British thermal unit (MMBtu) Gas Master Boiler (HC 3000) for a circulation system that provides radiant heat to grow beds in existing greenhouses.
- One 1,200-amp diesel-fueled backup generator (Cummins PJ 1200).
- One 0.4 MMBtu Raypak Hi Delta Boiler to provide radiant heat for the germination chamber.
- One diesel-fueled yard mule for relocating delivery trailers.

New equipment use at the proposed project includes:

- 416 Holland Heaters (model HHB120; 0.41 MMBtu) for space heating in thirteen proposed greenhouses.
- 10 propane-fueled forklifts for moving product between the germination building, growing areas, and shipment trailer.
- Three gasoline-fueled all-terrain vehicles for staff mobility.
- One 0.4 MMBtu Raypak Hi Delta Boiler to provide radiant heat for the proposed germination chamber.

There are several relevant points on the existing operations that will continue with the proposed expansion and directly affects this analysis. These include the following:

- **Permits.** The facility currently is not required to obtain air quality permits to operate due to the magnitude of its existing emissions and the exclusion of agricultural operations pursuant with the Santa Barbara County Air Pollution Control District's (SBCAPCD) Rule 202 for permit exemptions. However, the existing backup compression ignition (diesel fueled) generator engine onsite does require registration pursuant with Rule 1201, *Registration of Agricultural Diesel Engines*. The Client currently has this registration in place.
- **Seasonal Energy Use Fluctuations.** The emissions and heating loads of the existing natural gas combustion equipment depend directly on the ambient temperatures and the greenhouse interior temperature. Based on historical practices from the existing operations, the heaters for the greenhouses would operate from November to April each year and would be set to operate whenever interior temperatures drop to 60 degrees Fahrenheit (◦F). The germination building heater is set to operate at 70◦F.

- **Greenhouse Heating.** A variety of crops are grown in the greenhouses, such as lettuce, cabbage, and celery. Some of the crops require heating in the greenhouse. A three-year (2018-20) review of the annual crop production identified that 52 percent of the crops need heating. Thus, slightly more than half of the greenhouse area would be heated by natural gas heaters. Refer to Table 1 for the amount of crops produced per year and the crops that require heating. There will be a fuel limitation of 50 percent on the project's natural gas sources (germination, building heater, and greenhouse heaters).
- **Expansion Needs.** The eastside expansion will represent a debottlenecking and optimization of the existing operations. The additional greenhouses will be used to accommodate the seasonal fluctuations in product and fully utilize the existing infrastructure. Thus, the incremental trips from employees and vendors are based on the Client's estimates of this optimization.

Table 1 Crops Produced Per Year

Crop	Heated	2018	2019	2020
Broccoli	No	326,804,399	355,633,691	391,215,377
Cabbage	No	78,293,086	98,617,131	90,979,239
Cauliflower	No	181,439,880	167,503,202	165,304,817
Celery	Yes	405,538,525	489,521,810	481,218,929
Lettuce	No	239,928,690	261,297,984	190,155,569
Organic	Yes	213,413,225	248,996,009	269,358,138
Other	Yes	48,694,543	45,478,265	118,254,271
Peppers	Yes	35,316,820	34,489,225	29,131,059
Total		**1,529,429,168**	**1,701,539,336**	**1,735,619,419**
Percent of crop that use heaters		**46%**	**48%**	**52%**

2 Background

2.1 Air Quality

Local Climate and Meteorology

The project site is located in the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. Based on data recorded at the Santa Maria Airport, 4.5 miles northwest of the project site, the predominant wind direction in the vicinity of project site is from the northwesterly and the average wind speed is approximately 6.8 miles per hour (Iowa Environmental Mesonet 2021). The maximum average daily temperature in the project area is approximately 72.0°F in summer months, and the minimum average daily temperature is approximately 40.1°F in winter months. Total precipitation in the project area averages approximately 14 inches annually.

Air Pollutants of Primary Concern

Pollutants may be emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere; these pollutants include carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter with a diameter of up to ten microns (PM_{10}) and up to 2.5 microns ($PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb).

Additionally, pollutants may be created indirectly through chemical reactions in the atmosphere. Ozone (O_3) is created by atmospheric chemical and photochemical reactions between volatile organic compounds (VOC) and nitrogen oxides (NO_X). The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants of primary concern.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic compounds (ROC[1]). NO_X is formed during the combustion of fuels, while ROC are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it usually occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions (United States Environmental Protection Agency [USEPA] 2020). Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is a local pollutant that is found in high concentrations near fuel combustion equipment and other sources of CO. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes.

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC). Santa Barbara County Air Pollution Control District (SCAPCD) uses the term ROC to denote organic precursors.

The health effects of CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, nausea, reduced lung capacity, and impaired mental abilities (USEPA 2020).

Nitrogen Dioxide

NO_2 is a byproduct of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Elevated levels of NO_2 can also cause respiratory irritation, impaired pulmonary function, and bronchitis (USEPA 2020). NO_2 absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of ozone/smog and acid rain.

Sulfur Dioxide

SO_2 is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide (SO_3). Collectively, these pollutants are referred to as sulfur oxides (SO_X). In humid atmospheres, SO_2 can also form sulfuric acid mist, which can eventually react to produce sulfate particulates that can inhibit visibility. Combustion of high sulfur-content fuels is the major source, while chemical plants, sulfur recovery plants, and metal processing are minor contributors. At sufficiently high concentrations, SO_2 irritates the upper respiratory tract. At lower concentrations, when in conjunction with particulates, SO_2 appears to do still greater harm by injuring lung tissues. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. Sulfur dioxide causes respiratory irritation, including wheezing, shortness of breath, and coughing (USEPA 2020). Long-term SO_2 exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

Particulate Matter

Suspended atmospheric PM_{10} and $PM_{2.5}$ is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The characteristics, sources, and potential health effects associated with the PM_{10} and $PM_{2.5}$ can be different. Major man-made sources of PM_{10} are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer $PM_{2.5}$ particulates are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. Elevated levels of PM_{10} can cause respiratory irritation, reduced lung function, aggravation of cardiovascular disease, and cancer (USEPA 2020). $PM_{2.5}$ is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. Elevated levels of $PM_{2.5}$ can cause respiratory stress and decreased lung function and increase the risk of long-term disease. More than half of the $PM_{2.5}$ that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body’s mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. Lead occurs in the atmosphere as particulate matter. The major sources of Pb emissions historically have been mobile and industrial sources. In the early 1970s, the USEPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries in part due to national emissions standards for hazardous air pollutants (USEPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest level of Pb in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Lead may cause a range of health effects, including anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases). Demolition of buildings containing lead-based paint is regulated by existing laws and regulations, including California Code of Regulations Title 17, Division 1, Chapter 8 and Senate Bill 460, to reduce or eliminate the risk to nearby receptors. Furthermore, the proposed project does not include any stationary sources of lead emissions. Therefore, implementation of the project would not result in substantial emissions of lead, and this pollutant is not discussed further in this analysis.

Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM; California Air Resources Board [CARB] 2021a); however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

Air Quality Regulation

Federal Air Quality Regulations

The Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the USEPA developed Ambient Air Quality Standards which represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) have been designated for the following criteria pollutants of primary concern: ozone, CO, NO_2, SO_2, $PM_{10,}$ $PM_{2.5}$, and Pb.

USEPA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Table 2 lists the current federal standards for regulated pollutants.

Table 2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.00 ppm	9.00 ppm
	1-Hour	35.00 ppm	20.00 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.180 ppm
Sulfur Dioxide	Annual	0.030 ppm	–
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	–	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
PM_{25}	Annual	12 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	–
Lead	30-Day Average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–

ppm= parts per million
µg/m^3 = micrograms per cubic meter
Source: CARB 2016

State Air Quality Regulations

CALIFORNIA CLEAN AIR ACT

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code (H&SC) Section 39000 et seq.). Under the CCAA, the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 2 lists the current state standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the CCAA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant, based on the comparison of measured data within the CAAQS.

California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. As discussed in Section 2.3, *Federal Air Quality Regulations*, the USEPA classifies specific geographic areas as either "attainment" or "nonattainment" areas for NAAQS for each pollutant. If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as a nonattainment area for that pollutant. Under the federal and state Clean Air Acts, once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been redesignated to attainment are called maintenance areas.

TOXIC AIR CONTAMINANTS

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: H&SC Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

STATE IMPLEMENTATION PLAN

The SIP is a collection of documents that set forth the state's strategies for achieving the NAAQS and CAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. CARB is the lead agency for all purposes related to the SIP under state law. Local air districts are responsible for preparing and implementing air quality attainment plans for pollutants for which the district is in non-compliance; the plans are incorporated into the SIP. Additionally, other agencies such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

Regional Air Quality Regulations

The SBCAPCD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

The Santa Barbara County portion of SCCAB is in a nonattainment for annual and 24-hour averaged PM_{10} (SBCAPCD 2021). Formerly, the Santa Barbara County portion of SCCAB was a nonattainment area for federal and State ozone standards. Effective December 2015, Santa Barbara County is designated as attainment of federal ozone standards and effective July 1, 2020, Santa Barbara County is designated as attainment for the State ozone standards (SBCAPCD 2021).

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SBCAPCD updates the plan every three years. Each SBCAPCD Air Quality Attainment Plan (AQAP) is an update of the previous plan and has a 20-year horizon. The latest AQAP, the 2019 Ozone Plan, was adopted December 2022 (SBCAPCD 2019). It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2019 Clean Air Plan. The Final 2019 Ozone Plan addresses several state planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Santa Barbara County Association of Governments' (SBCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2040 Regional Transportation Plan/Sustainable Communities Strategy (2040 RTP/SCS)[2] are integrated into the 2019 Ozone Plan.

The 2022 Ozone Plan incorporates and builds upon the prior Clean Air Plans and focuses on achieving attainment of the State ozone standards, in addition to the federal ozone standard. The 2019 Ozone Plan focuses on reducing ozone precursor emissions through implementation of transportation control measures, which would serve to reduce mobile source emissions, which are the primary source of ROC and NO_X emissions in the County. In addition, the 2019 Ozone Plan utilizes SBCAG's Regional Growth Forecast and CARB on-road emissions forecasts to project population growth and associated air pollutant emissions within Santa Barbara County (SBCAPCD 2016).

Current Air Quality

The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The SBCAPCD operates a network of air quality monitoring stations throughout Santa Barbara County. The monitoring station with available data nearest to the project is the Santa Maria - 906 South Broadway monitoring station, located at 906 South Broadway in Santa Maria, approximately 6.3 miles northwest of the project site. In 2021, in order to meet siting criteria mandated by CARB, this monitoring station was relocated to 3700 Orcutt Road in Santa Maria, approximately 4.5 miles northwest of the project site. Therefore, data for 2022 was taken from the new Santa Maria - 3700 Orcutt Road station. Table 3 summarizes the number of days that each of the federal and state standards has been exceeded at this station in each of the last three years for which data is available. The data collected at the station indicate that the state $PM_{2.5}$ standard was exceeded in 2020. No other state or federal standards were exceeded at this monitoring station.

[2] The SBCAG's Connected 2050 RTP/SCS was adopted in August 2021 and supersedes the 2040 RTP/SCS. However, since the 2019 Ozone Plan incorporates the former iteration of the RTP/SCS then it is pertinent to the analysis.

Table 3 Ambient Air Quality at the Nearest Monitoring Station

Pollutant	2020[1]	2021[1]	2022[2]
8 Hour Ozone (ppm), 8-Hr. Average	0.059	0.050	0.054
Number of Days of state exceedances (>0.070 ppm)	0	0	0
Number of days of federal exceedances (>0.070 ppm)	0	0	0
Ozone (ppm), Worst Hour	0.063	0.075	0.057
Number of days of state exceedances (>0.09 ppm)	0	0	0
Number of days of federal exceedances (>0.112 ppm)	0	0	0
Nitrogen Dioxide (ppm) - Worst Hour	0.036	0.025	*
Number of days of state exceedances (>0.18 ppm)	0	0	*
Number of days of federal exceedances (>0.10 ppm)	0	0	*
Particulate Matter 10 microns, $\mu g/m^3$, Worst 24 Hours[1]	113.3	54.3	73.9
Number of days of state exceedances (>50 $\mu g/m^3$)	32	1	3
Number of days above federal standard (>150 $\mu g/m^3$)	0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$, Worst 24 Hours[2]	88.4	12.4	13.5
Number of days above federal standard (>35 $\mu g/m^3$)	9	0	0

[1]Data from the Santa Maria – 906 South Broadway Monitoring Station

[2]Data from the Santa Maria – 3700 Orcutt Road Monitoring Station

* = Data not available

Source: CARB 2024

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005; OEHHA 2015). Some land uses considered more sensitive to air pollution than others due to the types of population groups or activities involved are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, religious facilities, and daycare centers. Nearby sensitive receptors include single-family agricultural residences 900 feet east of the project site and 1,100 feet southwest of the project site. Additionally, the nearest residential neighborhood is approximately 2,640 feet west of the project site.

2.2 Greenhouse Gas Emissions

Climate Change and Greenhouse Gases Overview

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term “climate change” is often used interchangeably with the term “global warming,” but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (USEPA 2021a).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (IPCC 2021).[3]

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2021). However, since 1750, estimated concentrations of CO_2, CH_4, and N_2O in the atmosphere have increased by 47 percent, 156 percent, and 23 percent, respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are

[3] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Greenhouse Gas Emissions Inventory

Global

In 2015, worldwide anthropogenic total 47,000 million MT of CO_2e, which is a 43 percent increase from 1990 GHG levels (USEPA 2021b). Specifically, 34,522 million metric tons (MMT) of CO_2e of CO_2, 8,241 MMT of CO_2e of CH_4, 2,997 MMT of CO_2e of N_2O, and 1,001 MMT of CO_2e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed for three percent and two percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change and forestry (USEPA 2021b).

United States

Total U.S. GHG emissions were 6,558 MMT of CO_2e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019; since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (USEPA 2021c).

California

Based on CARB's California GHG Inventory for 2000-2018, California produced 425.3 MMT CO_2e in 2018 (CARB 2020a). The largest source of GHGs in California is transportation, which generates 40 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 21 percent of the state's GHG emissions, and electric power accounted for approximately 15 percent (CARB 2018a). California emissions are due in part to its large size and large population compared to other states. However, per capita emissions in California are lower than all states except New York (U.S. Energy Information Administration 2019). A factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate.

Regional

Santa Barbara County Emissions Inventory

In 2015, the County of Santa Barbara published its Energy and Climate Action Plan (ECAP; County of Santa Barbara 2015). The ECAP included a 2007 GHG emissions inventory; results of the inventory are shown in Table 4.

Table 4 Santa Barbara County 2007 GHG Emissions Inventory

Source	Subsector	2007 Total (MT CO_2e)
Transportation	On-Road Transportation from Trips Beginning and/or Ending in the Unincorporated County	521,160
Residential Energy	Residential Electricity Residential Natural Gas	195,490
Commercial Energy	Commercial Electricity Commercial Natural Gas	121,580
Off-Road	Agricultural Equipment Construction and Mining Equipment Industrial Equipment Lawn & Garden Equipment Light Commercial Equipment	102,140
Solid Waste	Landfilled Waste Alternative Daily Cover	91,920
Agriculture	Fertilizer Emissions Livestock Emissions	62,110
Water and Wastewater	Electricity Used by Water Systems Wastewater Emissions Septic Tanks	49,520
Industrial Energy	Industrial Electricity Industrial Natural Gas	46,780
Aircraft	Landings and Takeoffs from Santa Ynez Airport	2,270
Total		**1,192,970**

Source: County of Santa Barbara 2015

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2015 to 2017 was approximately 1.12°C higher than the average GMST over the period from 1880 to 1900 (National Oceanic and Atmospheric Administration 2021). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.4 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological

Organization 2013; National Aeronautics and Space Administration 2021). Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (National Aeronautics and Space Administration 2020). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise ranging between 0.25 to 0 1.01 meters by 2100 with the sea level ranges dependent on a low, intermediate, or high GHG emissions scenario (IPCC 2021). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

Greenhouse Gas Regulations

Federal Regulations

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

State Regulations

ASSEMBLY BILL 1493 - CALIFORNIA ADVANCED CLEAN CARS PROGRAM

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

ASSEMBLY BILL 32 - CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan Update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

Senate Bill (SB) 32, signed into law on September 8, 2016, extended AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remained unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of no more than 6 metric tons (MT) CO_2e by 2030 and 2 MT CO_2e by 2050 (CARB 2017).

Senate Bill 97 - CEQA: Greenhouse Gas Emissions

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Natural Resources Agency (Resources Agency) adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Senate Bill 375 - 2008 Sustainable Communities and Climate Protection Act

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the RTP. On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of sub regional plans by the sub regional councils of governments and the county transportation commissions to meet SB 375 requirements.

Senate Bill 1383 - Short-lived climate pollutants

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve:

- 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020; and,
- 75 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

The bill also mandates various state and local agencies develop of further strategies to reduce emissions generated by specific industries such as agriculture. The stated goal is to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

Senate Bill 100 - California Renewables Portfolio Standard Program

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

Assembly Bill 341 - California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste by 2020, and annually thereafter. CalRecycle is required to develop strategies to implement AB 341, including source reduction.

Assembly Bill 2230 - Recycled Water: Car Washes

AB 2230, passed in 2012, required all car washes constructed after January 1, 2014, to install a water recycling system that recycles and reuses at least 60 percent of the wash and rinse water, or to use recycled water provided by a water supplier for at least 60 percent of its wash and rinse water.

California Building Standards Code

The California Code of Regulations (CCR), Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on.

Regional and Local Regulations

SBCAG 2050 RTP-SCS

SBCAG adopted its 2050 RTP/SCS (titled Connected 2050) in August 2021. This plan shows how the region will achieve the required SB 375 targets and demonstrates the co-benefits of reducing criteria pollutants. The 2050 RTP/SCS is based on a preferred land use and transportation scenario, which lays out one possible pattern of future growth and transportation investment for the region. The 2050 RTP/SCS preferred scenario emphasizes a transit-oriented development and infill approach to land use and housing, supported by complementary transportation and transit investments. The 2050 RTP/SCS meets the requirements of SB 375 and successfully achieves the region's current GHG emission targets in 2020 and 2035 while accommodating forecast growth and regional housing needs (SBCAG 2021).

COUNTY OF SANTA BARBARA ECAP

In May 2015, the County of Santa Barbara Board of Supervisors adopted its ECAP and certified the accompanying EIR. The ECAP commits the County to reducing community-wide GHG emissions by 15 percent below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (AB 32) and the original Scoping Plan (CARB 2008). The ECAP identified 53 emission reduction measures (ERMs) that would enable the County to meet the GHG reduction target of 15 percent below baseline (2007) levels by 2020, consistent with AB 32. Examples of the ERMs in the ECAP include: an energy checklist for residential building permits (BE 2), energy efficiency education and outreach programs (BE 4), and additional opportunities to recycle cardboard, glass, paper, and plastic products (WR 2). Specific projects included in the ECAP's emission forecast are not currently required to incorporate ERMs listed in the ECAP or any other mitigation measures to reduce GHG emissions. According to the most recent progress report (2017), 2016 emissions from Santa Barbara County are 14 percent higher than 2007 levels due to increases in vehicle trips, construction activity, natural gas use in non-residential buildings, and agricultural fertilizer use. As a result, to meet its target of 15 percent below 2007 levels, the County would need to reduce emissions by 26 percent from 2016 levels (County of Santa Barbara 2018a).

The ECAP included a GHG emissions forecast for unincorporated Santa Barbara County through 2020. The growth estimates used in the ECAP's GHG emissions forecast were based on SBCAG's Regional Growth Forecast 2005-2040 and the 2010 U.S. Census (SBCAG 2007). The growth estimates were based on factors that included population projections, vehicle trends, and planned land uses. The sources of GHG emissions included various sectors, such as transportation, residential energy, commercial energy, off-road, solid waste, agriculture, water and wastewater, industrial energy, and aircraft. As a result, most residential and commercial projects that are consistent with the County's zoning (in 2007) were included in the forecast. However, certain projects were not included in the emissions forecast, such as stationary source projects (e.g., large boilers, gas stations, auto body shops, dry cleaners, oil and gas production facilities, and water treatment facilities), Comprehensive Plan amendments, and community plans that exceed the County's projected population and job growth, due to uncertainty in forecasting their GHG emissions. Projects not included in the forecast must be evaluated on a case-by-case basis.

Concurrent with the ECAP, the Board of Supervisors also adopted an amendment to the Energy Element of the Comprehensive Plan that requires the County to monitor progress towards meeting the emission reduction target and, as necessary, update the ECAP.

3 Impact Analysis

3.1 Methodology

Criteria pollutant and GHG emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed by BREEZE Software for the California Air Pollution Control Officers Association (CAPCOA) with collaborative input from the California air districts. CalEEMod allows for the use of standardized data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices (CAPCOA 2021). The analysis reflects the construction and operation of the project as described in Section 1.2, *Project Summary*. The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A to this report.

Construction Emissions

Construction emissions modeled include emissions generated by construction equipment used onsite and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Construction input data for CalEEMod include but are not limited to: (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the project site. The analysis assessed maximum daily emissions from individual construction activities, including demolition, site preparation, grading, building construction, paving, and architectural coating. Construction would require heavy equipment during demolition, site preparation, grading, building construction, and paving. Construction equipment estimates are based on surveys of construction projects within California conducted by members of CAPCOA.

Project construction would begin in July 2025 and to be completed in August 2030. Construction phases would include site preparation, grading, utilities and basin linear, building construction, and paving. Site preparation and grading would occur first with both completed in a four-month period. Subsequently, the utilities and basin liner activities would commence with the construction of four greenhouses, the germination building, and adjacent parking lot happening simultaneously. The remaining nine greenhouses would be built in subsequent phases from late-2027 through 2030 with approximately two greenhouses built a year until a total of 13 greenhouses are constructed.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on a construction schedule and construction equipment list provided by the project applicant. It was assumed that all construction equipment used would be diesel-powered equipped with

USEPA tier 3 rated engines and that the project would comply with all applicable regulatory standards. In particular, the project would comply with SBCAPCD Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities*. In addition, the worker and vendor trips were adjusted based on applicant provided information. There would be no site preparation or grading haul trips since cut and fill on the site would be balanced.

The County of Santa Barbara's guidance on including construction GHG emissions in an analysis stated that "construction-related emissions are to be accounted for in the year that they occur." Therefore, the year with the greatest construction emissions is used in the GHG emissions total (County of Santa Barbara 2024).

Operational Emissions

Operational emissions modeled include area source emissions, mobile source emissions (i.e., vehicle emissions), solid waste, off-road equipment, and stationary sources. Emissions from electricity consumption and water and wastewater generation were not included since the project would not increase consumption or usage beyond existing conditions. The existing development is supplied 100 percent of its electricity from an onsite solar photovoltaic system. With the expansion project, the water use would be reduced from 185 acre-feet to 120 acre-feet due to the more efficient irrigation design. The natural gas emissions were captured in the stationary source analysis. Air quality operational emissions were modeled for the first year of full buildout, which is 2026.

GHG emissions from project operation were modeled for the year 2030 to be consistent with the County's Interim GHG Emissions Thresholds of Significance (Santa Barbara County 2021). These thresholds reflect the State's next GHG emission reduction milestone target of achieving 40 percent reduction in 1990 GHG emission levels by 2030. Emissions of all GHGs are converted into their equivalent global warming potential in terms of CO_2e.

Area Source Emissions

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating, were calculated in CalEEMod and utilize standard emission rates from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2021).

Mobile Source Emissions

Mobile source emissions are generated by vehicle trips to and from the project site. With the proposed expansion, the number of worker trips would increase by up to ten trips per day. The vendor trips for produce and raw material deliveries would also increase to approximately eight trips per day. The daily trip generation rates were based on the total daily trips for workers and vendors traveling to the site. For workers, it was assumed that all trips would be completed with light duty vehicles with 50 percent traveling with light-duty passenger vehicles and the other 50 percent traveling in a light-duty truck. All product shipping and raw material receiving major vendor trips were assumed to be conducted by heavy-heavy duty trucks (i.e., trucks that have gross vehicle weight between approximately 30,000 to 80,000 pounds). Based on the distance of the existing and projected (post expansion) customer base of the facility, the average one-way distance for shipping the product and raw materials would be 18 miles.

Solid Waste Emissions

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. The existing facility disposes of solid waste using an in-house vehicle that travels to the Santa Maria landfill once per week, which will increase to twice per week with the proposed expansion. It is estimated that with the proposed project approximately 2.5 tons of solid waste would be transported to the Santa Maria Landfill per month, or 30 tons per year.

Natural Gas Usage from Stationary Equipment

As discussed in Section 1.2, *Project Summary*, the project would include 416 Holland heaters for space heating in the proposed greenhouses and one new boiler for radiant heating in the proposed germination chamber. Additionally, the usage of the existing hot water heaters that provides hot water for tray washing would be increased. One of the two hot water heaters will be operated for an additional 4 hours during the work days once the project is constructed and operational. The natural gas use associated with greenhouse space heaters would be similar to the corresponding heaters at the existing facility since the proposed greenhouse would operate at the same interior set point temperature of 60 ◦F.

To derive a maximum monthly and annual peak potential to emit, the existing facility's natural gas fuel usage from the past seven years (January 2016 through April 2023) was used. From this data set, the month with the highest fuel usage was selected as the maximum monthly fuel capacity. For the annual fuel capacity, the sum of all the individual calendar months represented the annual fuel usage. Based on this data, the peak monthly natural gas usage at the existing facility was 241,360 therms and the total annual usage was 1,129,607 therms. The natural gas consumption accounts for usage from the greenhouse heaters, water heaters/defroster and the tray washer hot water heaters

Based on the existing stationary source natural gas usage, the maximum monthly potential to emit is estimated at 33 percent of capacity for the new heaters and hot water boilers. However, this factor is monthly average and would not peak heat load days. While the aggregate heat input capacity of the project is 4,132 MBTU/day, it is reasonable that input capacity would never be used on a single day. This is because the fact that some of the greenhouses may have seedling plants that do not require building heat per Table 1 or some greenhouses may be in maintenance mode. The project will limit its natural gas usage to 50% of its rated daily capacity for the new gas combustion equipment. With the fuel limit imposed, the peak daily input of the energy for the project is estimated at 2,049 million BTUs per day. At an assumed heater value of 1,050 BTU/scf, the project would limit the fuel use to 1.95 million standard cubic feet per day.

For the annual maximum potential to emit, the annual load percentage was calculated at 12.9 percent of the rated input of the natural gas combustion equipment based on the worst 12-month period of the historical fuel use of the existing operations for 2020 to 2023. This methodology is consistent with the methodology of the SBCAPCD.

The emissions for the greenhouse heaters were calculated based on equipment vendor information of criteria pollutants. For NOx, the emissions quantified with emission factors were approximately 0.058 lb NOx per MMBTU. This factor represents reasonable available control technology (RACT) for natural gas combustion. Best available control technology (BACT) has not been established for this specialized type of gas combustion equipment.

Off-Road Equipment

During project operation, off-road equipment would be used onsite for deliveries and travel on the property. There is one existing yard mule (160 horsepower [HP]) operating onsite that moves materials from the delivery trucks staging area to the seedling warehousing section of the main building. The eastside expansion of the facility would increase the onsite duration from one to two hours per day. Due to the expansion, the number of forklifts (52 HP) needed to move trays of seedling onsite would also be increased from 21 to 31 forklifts. The forklifts would operate four hours per day. To navigate onsite between the greenhouses and administration building, all-terrain, gasoline-powered utility vehicles (160 HP) are currently used. The number of vehicles would increase from six to nine vehicles with normal operations of six hours per day. Consistent with SBCAPCD guidance, fugitive dust emissions from off-road equipment operating onsite were quantified using emission factors and methodology found in AP-42, *Compilation of Air Pollutant Emissions Factors from Stationary Sources*, Chapter 13, Section 2 (USEPA 2011).

3.2 Significance Thresholds

Air Quality

To determine whether a project would have a significant air quality impact, Appendix G of the State CEQA Guidelines requires consideration of whether a project 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 those leading to odors) adversely affecting a substantial number of people.

The SBCAPCD has adopted Environmental Review Guidelines and Scope and Content of Air Quality Sections in Environmental Documents for quantifying and determining the significance of air quality emissions in its Environmental Review Guidelines (SBCAPCD 2015 and 2017). These guidelines are also reflected in Santa Barbara County Guidelines for the Implementation of the California Environmental Quality Act of 1970 (Guidelines Manual); the most recent version is from September 2020 (County of Santa Barbara 2020).

Construction Emissions Thresholds

As discussed in the County Guidelines Manual, county-wide construction emissions are considered to cause exceedances because dust control is already required of all discretionary construction activities by SBCAPCD Rule 345, and NO_X emissions associated with construction represent a small portion of county-wide emissions inventory. Therefore, the County does not currently have quantitative significance thresholds for construction emissions. Although construction emissions are considered not in exceedance of thresholds, CEQA requires that the short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading be analyzed. Therefore, the Guidelines Manual recommends construction-related NO_X, ROC, PM_{10}, and $PM_{2.5}$ emissions be quantified.

Standard dust control measures must be implemented for any discretionary project involving earthmoving activities, regardless of size or duration. According to the SBCAPCD, proper implementation of these required measures reduces fugitive dust emissions to a level that is below applicable thresholds (SBCAPCD 2017). Therefore, construction activities would be required to incorporate the SBCAPCD standard dust control measures.

Operational Emissions Thresholds

As described in SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents,* a project would have an exceedance if operation would:

- Emit (from all sources, both stationary and mobile) more than the daily trigger for offsets set in the APCD New Source Review Rule for any pollutant (i.e., 240 pounds per day for ROC and NO_X or more than 80 pounds per day for PM_{10}).
- Emit more than 25 pounds per day of NO_X or ROC from motor vehicle trips only.
- Cause or contribute to a violation of any California or National Ambient Air Quality Standard;
- Exceed the health risk public notification thresholds adopted by the SBCAPCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk).
- Be inconsistent with the latest adopted federal and state air quality plans for Santa Barbara County.
- The SBCAPD threshold for requiring a detailed review of National Ambient Air Quality Standard impacts are cited in Table 4 of SBCAPCD Rule 802, New Source Review. The fuel limitation of 50 percent will keep emissions below these thresholds.

Greenhouse Gas Emissions

Appendix G of the State CEQA Guidelines considers a project to have a significant impact related to greenhouse gas emissions if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to *CEQA Guidelines* Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. Currently, the County of Santa

Barbara has not adopted a Climate Action Plan or a qualified GHG reduction plan to address SB 32 and beyond.

However, under CEQA Guidelines Section 15183.5, the lead agency has discretion to select a model or methodology it considers most appropriate to enable decision makers to intelligently account for the project's incremental contribution to climate change. Santa Barbara County has adopted a GHG threshold for indusial stationary-source projects in their Environmental Thresholds and Guidelines Manual (Santa Barbara County 2021). Adopted on January 26, 2021, Guidelines include an industrial stationary source GHG emissions threshold of 1,000 MT CO_2e per year, which applies to industrial stationary sources subject to discretionary approvals (Santa Barbara County 2021). The threshold applies to both direct and indirect emissions. According to the Environmental Thresholds and Guidelines Manual, direct emissions encompass the project's complete operations, including stationary and mobile sources. Indirect emissions encompass GHG emissions that are associated with electricity, water, and solid waste.

Senate Bill (SB) 32 and Executive Order (EO) S-3-05 extend the state's GHG reduction goals to meet a state goal of reducing GHG emissions to 1990 levels by 2020, 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. The Santa Barbara County industrial stationary source threshold was adopted consistent with the state requirements.

3.3 Air Quality Project Impacts

Applicable Air Quality Plan

SBCAPCD typically considers a large commercial or industrial stationary source that is not subject to the SBCAPCD's rules and regulations and is not subject to the SBCAPCD's New Source Review program inconsistent with the 2022 Ozone Plan if it is a new, unexpected source of air pollutants that is not required to mitigate its emissions below significance thresholds. The project's emissions will be below the SBCAPCD's AQIA thresholds, as well as the County's mass emission thresholds. Therefore, the project is not a new, unexpected source of air pollutants that is not required to mitigate its emissions below significance thresholds and the project would not conflict with or obstruct the implementation of the applicable air quality plan.

Criteria Air Pollutant Emissions

Construction

Construction activities would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$), exhaust emissions from heavy construction vehicles, and ROC that would be released during the drying phase after application of architectural coatings. Table 5 summarizes emissions that would be generated from construction activities. As shown therein, construction emissions would not exceed the recommended threshold of 25 tons per year for ROC or NO_x.

Table 5 Estimated Annual Construction Emissions

Construction Year	Annual Emissions (tons per year)					
	ROC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
2025	<1	2	3	<1	1	<1
2026	1	2	3	<1	2	<1
2027	<1	<1	<1	<1	<1	<1
2028	<1	<1	<1	<1	<1	<1
2029	<1	1	1	<1	<1	<1
2030	<1	<1	<1	<1	<1	<1
Maximum Annual Emissions	**1**	**2**	**3**	**<1**	**2**	**<1**
SBCAPCD Thresholds	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including SBCAPCD Rules 345) and project design features.

Operation

Operational emissions for the project were quantified for two different time periods (daily and annual) to meet several objectives. First, County air quality significance thresholds are based on the maximum daily emissions from stationary and mobile sources; therefore, the project's maximum daily emissions are used to analyze the project's impacts to County thresholds. Second, the project annual emissions are presented in this section because annual emissions are used to determine the air quality permit status of the agricultural facility and associated requirement of the facility (offsets, AQIA, and control technology). In addition, the GHG emissions analysis uses an annual emission basis.

MAXIMUM DAILY OPERATIONAL EMISSIONS

Table 6 summarizes the project's operational emissions by emission source (area, mobile, on-site off-road equipment, and natural gas usage from stationary sources). As shown in Table 6, total operational emissions and mobile emissions would not exceed the applicable SBCAPCD daily operational thresholds. Table 7 presents the maximum daily emissions from the stationary sources compared to the AQIA thresholds in Rule 802.

Table 6 Maximum Estimated Daily Operational Emissions with Fuel Limitation

	Emissions (pounds per day)					
Emissions Source	**ROC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	34.5	0.0	0.0	0.0	0.0	0.00
Mobile	0.41	1.73	3.68	0.02	10.4	1.20
Onsite Off-road Equipment	0.49	8.76	61.3	0.01	0.18	0.16
Fugitive Dust from Onsite Equipment	N/A	N/A	N/A	N/A	0.87	0.21
Stationary Source Natural Gas Usage						
Tray Washer x Shift	0.0216	0.0976	1.186	0.0548	0.03	0.03
Germination Building Heater	0.03	0.12	1.42	0.07	0.16	0.16
Greenhouse Heaters	11.04	118.84	30	28	15	15
Stationary Source Totals	11.1	119.1	32.76	28.13	15.4	15.4
Project Total	**47**	**130**	**98**	**28**	**27**	**17**
Threshold (all sources)	240	240	N/A	N/A	80	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**No**	**N/A**
Threshold (mobile only)	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**N/A**	**N/A**

ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day

[1] Accounts for the natural gas energy emissions. Refer to Appendix B for the results.

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emissions presented are the highest of the winter and summer modeled emissions.

Table 7 Stationary Source Criteria Air Pollutants for the Plantel Eastside Expansion with Daily Use Limitation Compared to Air Quality Impact Analysis Thresholds.

	Emissions (pounds per day)						
	ROC	NOx	CO	SOx	PM	PM10	PM2.5
Total stationary source	**11.1**	**119.1**	**32.76**	**28.13**	**15.4**	**15.4**	**11.1**
Fugitive Dust from Onsite Equipment	**N/A**	**N/A**	**N/A**	**N/A**	**0.87**	**0.87**	**0.21**
Total Daily Stationary Source Emissions	11.1	119.1	37.8	28.1	16.3	16.3	11.3
AQIA Thresholds (table 4 of District Rule 802	120	120	500	120	120	80	55

Annual Operational Emissions

As described above, the seasonal heating loads make the project's emissions vary between winter and summer. The annual operational emissions of mobile and stationary sources are provided for informational purposes only in Table 8. The stationary equipment natural gas consumption was based on a 12.9 percent potential to emit.

The SBCAPCD does not require major source permits for agricultural projects where existing emissions are less than 50 percent of the emissions threshold for major source air permits. In SBCAPCD, the applicable threshold for this project is 100 tons per year of NO_x emissions. The SBCAPD reviewed the emissions of existing operations initially under this fuel use. Using the same potential to emit factor (12.9 percent), the maximum annual emissions of the project (eastside expansion) were quantified and added to the existing operations emissions. The projected annual emissions do not exceed 50 percent of the major source permit threshold, and thus would not trigger a major source permit requirement with the project.

Table 8 Maximum Estimated Annual Operational Emissions

	Annual Emissions (tons per year)					
Emissions Source	**ROC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	6.30	0.0	0.0	0	0.0	0.0
Mobile	0.02	0.20	0.18	0.005	0.57	0.07
Onsite Off-road Equipment	0.06	1.13	7.97	0.005	0.02	0.02
Fugitive Dust from Onsite	N/A	N/A	N/A	N/A	0.113	0.028
Stationary Source Natural Gas Usage						
Tray Washer x shift	0.008	0.036	0.433	0.020	0.011	0.011
Germination building heater	0.001	0.006	0.067	0.003	0.002	0.002
Greenhouse Heater	0.5	5.6	1.4	1.3	0.7	0.7
Stationary Source Total	0.529	5.637	1.919	1.342	0.735	0.735
Total	**7**	**7**	**10**	**1**	**1**	**1**

ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day

[1] Accounts for the natural gas energy emissions. Refer to Appendix B for the results.

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emissions presented are the highest of the winter and summer modeled emissions.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. As discussed under Section 2.1, *Air Quality*, the closest sensitive receptors are single-family residences 900 feet east of the project site. The SBCAPCD states that localized air quality impacts to sensitive receptors typically result from TACs (SBCAPCD 2017). The following subsections discuss the project's potential to result in impacts related to TAC emissions, specifically DPM, during construction and operation.

Construction

Construction-related activities would result in short-term, project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation grading, building construction, and other construction activities. DPM was identified as a toxic air contaminant (TAC) by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2021a). Per SBCAPCD, a health risk assessment is not required for short-term construction projects (SBCAPCD 2017). Instead, the project's TAC impacts from construction are discussed qualitatively.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately five years (62 months) with active construction occurring only over 22 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends in a household). OEHHA recommends this risk be bracketed with 9-year and 70-year exposure periods. Health risk assessments should be limited to the period/duration of activities associated with the project.

The maximum PM_{10} emissions, which is used to represent DPM emissions for this analysis, would occur during grading activities. While grading emissions represent the worst-case condition, such activities would only occur for approximately three months, which is less than one percent of the typical health risk calculation period (i.e., 30 and 70 years). $PM_{2.5}$ emissions would decrease for the remaining construction period because construction activities such as building construction and paving would require less construction equipment. Therefore, given the short duration of exposure, DPM generated by project construction would not create conditions where the probability that the Maximally Exposed Individual would contract cancer is greater than 10 in one million or to generate ground-level concentrations of noncarcinogenic TACs that exceed a Hazard Index greater than one in one million for the Maximally Exposed Individual. Construction impacts to sensitive receptors would not exceed the SBCAPCD's health public notification thresholds of 10 in a million for cancer risk and a Hazard Index of more than one for non-cancer risk (i.e., acute and chronic hazards).

Operation

During preliminary permitting discussions with the SBCAPCD on March 29, 2021, SBCAPCD has concluded that the project is not required to prepare a Health Risk Assessment for CEQA-purposes due to exemptions under Rule 202 and because a Title V permit would not be required (Harris, David 2021). In addition, SBCAPCD concluded that the project is not required to prepare a Health Risk Assessment because the project is located in a rural area, with the nearest residence over 250 meters away, and because the proposed natural gas combustion equipment would not create substantial toxic emissions. Therefore, health risk impacts would be negligible.

Odors

For construction activities, odors would be short-term in nature and are subject to SBCAPCD Rule 303 Nuisance. Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction.

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents,* also indicate that projects such as fast-food restaurants, bakeries, and coffee roasting facilities may be associated with operational odor complaints. Pursuant to SBCAPCD Rule 303, the SBCAPCD prohibits discharge of odors which may be a nuisance by a considerable number of people. The SBCAPCD often requires an Odor Abatement Plan (OAP) for facilities with high potential to result in nuisance odor impacts.

The proposed project consists of an agricultural facility. Typical odor sources associated with such agricultural facilities include fertilizer application and composting of waste plant materials (particularly high-calorie food waste). During periods of high humidity, these types of odors may be discernable at relatively large distances.

The proposed project is an expansion of an existing agricultural facility in a rural setting. Surrounding uses within three-quarters of mile of the project site are agricultural. As the project is in a rural setting and is surrounded by similar agricultural uses, the project is not anticipated to expose a substantial number of people to objectionable odors.

3.4 Greenhouse Gas Emissions Impacts

Construction Greenhouse Gas Emissions

Construction of the proposed project would generate temporary GHG emissions, primarily as a result of operation of construction equipment on-site, as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. As shown in Table 9, construction of the project would generate an estimated total of 1,173 MT CO_2e.

Table 9 Estimated GHG Emissions during Construction

Year	Annual Emissions (MT CO_2e)
2025	429
2026	471
2027	61
2028	61
2029	121
20230	30
Total	**1,173**

MT = metric tons; CO_2e = carbon dioxide equivalents

See Appendix A for modeling results.

Project Greenhouse Gas Emissions

The magnitude of the GHG emissions scenario analyzed from the project is based on several factors discussed under Methodology. The amount of greenhouse area determines a required number of greenhouse heaters and size (416 Holland Heaters). These heaters combust natural gas to provide the heat when interior temperatures fall below 60 degrees Fahrenheit in the November to April time frame. The same conservative potential to emit capacity factor (12.9 percent) was applied to all the natural gas equipment to arrive at this estimate. Some of the carbon dioxide produced via fuel combustion in the greenhouse is used as a necessary input in seedling growing process due to photosynthesis. The quantification of the CO_2 reduction from photosynthesis is not verifiable at the time of this analysis. Thus, the value provided below is a conservative value due to the conservative methodology and from not including the deduction of the CO_2 sink from photosynthesis.

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, wastewater and solid waste generation, and off-road equipment. As shown in Table 10, total combined annual GHG maximum emissions generated by the project would be approximately 11,318 MT CO_2e per year. The total annual emissions would exceed the Santa Barbara County threshold of 1,000 MT CO_2e per year. Recommended Measure GHG-1 provides suggestions to reduce the total GHG emissions to a level below the threshold.

Table 10 Combined Annual GHG Emissions

Emission Source	Annual Emissions (MT CO_2e)
Construction	471
Operation	
Area	<1
Mobile	149
Solid Waste	9
Refrigerant	69
Onsite Off-road Equipment	298
Natural Gas Usage from Stationary Equipment[1]	10,322
Total	**11,318**
Santa Barbara Industrial Source Threshold	1,000
Exceed Threshold?	Yes

MT = metric tons; CO_2e = carbon dioxide equivalents

See Appendix A and B for modeling results.

Recommended Measures

GHG-1 Greenhouse Gas Reduction Program

The project applicant shall prepare and implement a Greenhouse Gas Reduction Program (GHGRP) that includes GHG reduction measures to reduce the project's total remaining GHG emissions to 1,000 MT CO_2e per year or less:

- Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Reduction Credits." A "GHG Mitigation Reduction Credit" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the CARB's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (CARB 2013). An "Approved Registry" is an accredited carbon registry that follows approved CARB Compliance Offset Protocols. As of April 2021, Approved Registries include American Carbon Registry, Climate Action Reserve, and Verra (CARB 2018b). Credits from other sources shall not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the CARB standards; this would be validated by a CARB-certified GHG verification body. If the project applicant chooses to meet some of the GHG reduction requirements through Direct Reduction Activities, the activities shall be implemented as feasible in order of County preference: (1) within the County of Santa Barbara; (2) within the SBCAPCD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing GHG Mitigation Reduction Credits to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring GHG Mitigation Reduction Credits specific to the registry involved and shall undertake additional direct investments to fully recoup the loss.

- Obtain and retire "Carbon Offsets." "Carbon Offset" shall mean an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of 1 MT of CO_2e achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "Carbon Offset" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the CARB's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (CARB 2013). If the project applicant chooses to meet some of the GHG reduction requirements by purchasing offsets on an annual and permanent basis, the offsets shall be purchased according to the County of Santa Barbara's preference, which is, in order of County preference: (1) within the County of Santa Barbara; (2) within the SBCAPCD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to fully recoup the loss.

Plan Requirements and Timing. The applicant shall submit to Planning & Development the GHGRP for review and approval prior to final design approval. The GHGRP shall reduce the project's emissions to 1,000 MT CO_2e per year and shall incorporate all feasible actions to reduce emissions associated with natural gas consumption. To determine the applicable amount of GHG emissions to reduce, the GHGRP can include revised calculations that include actual usage from implementation of the project and include additional estimated reductions, such as from plant sequestration. Planning & Development shall verify that project plans incorporate required GHG emission reduction measures per the GHGRP prior to final design approval. Each emission reduction measure shall include a commitment enforceable by Planning & Development.

Monitoring. Planning & Development compliance monitoring staff shall confirm inclusion of the required GHG emission reduction measures into the project Conditional Use Permit. Compliance with all components of the GHGRP shall be verified during construction and prior to issuance of a Certificate of Occupancy.

Applicable GHG Regulations and Plans

Regional Transportation Plans

SBCAG has incorporated a sustainable community strategy into its RTP/SCS, which is designed to help the region achieve its SB 375 GHG emissions reduction target. The SBCAG 2050 RTP/SCS demonstrates that the SBCAG region would achieve its regional emissions reduction targets for the 2020 and 2035 target years. The RTP/SCS sets also forth goals and objectives related to mixed-use development and the jobs-housing balance by allotting more jobs to the northern portion of Santa Barbara County. The project does not include new residential development and therefore would not increase population projections. In addition, the project would create job opportunities within the northern portion of the County to increase the jobs-housing ratio.

2017 Scoping Plan

The principal state plans and policies regarding GHG emissions are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design. The facility would continue to utilize renewable electricity sourced from their onsite solar photovoltaic system. Water consumption would also decrease with construction and operational of the proposed expansion. In addition, the project would be required to comply with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. As discussed above, while the project's GHG emissions would exceed the County's GHG thresholds, Recommended Measure GHG-1 would reduce emissions to below the County threshold. Therefore, the project would be consistent with the 2017 Scoping Plan and the project would not conflict with applicable GHG regulations and plans.

4 Conclusions

The project's air quality impacts related to construction and operation would not be in exceedance of applicable SBCAPCD thresholds as discussed in Section 3.3, *Air Quality Project Impacts*. Population growth associated with the proposed project would be within SBCAG regional growth projections; therefore, the project would be consistent with the AQMP. Project construction and operation would not 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. Project construction and operation would not expose sensitive receptors to substantial pollutant concentrations related to TAC emissions, or to substantial odors.

As discussed in Section 3.4, *Greenhouse Gas Emissions Impacts*, project GHG emissions would exceed the County's adopted GHG significance threshold of 1,000 MT CO_2e per year. Measure GHG-1 is recommended to reduce the total GHG emissions.

For air quality protection, Plantel will implement a fuel use monitoring program. The program will include a natural gas volumetric meter on the project-specific trunk line from the Southern California Gas (SCG) pipeline downstream of the SCG main meter. The volume throughput for natural gas used by the project will be digitally recorded daily at Plantel. The record will include daily fuel use and will be maintained onsite. The recorded data will also include a monthly total and a rolling 12-month total. The meter will have temperature and pressure compensation to maintain quality data for GHG emissions reporting. The collected data would be used to conduct on-site compliance checks with the daily fuel limitations and the necessary GHG monitoring and reporting.

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Appendix A

Emissions Quantification Information

A-1 CalEEMod

CalEEMod Input and Output files located here:
https://rinconconsultants.files.com/f/becba4d4bc897ca7

A-2 Project Basis for Stationary Sources on Plantel Eastside Expansion

Table 1 Quantity and capacity of combustion equipment

Table 2 Emission Factors

Table 3 Natural Gas Combustion

Natural Gas Combustion Emissions Excel file located here:
https://rinconconsultants.files.com/f/becba4d4bc897ca7

Historical fuel use for capacity factory derivation Excel file located here:

https://rinconconsultants.files.com/f/becba4d4bc897ca7

Plantel Nursery Eastside Expansion Project v2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Plantel Nursery Eastside Expansion Project v2
Construction Start Date	7/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	26.2
Location	2775 E Clark Ave, Santa Maria, CA 93455, USA
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3377
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.26

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
General Light Industry	24.0	1000sqft	0.55	24,000	0.00	—	—	—

Industrial Park	1,573	1000sqft	36.1	1,572,800	0.00	—	—	—
Other Non-Asphalt Surfaces	40.4	Acre	40.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	12.9	12.0	48.2	50.1	0.11	2.04	35.4	36.7	1.88	3.76	4.98	—	11,574	11,574	0.48	0.21	7.45	11,621
Mit.	10.4	10.2	51.4	61.3	0.11	2.15	35.4	37.5	1.95	3.76	5.71	—	11,574	11,574	0.48	0.21	7.45	11,621
% Reduced	19%	15%	-7%	-22%	—	-5%	—	-2%	-4%	—	-15%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	12.0	48.2	50.4	0.11	2.04	35.4	36.7	1.88	3.76	4.98	—	11,570	11,570	0.48	0.21	0.19	11,616
Mit.	10.5	10.3	51.4	61.4	0.11	2.15	35.4	37.5	1.95	3.76	5.71	—	11,570	11,570	0.48	0.21	0.19	11,616
% Reduced	19%	15%	-7%	-22%	—	-5%	—	-2%	-4%	—	-15%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.63	3.41	10.9	13.0	0.02	0.46	9.03	9.37	0.42	0.96	1.27	—	2,825	2,825	0.13	0.06	0.88	2,846

Mit.	3.00	2.95	12.7	15.8	0.02	0.55	9.03	9.58	0.50	0.96	1.46	—	2,825	2,825	0.13	0.06	0.88	2,846
% Reduced	17%	13%	-17%	-22%	—	-20%	—	-2%	-19%	—	-15%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.66	0.62	1.99	2.36	< 0.005	0.08	1.65	1.71	0.08	0.18	0.23	—	468	468	0.02	0.01	0.15	471
Mit.	0.55	0.54	2.32	2.88	< 0.005	0.10	1.65	1.75	0.09	0.18	0.27	—	468	468	0.02	0.01	0.15	471
% Reduced	17%	13%	-17%	-22%	—	-20%	—	-2%	-19%	—	-15%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.51	5.48	48.2	46.3	0.11	2.04	9.11	11.1	1.88	2.01	3.89	—	11,574	11,574	0.47	0.11	1.06	11,621
2026	12.9	12.0	36.2	50.1	0.09	1.33	35.4	36.7	1.23	3.76	4.98	—	11,019	11,019	0.48	0.21	7.45	11,102
2027	1.73	1.45	11.1	13.0	0.03	0.40	6.85	7.25	0.37	0.73	1.10	—	3,027	3,027	0.12	0.06	1.41	3,048
2028	1.66	1.40	10.5	12.9	0.03	0.37	6.85	7.22	0.34	0.73	1.07	—	3,019	3,019	0.12	0.05	1.29	3,040
2029	3.21	2.72	20.0	25.4	0.05	0.68	13.7	14.4	0.63	1.46	2.08	—	6,020	6,020	0.24	0.11	2.33	6,060
2030	1.56	1.32	9.75	12.6	0.03	0.33	6.85	7.17	0.30	0.73	1.03	—	3,001	3,001	0.12	0.05	1.05	3,021
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.51	5.47	48.2	46.3	0.11	2.04	14.1	15.1	1.88	2.01	3.89	—	11,570	11,570	0.48	0.12	0.09	11,616
2026	12.9	12.0	36.3	50.4	0.09	1.33	35.4	36.7	1.23	3.76	4.98	—	10,989	10,989	0.44	0.21	0.19	11,063
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	3.21	2.72	20.0	25.5	0.05	0.68	13.7	14.4	0.63	1.46	2.08	—	6,010	6,010	0.24	0.11	0.06	6,048
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.50	1.27	10.9	11.0	0.02	0.46	2.86	3.32	0.42	0.56	0.98	—	2,581	2,581	0.11	0.03	0.20	2,592
2026	3.63	3.41	9.23	13.0	0.02	0.34	9.03	9.37	0.31	0.96	1.27	—	2,825	2,825	0.13	0.06	0.88	2,846
2027	0.21	0.18	1.34	1.57	< 0.005	0.05	0.77	0.82	0.04	0.08	0.13	—	364	364	0.01	0.01	0.07	367
2028	0.20	0.17	1.27	1.55	< 0.005	0.04	0.77	0.81	0.04	0.08	0.12	—	363	363	0.01	0.01	0.07	366
2029	0.39	0.33	2.41	3.06	0.01	0.08	1.54	1.62	0.08	0.16	0.24	—	724	724	0.03	0.01	0.12	729
2030	0.09	0.08	0.59	0.76	< 0.005	0.02	0.38	0.40	0.02	0.04	0.06	—	181	181	0.01	< 0.005	0.03	182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.23	1.99	2.01	< 0.005	0.08	0.52	0.61	0.08	0.10	0.18	—	427	427	0.02	< 0.005	0.03	429
2026	0.66	0.62	1.69	2.36	< 0.005	0.06	1.65	1.71	0.06	0.18	0.23	—	468	468	0.02	0.01	0.15	471
2027	0.04	0.03	0.25	0.29	< 0.005	0.01	0.14	0.15	0.01	0.01	0.02	—	60.3	60.3	< 0.005	< 0.005	0.01	60.7
2028	0.04	0.03	0.23	0.28	< 0.005	0.01	0.14	0.15	0.01	0.01	0.02	—	60.2	60.2	< 0.005	< 0.005	0.01	60.6
2029	0.07	0.06	0.44	0.56	< 0.005	0.02	0.28	0.30	0.01	0.03	0.04	—	120	120	< 0.005	< 0.005	0.02	121
2030	0.02	0.01	0.11	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	29.9	29.9	< 0.005	< 0.005	< 0.005	30.1

2.3. Construction Emissions by Year, Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.26	2.22	51.4	61.3	0.11	2.10	9.11	11.2	1.88	2.01	3.89	—	11,574	11,574	0.47	0.11	1.06	11,621
2026	10.4	10.2	49.8	61.2	0.09	2.15	35.4	37.5	1.95	3.76	5.71	—	11,019	11,019	0.48	0.21	7.45	11,102
2027	0.93	0.87	14.0	15.8	0.03	0.60	6.85	7.45	0.54	0.73	1.27	—	3,027	3,027	0.12	0.06	1.41	3,048
2028	0.92	0.86	14.0	15.7	0.03	0.60	6.85	7.45	0.54	0.73	1.27	—	3,019	3,019	0.12	0.05	1.29	3,040
2029	1.81	1.71	28.0	31.3	0.05	1.20	13.7	14.9	1.08	1.46	2.54	—	6,020	6,020	0.24	0.11	2.33	6,060
2030	0.90	0.85	14.0	15.6	0.03	0.60	6.85	7.44	0.54	0.73	1.27	—	3,001	3,001	0.12	0.05	1.05	3,021

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.26	2.22	51.4	61.3	0.11	2.10	14.1	15.6	1.88	2.01	3.89	—	11,570	11,570	0.48	0.12	0.09	11,616
2026	10.5	10.3	49.9	61.4	0.09	2.15	35.4	37.5	1.95	3.76	5.71	—	10,989	10,989	0.44	0.21	0.19	11,063
2027	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2028	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2029	1.81	1.71	28.0	31.4	0.05	1.20	13.7	14.9	1.08	1.46	2.54	—	6,010	6,010	0.24	0.11	0.06	6,048
2030	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.56	0.55	11.6	13.9	0.02	0.48	2.86	3.34	0.43	0.56	0.99	—	2,581	2,581	0.11	0.03	0.20	2,592
2026	3.00	2.95	12.7	15.8	0.02	0.55	9.03	9.58	0.50	0.96	1.46	—	2,825	2,825	0.13	0.06	0.88	2,846
2027	0.11	0.10	1.69	1.91	< 0.005	0.07	0.77	0.84	0.07	0.08	0.15	—	364	364	0.01	0.01	0.07	367
2028	0.11	0.10	1.69	1.90	< 0.005	0.07	0.77	0.84	0.07	0.08	0.15	—	363	363	0.01	0.01	0.07	366
2029	0.22	0.21	3.38	3.77	0.01	0.14	1.54	1.68	0.13	0.16	0.29	—	724	724	0.03	0.01	0.12	729
2030	0.05	0.05	0.84	0.94	< 0.005	0.04	0.38	0.42	0.03	0.04	0.07	—	181	181	0.01	< 0.005	0.03	182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.10	2.11	2.54	< 0.005	0.09	0.52	0.61	0.08	0.10	0.18	—	427	427	0.02	< 0.005	0.03	429
2026	0.55	0.54	2.32	2.88	< 0.005	0.10	1.65	1.75	0.09	0.18	0.27	—	468	468	0.02	0.01	0.15	471
2027	0.02	0.02	0.31	0.35	< 0.005	0.01	0.14	0.15	0.01	0.01	0.03	—	60.3	60.3	< 0.005	< 0.005	0.01	60.7
2028	0.02	0.02	0.31	0.35	< 0.005	0.01	0.14	0.15	0.01	0.01	0.03	—	60.2	60.2	< 0.005	< 0.005	0.01	60.6
2029	0.04	0.04	0.62	0.69	< 0.005	0.03	0.28	0.31	0.02	0.03	0.05	—	120	120	< 0.005	< 0.005	0.02	121
2030	0.01	0.01	0.15	0.17	< 0.005	0.01	0.07	0.08	0.01	0.01	0.01	—	29.9	29.9	< 0.005	< 0.005	< 0.005	30.1

2.4. Operations 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.	35.7	35.4	10.4	64.9	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,193	4,209	1.78	0.20	420	4,733
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	35.7	35.4	10.5	65.0	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,180	4,196	1.78	0.20	416	4,716
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	35.2	35.0	7.32	44.6	0.02	0.14	3.10	3.24	0.13	0.36	0.49	16.2	2,657	2,673	1.72	0.13	416	3,171
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.42	6.38	1.34	8.15	< 0.005	0.03	0.57	0.59	0.02	0.07	0.09	2.68	440	443	0.28	0.02	69.0	525

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.41	1.66	3.57	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,672	1,672	0.09	0.19	4.59	1,734
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Total	35.7	35.4	10.4	64.9	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,193	4,209	1.78	0.20	420	4,733

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.41	1.73	3.68	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,659	1,659	0.09	0.19	0.12	1,717
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Total	35.7	35.4	10.5	65.0	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,180	4,196	1.78	0.20	416	4,716
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.09	1.10	0.98	0.01	0.01	3.10	3.11	0.01	0.36	0.37	—	861	861	0.05	0.12	0.82	899
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.50	0.35	6.22	43.7	0.01	0.13	—	0.13	0.12	—	0.12	—	1,796	1,796	0.05	0.01	—	1,800
Total	35.2	35.0	7.32	44.6	0.02	0.14	3.10	3.24	0.13	0.36	0.49	16.2	2,657	2,673	1.72	0.13	416	3,171
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	0.20	0.18	< 0.005	< 0.005	0.57	0.57	< 0.005	0.07	0.07	—	143	143	0.01	0.02	0.14	149
Area	6.30	6.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8

Off-Road	0.09	0.06	1.13	7.97	< 0.005	0.02	—	0.02	0.02	—	0.02	—	297	297	0.01	< 0.005	—	298
Total	6.42	6.38	1.34	8.15	< 0.005	0.03	0.57	0.59	0.02	0.07	0.09	2.68	440	443	0.28	0.02	69.0	525

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.41	1.66	3.57	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,672	1,672	0.09	0.19	4.59	1,734
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Total	35.7	35.4	10.4	64.9	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,193	4,209	1.78	0.20	420	4,733
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.41	1.73	3.68	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,659	1,659	0.09	0.19	0.12	1,717
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Total	35.7	35.4	10.5	65.0	0.03	0.20	10.4	10.6	0.18	1.18	1.36	16.2	4,180	4,196	1.78	0.20	416	4,716

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.09	1.10	0.98	0.01	0.01	3.10	3.11	0.01	0.36	0.37	—	861	861	0.05	0.12	0.82	899
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Off-Road	0.50	0.35	6.22	43.7	0.01	0.13	—	0.13	0.12	—	0.12	—	1,796	1,796	0.05	0.01	—	1,800
Total	35.2	35.0	7.32	44.6	0.02	0.14	3.10	3.24	0.13	0.36	0.49	16.2	2,657	2,673	1.72	0.13	416	3,171
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	0.20	0.18	< 0.005	< 0.005	0.57	0.57	< 0.005	0.07	0.07	—	143	143	0.01	0.02	0.14	149
Area	6.30	6.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8
Off-Road	0.09	0.06	1.13	7.97	< 0.005	0.02	—	0.02	0.02	—	0.02	—	297	297	0.01	< 0.005	—	298
Total	6.42	6.38	1.34	8.15	< 0.005	0.03	0.57	0.59	0.02	0.07	0.09	2.68	440	443	0.28	0.02	69.0	525

3. Construction Emissions Details

3.1. Site Preparation (2025) - 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	2.53	2.12	18.2	18.1	0.03	0.81	—	0.81	0.75	—	0.75	—	3,005	3,005	0.12	0.02	—	3,016
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.14	< 0.005	0.05	—	0.05	0.05	—	0.05	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—
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	0.03	0.02	0.21	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.09	1.12	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	189	189	0.01	0.01	0.83	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.8	88.8	< 0.005	0.01	0.23	92.8
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	0.01	0.01	0.01	0.07	0.00	0.00	0.24	0.24	0.00	0.03	0.03	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	0.01	5.84
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	0.04	0.04	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.97
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

3.2. Site Preparation (2025) - Mitigated

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	0.84	0.80	16.0	17.7	0.03	0.74	—	0.74	0.67	—	0.67	—	3,005	3,005	0.12	0.02	—	3,016
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.01	1.12	< 0.005	0.05	—	0.05	0.04	—	0.04	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—
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	0.18	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.09	1.12	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	189	189	0.01	0.01	0.83	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.8	88.8	< 0.005	0.01	0.23	92.8
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	0.01	0.01	0.01	0.07	0.00	0.00	0.24	0.24	0.00	0.03	0.03	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	0.01	5.84
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	0.04	0.04	0.00	< 0.005	< 0.005	—	1.93	1.93	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.97
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

3.3. Grading (2025) - 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	6.36	5.34	47.9	45.1	0.10	2.04	—	2.04	1.88	—	1.88	—	11,297	11,297	0.46	0.09	—	11,335

Dust From Material Movement	—	—	—	—	—	—	4.62	4.62	—	1.54	1.54	—	—	—	—	—	—	—
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	6.36	5.34	47.9	45.1	0.10	2.04	—	2.04	1.88	—	1.88	—	11,297	11,297	0.46	0.09	—	11,335
Dust From Material Movement	—	—	—	—	—	—	4.62	4.62	—	1.54	1.54	—	—	—	—	—	—	—
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	1.13	0.95	8.53	8.03	0.02	0.36	—	0.36	0.33	—	0.33	—	2,012	2,012	0.08	0.02	—	2,019
Dust From Material Movement	—	—	—	—	—	—	0.82	0.82	—	0.27	0.27	—	—	—	—	—	—	—
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	0.21	0.17	1.56	1.47	< 0.005	0.07	—	0.07	0.06	—	0.06	—	333	333	0.01	< 0.005	—	334

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.05	0.05	—	—	—	—	—	—	—
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	0.14	0.14	0.09	1.12	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	189	189	0.01	0.01	0.83	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.8	88.8	< 0.005	0.01	0.23	92.8
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	0.15	0.13	0.11	1.15	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	185	185	0.01	0.01	0.02	188
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.9	88.9	< 0.005	0.01	0.01	92.7
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	0.03	0.02	0.02	0.20	0.00	0.00	0.67	0.67	0.00	0.07	0.07	—	33.0	33.0	< 0.005	< 0.005	0.06	33.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	15.8	15.8	< 0.005	< 0.005	0.02	16.5
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	0.04	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	5.46	5.46	< 0.005	< 0.005	0.01	5.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	2.62	2.62	< 0.005	< 0.005	< 0.005	2.73
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

3.4. Grading (2025) - Mitigated

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	2.11	2.08	51.1	60.1	0.10	2.09	—	2.09	1.88	—	1.88	—	11,297	11,297	0.46	0.09	—	11,335
Dust From Material Movement	—	—	—	—	—	—	4.62	4.62	—	1.54	1.54	—	—	—	—	—	—	—
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	2.11	2.08	51.1	60.1	0.10	2.09	—	2.09	1.88	—	1.88	—	11,297	11,297	0.46	0.09	—	11,335
Dust From Material Movement	—	—	—	—	—	—	4.62	4.62	—	1.54	1.54	—	—	—	—	—	—	—
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	0.37	9.10	10.7	0.02	0.37	—	0.37	0.33	—	0.33	—	2,012	2,012	0.08	0.02	—	2,019
Dust From Material Movement	—	—	—	—	—	—	0.82	0.82	—	0.27	0.27	—	—	—	—	—	—	—

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	0.07	1.66	1.95	< 0.005	0.07	—	0.07	0.06	—	0.06	—	333	333	0.01	< 0.005	—	334
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.05	0.05	—	—	—	—	—	—	—
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	0.14	0.14	0.09	1.12	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	189	189	0.01	0.01	0.83	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.8	88.8	< 0.005	0.01	0.23	92.8
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	0.15	0.13	0.11	1.15	0.00	0.00	4.07	4.07	0.00	0.43	0.43	—	185	185	0.01	0.01	0.02	188
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.41	0.41	< 0.005	0.05	0.05	—	88.9	88.9	< 0.005	0.01	0.01	92.7
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	0.03	0.02	0.02	0.20	0.00	0.00	0.67	0.67	0.00	0.07	0.07	—	33.0	33.0	< 0.005	< 0.005	0.06	33.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	15.8	15.8	< 0.005	< 0.005	0.02	16.5
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	0.04	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	5.46	5.46	< 0.005	< 0.005	0.01	5.55

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	2.62	2.62	< 0.005	< 0.005	< 0.005	2.73
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

3.5. Utilities and Basin Liner (2025) - 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	1.07	0.89	8.23	9.92	0.02	0.31	—	0.31	0.29	—	0.29	—	1,940	1,940	0.08	0.02	—	1,947
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	0.13	0.11	1.00	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	235	235	0.01	< 0.005	—	236
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	0.02	0.18	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.0	39.0	< 0.005	< 0.005	—	39.1
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	0.24	0.22	0.18	1.91	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	308	308	0.02	0.01	0.04	313
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	107	107	< 0.005	0.01	0.01	111
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	0.03	0.03	0.02	0.23	0.00	0.00	0.77	0.77	0.00	0.08	0.08	—	37.4	37.4	< 0.005	< 0.005	0.07	38.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	12.9	12.9	< 0.005	< 0.005	0.01	13.5
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	0.01	< 0.005	< 0.005	0.04	0.00	0.00	0.14	0.14	0.00	0.01	0.01	—	6.20	6.20	< 0.005	< 0.005	0.01	6.30
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.24
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

3.6. Utilities and Basin Liner (2025) - Mitigated

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	0.48	0.46	10.2	11.6	0.02	0.44	—	0.44	0.40	—	0.40	—	1,940	1,940	0.08	0.02	—	1,947
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	0.06	0.06	1.24	1.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	235	235	0.01	< 0.005	—	236
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	0.23	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.0	39.0	< 0.005	< 0.005	—	39.1
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	0.24	0.22	0.18	1.91	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	308	308	0.02	0.01	0.04	313
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	107	107	< 0.005	0.01	0.01	111
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	0.03	0.03	0.02	0.23	0.00	0.00	0.77	0.77	0.00	0.08	0.08	—	37.4	37.4	< 0.005	< 0.005	0.07	38.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	12.9	12.9	< 0.005	< 0.005	0.01	13.5
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	0.01	< 0.005	< 0.005	0.04	0.00	0.00	0.14	0.14	0.00	0.01	0.01	—	6.20	6.20	< 0.005	< 0.005	0.01	6.30
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.24
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. Utilities and Basin Liner (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	1.03	0.86	7.82	9.86	0.02	0.28	—	0.28	0.26	—	0.26	—	1,940	1,940	0.08	0.02	—	1,947
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	1.03	0.86	7.82	9.86	0.02	0.28	—	0.28	0.26	—	0.26	—	1,940	1,940	0.08	0.02	—	1,947
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	0.24	0.20	1.82	2.30	< 0.005	0.07	—	0.07	0.06	—	0.06	—	452	452	0.02	< 0.005	—	453

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	0.04	0.04	0.33	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.0
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.15	1.72	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	308	308	0.02	0.01	1.29	314
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	105	105	< 0.005	0.01	0.25	109
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	0.22	0.21	0.16	1.77	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	302	302	0.01	0.01	0.03	306
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	105	105	< 0.005	0.01	0.01	109
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	0.05	0.05	0.04	0.40	0.00	0.00	1.47	1.47	0.00	0.16	0.16	—	70.3	70.3	< 0.005	< 0.005	0.13	71.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.03	25.5
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	0.01	0.01	0.01	0.07	0.00	0.00	0.27	0.27	0.00	0.03	0.03	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	4.03	4.03	< 0.005	< 0.005	< 0.005	4.21
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

3.8. Utilities and Basin Liner (2026) - Mitigated

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	0.48	0.46	10.2	11.6	0.02	0.44	—	0.44	0.40	—	0.40	—	1,940	1,940	0.08	0.02	—	1,947
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	0.48	0.46	10.2	11.6	0.02	0.44	—	0.44	0.40	—	0.40	—	1,940	1,940	0.08	0.02	—	1,947
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	0.11	0.11	2.38	2.70	< 0.005	0.10	—	0.10	0.09	—	0.09	—	452	452	0.02	< 0.005	—	453
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	0.02	0.43	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	74.8	74.8	< 0.005	< 0.005	—	75.0

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.15	1.72	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	308	308	0.02	0.01	1.29	314
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	105	105	< 0.005	0.01	0.25	109
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	0.22	0.21	0.16	1.77	0.00	0.00	6.78	6.78	0.00	0.72	0.72	—	302	302	0.01	0.01	0.03	306
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.49	0.50	< 0.005	0.05	0.06	—	105	105	< 0.005	0.01	0.01	109
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	0.05	0.05	0.04	0.40	0.00	0.00	1.47	1.47	0.00	0.16	0.16	—	70.3	70.3	< 0.005	< 0.005	0.13	71.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.03	25.5
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	0.01	0.01	0.01	0.07	0.00	0.00	0.27	0.27	0.00	0.03	0.03	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	4.03	4.03	< 0.005	< 0.005	< 0.005	4.21
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

3.9. Construction of Greenhouses 1-4 (2025) - 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	2.41	2.01	17.5	18.1	0.04	0.70	—	0.70	0.65	—	0.65	—	4,331	4,331	0.18	0.04	—	4,346
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	0.01	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.4	25.4	< 0.005	< 0.005	—	25.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.21	4.21	< 0.005	< 0.005	—	4.22
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	0.22	0.20	0.17	1.72	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	277	277	0.02	0.01	0.03	282
Vendor	0.01	0.01	0.26	0.12	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	160	160	0.01	0.02	0.01	167

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	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.66
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.98
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	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
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

3.10. Construction of Greenhouses 1-4 (2025) - Mitigated

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	1.17	1.11	22.7	23.9	0.04	0.99	—	0.99	0.89	—	0.89	—	4,331	4,331	0.18	0.04	—	4,346
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	0.01	0.01	0.13	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.4	25.4	< 0.005	< 0.005	—	25.5

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.21	4.21	< 0.005	< 0.005	—	4.22
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	0.22	0.20	0.17	1.72	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	277	277	0.02	0.01	0.03	282
Vendor	0.01	0.01	0.26	0.12	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	160	160	0.01	0.02	0.01	167
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	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.66
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.98
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	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
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. Construction of Greenhouses 1-4 (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	2.30	1.92	16.5	18.0	0.04	0.63	—	0.63	0.58	—	0.58	—	4,332	4,332	0.18	0.04	—	4,347
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	2.30	1.92	16.5	18.0	0.04	0.63	—	0.63	0.58	—	0.58	—	4,332	4,332	0.18	0.04	—	4,347
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	0.54	0.45	3.83	4.18	0.01	0.15	—	0.15	0.14	—	0.14	—	1,009	1,009	0.04	0.01	—	1,012
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	0.10	0.08	0.70	0.76	< 0.005	0.03	—	0.03	0.02	—	0.02	—	167	167	0.01	< 0.005	—	168
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	0.20	0.19	0.13	1.55	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	277	277	0.02	0.01	1.16	283
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	157	157	0.01	0.02	0.38	164
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	0.20	0.19	0.15	1.59	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	272	272	0.01	0.01	0.03	276
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	157	157	0.01	0.02	0.01	164
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	0.05	0.04	0.03	0.36	0.00	0.00	1.32	1.32	0.00	0.14	0.14	—	63.3	63.3	< 0.005	< 0.005	0.12	64.4
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	36.6	36.6	< 0.005	0.01	0.04	38.2
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	0.01	0.01	0.01	0.07	0.00	0.00	0.24	0.24	0.00	0.03	0.03	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	6.05	6.05	< 0.005	< 0.005	0.01	6.32
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

3.12. Construction of Greenhouses 1-4 (2026) - Mitigated

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 Equipm	1.17	1.10	22.7	23.9	0.04	0.99	—	0.99	0.89	—	0.89	—	4,332	4,332	0.18	0.04	—	4,347
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	1.17	1.10	22.7	23.9	0.04	0.99	—	0.99	0.89	—	0.89	—	4,332	4,332	0.18	0.04	—	4,347
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	0.27	0.26	5.27	5.58	0.01	0.23	—	0.23	0.21	—	0.21	—	1,009	1,009	0.04	0.01	—	1,012
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	0.05	0.05	0.96	1.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	167	167	0.01	< 0.005	—	168
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	0.20	0.19	0.13	1.55	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	277	277	0.02	0.01	1.16	283
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	157	157	0.01	0.02	0.38	164
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	0.20	0.19	0.15	1.59	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	272	272	0.01	0.01	0.03	276
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	157	157	0.01	0.02	0.01	164
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	0.05	0.04	0.03	0.36	0.00	0.00	1.32	1.32	0.00	0.14	0.14	—	63.3	63.3	< 0.005	< 0.005	0.12	64.4
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	36.6	36.6	< 0.005	0.01	0.04	38.2
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	0.01	0.01	0.01	0.07	0.00	0.00	0.24	0.24	0.00	0.03	0.03	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	6.05	6.05	< 0.005	< 0.005	0.01	6.32
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

3.13. Germination Building (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	0.73	0.61	5.21	6.46	0.02	0.19	—	0.19	0.18	—	0.18	—	1,731	1,731	0.07	0.01	—	1,736
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	0.73	0.61	5.21	6.46	0.02	0.19	—	0.19	0.18	—	0.18	—	1,731	1,731	0.07	0.01	—	1,736
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	0.22	0.18	1.57	1.95	0.01	0.06	—	0.06	0.05	—	0.05	—	522	522	0.02	< 0.005	—	523
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	0.04	0.03	0.29	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.3	86.3	< 0.005	< 0.005	—	86.6
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	0.30	0.28	0.20	2.30	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	413	413	0.03	0.02	1.73	421
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	99.7	99.7	< 0.005	0.01	0.24	104
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	0.30	0.28	0.22	2.37	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	404	404	0.02	0.02	0.04	410
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	99.7	99.7	< 0.005	0.01	0.01	104
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	0.09	0.08	0.06	0.69	0.00	0.00	2.55	2.55	0.00	0.27	0.27	—	122	122	0.01	0.01	0.22	124
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.13	0.13	< 0.005	0.01	0.01	—	30.0	30.0	< 0.005	< 0.005	0.03	31.4
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	0.02	0.02	0.01	0.13	0.00	0.00	0.47	0.47	0.00	0.05	0.05	—	20.2	20.2	< 0.005	< 0.005	0.04	20.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	0.01	5.20
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

3.14. Germination Building (2026) - Mitigated

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	0.44	0.42	8.96	9.65	0.02	0.39	—	0.39	0.35	—	0.35	—	1,731	1,731	0.07	0.01	—	1,736
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	0.44	0.42	8.96	9.65	0.02	0.39	—	0.39	0.35	—	0.35	—	1,731	1,731	0.07	0.01	—	1,736
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	0.13	0.13	2.70	2.91	0.01	0.12	—	0.12	0.11	—	0.11	—	522	522	0.02	< 0.005	—	523
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	0.02	0.49	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02	—	86.3	86.3	< 0.005	< 0.005	—	86.6
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	0.30	0.28	0.20	2.30	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	413	413	0.03	0.02	1.73	421
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	99.7	99.7	< 0.005	0.01	0.24	104
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	0.30	0.28	0.22	2.37	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	404	404	0.02	0.02	0.04	410
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	99.7	99.7	< 0.005	0.01	0.01	104
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	0.09	0.08	0.06	0.69	0.00	0.00	2.55	2.55	0.00	0.27	0.27	—	122	122	0.01	0.01	0.22	124
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.13	0.13	< 0.005	0.01	0.01	—	30.0	30.0	< 0.005	< 0.005	0.03	31.4
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	0.02	0.02	0.01	0.13	0.00	0.00	0.47	0.47	0.00	0.05	0.05	—	20.2	20.2	< 0.005	< 0.005	0.04	20.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	0.01	5.20

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

3.15. Construction of Greenhoues 5-6 (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	1.52	1.27	10.8	11.5	0.03	0.40	—	0.40	0.37	—	0.37	—	2,601	2,601	0.11	0.02	—	2,610
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 Equipment	0.18	0.15	1.30	1.38	< 0.005	0.05	—	0.05	0.04	—	0.04	—	314	314	0.01	< 0.005	—	315
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	0.03	0.03	0.24	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.19	0.18	0.12	1.44	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	272	272	0.01	0.01	1.07	277
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	154	154	0.01	0.02	0.34	161
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	0.02	0.02	0.02	0.17	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	32.2	32.2	< 0.005	< 0.005	0.06	32.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	18.5	18.5	< 0.005	< 0.005	0.02	19.4
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	0.13	0.13	0.00	0.01	0.01	—	5.33	5.33	< 0.005	< 0.005	0.01	5.42
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.21
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

3.16. Construction of Greenhoues 5-6 (2027) - Mitigated

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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,601	2,601	0.11	0.02	—	2,610
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 Equipment	0.09	0.08	1.65	1.72	< 0.005	0.07	—	0.07	0.07	—	0.07	—	314	314	0.01	< 0.005	—	315
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	0.02	0.30	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.19	0.18	0.12	1.44	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	272	272	0.01	0.01	1.07	277
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	154	154	0.01	0.02	0.34	161
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	0.02	0.02	0.02	0.17	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	32.2	32.2	< 0.005	< 0.005	0.06	32.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	18.5	18.5	< 0.005	< 0.005	0.02	19.4
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	0.13	0.13	0.00	0.01	0.01	—	5.33	5.33	< 0.005	< 0.005	0.01	5.42
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.21
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

3.17. Construction of Greenhouses 7-8 (2028) - 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	1.46	1.22	10.2	11.4	0.03	0.37	—	0.37	0.34	—	0.34	—	2,602	2,602	0.11	0.02	—	2,611
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 Equipment	0.18	0.15	1.22	1.38	< 0.005	0.04	—	0.04	0.04	—	0.04	—	314	314	0.01	< 0.005	—	315
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	0.03	0.03	0.22	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1

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	0.19	0.17	0.11	1.36	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	267	267	0.01	0.01	0.98	272
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	150	150	0.01	0.02	0.31	157
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	0.02	0.02	0.01	0.16	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.6	31.6	< 0.005	< 0.005	0.05	32.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	18.1	18.1	< 0.005	< 0.005	0.02	18.9
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	0.13	0.13	0.00	0.01	0.01	—	5.23	5.23	< 0.005	< 0.005	0.01	5.32
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	< 0.005	3.12
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

3.18. Construction of Greenhouses 7-8 (2028) - Mitigated

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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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 Equipment	0.09	0.08	1.65	1.72	< 0.005	0.07	—	0.07	0.07	—	0.07	—	314	314	0.01	< 0.005	—	315
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	0.30	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.19	0.17	0.11	1.36	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	267	267	0.01	0.01	0.98	272
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	150	150	0.01	0.02	0.31	157
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	0.02	0.02	0.01	0.16	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.6	31.6	< 0.005	< 0.005	0.05	32.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	18.1	18.1	< 0.005	< 0.005	0.02	18.9
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	0.13	0.13	0.00	0.01	0.01	—	5.23	5.23	< 0.005	< 0.005	0.01	5.32
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	< 0.005	3.12
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

3.19. Construction of Greenhouses 9-10 (2029) - 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	1.42	1.19	9.69	11.3	0.03	0.34	—	0.34	0.31	—	0.31	—	2,602	2,602	0.11	0.02	—	2,611
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	1.42	1.19	9.69	11.3	0.03	0.34	—	0.34	0.31	—	0.31	—	2,602	2,602	0.11	0.02	—	2,611
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	0.17	0.14	1.17	1.37	< 0.005	0.04	—	0.04	0.04	—	0.04	—	314	314	0.01	< 0.005	—	315
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	0.03	0.03	0.21	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.17	0.17	0.10	1.27	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	263	263	0.01	0.01	0.89	267
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.27	152
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	0.17	0.17	0.11	1.30	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	257	257	0.01	0.01	0.02	261
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.01	152
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	0.02	0.02	0.01	0.15	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.0	31.0	< 0.005	< 0.005	0.05	31.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	17.6	17.6	< 0.005	< 0.005	0.01	18.4
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	0.13	0.13	0.00	0.01	0.01	—	5.14	5.14	< 0.005	< 0.005	0.01	5.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	3.04

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

3.20. Construction of Greenhouses 9-10 (2029) - Mitigated

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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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	0.09	0.08	1.65	1.72	< 0.005	0.07	—	0.07	0.07	—	0.07	—	314	314	0.01	< 0.005	—	315
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	0.02	0.01	0.30	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.17	0.17	0.10	1.27	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	263	263	0.01	0.01	0.89	267
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.27	152
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	0.17	0.17	0.11	1.30	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	257	257	0.01	0.01	0.02	261
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.01	152
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	0.02	0.02	0.01	0.15	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.0	31.0	< 0.005	< 0.005	0.05	31.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	17.6	17.6	< 0.005	< 0.005	0.01	18.4
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	0.13	0.13	0.00	0.01	0.01	—	5.14	5.14	< 0.005	< 0.005	0.01	5.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	3.04
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

3.21. Construction of Greenhouses 11-12 (2029) - 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	1.42	1.19	9.69	11.3	0.03	0.34	—	0.34	0.31	—	0.31	—	2,602	2,602	0.11	0.02	—	2,611
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	1.42	1.19	9.69	11.3	0.03	0.34	—	0.34	0.31	—	0.31	—	2,602	2,602	0.11	0.02	—	2,611
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	0.17	0.14	1.17	1.37	< 0.005	0.04	—	0.04	0.04	—	0.04	—	314	314	0.01	< 0.005	—	315
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	0.03	0.03	0.21	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.17	0.17	0.10	1.27	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	263	263	0.01	0.01	0.89	267
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.27	152
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	0.17	0.17	0.11	1.30	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	257	257	0.01	0.01	0.02	261
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.01	152
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	0.02	0.02	0.01	0.15	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.0	31.0	< 0.005	< 0.005	0.05	31.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	17.6	17.6	< 0.005	< 0.005	0.01	18.4
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	0.13	0.13	0.00	0.01	0.01	—	5.14	5.14	< 0.005	< 0.005	0.01	5.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	3.04
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

3.22. Construction of Greenhouses 11-12 (2029) - Mitigated

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 Equipm	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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	0.09	0.08	1.65	1.72	< 0.005	0.07	—	0.07	0.07	—	0.07	—	314	314	0.01	< 0.005	—	315
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	0.30	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.9	51.9	< 0.005	< 0.005	—	52.1
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	0.17	0.17	0.10	1.27	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	263	263	0.01	0.01	0.89	267
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.27	152
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	0.17	0.17	0.11	1.30	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	257	257	0.01	0.01	0.02	261
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	146	146	< 0.005	0.02	0.01	152
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	0.02	0.02	0.01	0.15	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	31.0	31.0	< 0.005	< 0.005	0.05	31.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	17.6	17.6	< 0.005	< 0.005	0.01	18.4
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	0.13	0.13	0.00	0.01	0.01	—	5.14	5.14	< 0.005	< 0.005	0.01	5.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	< 0.005	3.04
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

3.23. Construction of Greenhouse 13 (2030) - 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	1.39	1.16	9.46	11.3	0.03	0.33	—	0.33	0.30	—	0.30	—	2,602	2,602	0.11	0.02	—	2,611
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 Equipment	0.08	0.07	0.57	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	157	157	0.01	< 0.005	—	157
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	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.0	26.0	< 0.005	< 0.005	—	26.1
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	0.16	0.16	0.09	1.19	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	258	258	0.01	0.01	0.81	263
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	141	141	< 0.005	0.02	0.24	148
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	0.01	0.01	0.01	0.07	0.00	0.00	0.34	0.34	0.00	0.04	0.04	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	8.51	8.51	< 0.005	< 0.005	0.01	8.89
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	0.06	0.06	0.00	0.01	0.01	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.47
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

3.24. Construction of Greenhouse 13 (2030) - Mitigated

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	0.72	0.68	13.7	14.3	0.03	0.60	—	0.60	0.54	—	0.54	—	2,602	2,602	0.11	0.02	—	2,611
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 Equipment	0.04	0.04	0.82	0.86	< 0.005	0.04	—	0.04	0.03	—	0.03	—	157	157	0.01	< 0.005	—	157
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	0.15	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
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	0.16	0.16	0.09	1.19	0.00	0.00	6.11	6.11	0.00	0.65	0.65	—	258	258	0.01	0.01	0.81	263
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.74	0.74	< 0.005	0.08	0.08	—	141	141	< 0.005	0.02	0.24	148
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	0.01	0.01	0.01	0.07	0.00	0.00	0.34	0.34	0.00	0.04	0.04	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	8.51	8.51	< 0.005	< 0.005	0.01	8.89
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	0.06	0.06	0.00	0.01	0.01	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.47
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

3.25. Adjacent Parking Lot (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	4.43	5.96	0.01	0.20	—	0.20	0.18	—	0.18	—	897	897	0.04	0.01	—	900
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.61	0.51	4.43	5.96	0.01	0.20	—	0.20	0.18	—	0.18	—	897	897	0.04	0.01	—	900
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.18	0.15	1.34	1.80	< 0.005	0.06	—	0.06	0.05	—	0.05	—	270	270	0.01	< 0.005	—	271
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.24	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.8	44.8	< 0.005	< 0.005	—	44.9
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.07	0.06	0.04	0.52	0.00	0.00	2.04	2.04	0.00	0.22	0.22	—	92.4	92.4	0.01	< 0.005	0.39	94.2
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	0.00	0.00	0.00	0.00	0.00	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	0.07	0.06	0.05	0.53	0.00	0.00	2.04	2.04	0.00	0.22	0.22	—	90.5	90.5	< 0.005	< 0.005	0.01	91.9
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.01	0.15	0.00	0.00	0.57	0.57	0.00	0.06	0.06	—	27.3	27.3	< 0.005	< 0.005	0.05	27.8
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	0.00	0.00	0.00	0.00	0.00	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	0.10	0.10	0.00	0.01	0.01	—	4.52	4.52	< 0.005	< 0.005	0.01	4.60
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

3.26. Adjacent Parking Lot (2026) - Mitigated

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	0.21	0.21	5.43	6.29	0.01	0.26	—	0.26	0.24	—	0.24	—	897	897	0.04	0.01	—	900
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.21	0.21	5.43	6.29	0.01	0.26	—	0.26	0.24	—	0.24	—	897	897	0.04	0.01	—	900
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.06	0.06	1.64	1.90	< 0.005	0.08	—	0.08	0.07	—	0.07	—	270	270	0.01	< 0.005	—	271
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.30	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.8	44.8	< 0.005	< 0.005	—	44.9
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.07	0.06	0.04	0.52	0.00	0.00	2.04	2.04	0.00	0.22	0.22	—	92.4	92.4	0.01	< 0.005	0.39	94.2
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	0.00	0.00	0.00	0.00	0.00	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	0.07	0.06	0.05	0.53	0.00	0.00	2.04	2.04	0.00	0.22	0.22	—	90.5	90.5	< 0.005	< 0.005	0.01	91.9
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.01	0.15	0.00	0.00	0.57	0.57	0.00	0.06	0.06	—	27.3	27.3	< 0.005	< 0.005	0.05	27.8
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	0.00	0.00	0.00	0.00	0.00	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	0.10	0.10	0.00	0.01	0.01	—	4.52	4.52	< 0.005	< 0.005	0.01	4.60
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

3.27. Architectural Coating (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	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	6.97	6.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	6.97	6.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.04	0.26	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.2	40.2	< 0.005	< 0.005	—	40.4
Architectural Coatings	2.10	2.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.66	6.66	< 0.005	< 0.005	—	6.68
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.30	0.28	0.20	2.30	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	413	413	0.03	0.02	1.73	421
Vendor	0.01	0.01	0.19	0.09	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	122	122	< 0.005	0.02	0.29	128
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	0.30	0.28	0.22	2.37	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	404	404	0.02	0.02	0.04	410
Vendor	0.01	0.01	0.19	0.09	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	122	122	< 0.005	0.02	0.01	127
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	0.09	0.08	0.06	0.69	0.00	0.00	2.55	2.55	0.00	0.27	0.27	—	122	122	0.01	0.01	0.22	124
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	36.8	36.8	< 0.005	0.01	0.04	38.4
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	0.02	0.02	0.01	0.13	0.00	0.00	0.47	0.47	0.00	0.05	0.05	—	20.2	20.2	< 0.005	< 0.005	0.04	20.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	6.09	6.09	< 0.005	< 0.005	0.01	6.36
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

3.28. Architectural Coating (2026) - Mitigated

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	0.05	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	6.97	6.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.05	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	6.97	6.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.33	0.29	< 0.005	0.02	—	0.02	0.02	—	0.02	—	40.2	40.2	< 0.005	< 0.005	—	40.4
Architectural Coatings	2.10	2.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.66	6.66	< 0.005	< 0.005	—	6.68

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.30	0.28	0.20	2.30	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	413	413	0.03	0.02	1.73	421
Vendor	0.01	0.01	0.19	0.09	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	122	122	< 0.005	0.02	0.29	128
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	0.30	0.28	0.22	2.37	0.00	0.00	9.09	9.09	0.00	0.96	0.96	—	404	404	0.02	0.02	0.04	410
Vendor	0.01	0.01	0.19	0.09	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	122	122	< 0.005	0.02	0.01	127
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	0.09	0.08	0.06	0.69	0.00	0.00	2.55	2.55	0.00	0.27	0.27	—	122	122	0.01	0.01	0.22	124
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	36.8	36.8	< 0.005	0.01	0.04	38.4
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	0.02	0.02	0.01	0.13	0.00	0.00	0.47	0.47	0.00	0.05	0.05	—	20.2	20.2	< 0.005	< 0.005	0.04	20.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	6.09	6.09	< 0.005	< 0.005	0.01	6.36
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

4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.41	0.38	0.24	3.08	0.01	< 0.005	8.03	8.04	< 0.005	0.90	0.91	—	647	647	0.03	0.02	2.70	657
Industrial Park	0.08	0.02	1.42	0.49	0.01	0.02	2.37	2.38	0.02	0.28	0.29	—	1,025	1,025	0.06	0.16	1.89	1,077
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.41	1.66	3.57	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,672	1,672	0.09	0.19	4.59	1,734
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.41	0.39	0.28	3.18	0.01	< 0.005	8.03	8.04	< 0.005	0.90	0.91	—	633	633	0.03	0.02	0.07	642
Industrial Park	0.08	0.02	1.46	0.49	0.01	0.02	2.37	2.38	0.02	0.28	0.29	—	1,026	1,026	0.06	0.16	0.05	1,076
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.41	1.73	3.68	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,659	1,659	0.09	0.19	0.12	1,717
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.02	0.01	0.01	0.11	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	21.3	21.3	< 0.005	< 0.005	0.04	21.6

Industrial	0.01	< 0.005	0.19	0.06	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.04	—	121	121	0.01	0.02	0.10	127
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.02	0.20	0.18	< 0.005	< 0.005	0.57	0.57	< 0.005	0.07	0.07	—	143	143	0.01	0.02	0.14	149

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.41	0.38	0.24	3.08	0.01	< 0.005	8.03	8.04	< 0.005	0.90	0.91	—	647	647	0.03	0.02	2.70	657
Industrial Park	0.08	0.02	1.42	0.49	0.01	0.02	2.37	2.38	0.02	0.28	0.29	—	1,025	1,025	0.06	0.16	1.89	1,077
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.41	1.66	3.57	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,672	1,672	0.09	0.19	4.59	1,734
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.41	0.39	0.28	3.18	0.01	< 0.005	8.03	8.04	< 0.005	0.90	0.91	—	633	633	0.03	0.02	0.07	642
Industrial Park	0.08	0.02	1.46	0.49	0.01	0.02	2.37	2.38	0.02	0.28	0.29	—	1,026	1,026	0.06	0.16	0.05	1,076
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	0.49	0.41	1.73	3.68	0.02	0.02	10.4	10.4	0.02	1.18	1.20	—	1,659	1,659	0.09	0.19	0.12	1,717
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.02	0.01	0.01	0.11	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	21.3	21.3	< 0.005	< 0.005	0.04	21.6
Industria l Park	0.01	< 0.005	0.19	0.06	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.04	—	121	121	0.01	0.02	0.10	127
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.02	0.20	0.18	< 0.005	< 0.005	0.57	0.57	< 0.005	0.07	0.07	—	143	143	0.01	0.02	0.14	149

4.2. Energy

4.2.1. Electricity Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.26	6.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.30	6.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.26	6.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.30	6.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.6

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.37

4.6. Refrigerant Emissions by Land Use

4.6.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	409	409
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	409	409
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.03	1.03
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67.8	67.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8

4.6.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	409	409
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	409	409

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	416	416
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.03	1.03
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67.8	67.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.11	0.00	5.32	53.1	0.00	0.00	—	0.00	0.00	—	0.00	—	1,176	1,176	0.02	< 0.005	—	1,177
Off-Highway Trucks	0.03	0.03	0.15	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	70.6	70.6	< 0.005	< 0.005	—	70.9
Other General Industrial Equipment	0.55	0.46	3.26	7.78	0.01	0.17	—	0.17	0.16	—	0.16	—	1,275	1,275	0.05	0.01	—	1,279
Total	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.11	0.00	5.32	53.1	0.00	0.00	—	0.00	0.00	—	0.00	—	1,176	1,176	0.02	< 0.005	—	1,177

Off-Highway	0.03	0.03	0.15	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	70.6	70.6	< 0.005	< 0.005	—	70.9
Other General Industrial Equipment	0.55	0.46	3.26	7.78	0.01	0.17	—	0.17	0.16	—	0.16	—	1,275	1,275	0.05	0.01	—	1,279
Total	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.01	0.00	0.69	6.90	0.00	0.00	—	0.00	0.00	—	0.00	—	139	139	< 0.005	< 0.005	—	139
Off-Highway Trucks	< 0.005	< 0.005	0.02	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.33	8.33	< 0.005	< 0.005	—	8.36
Other General Industrial Equipment	0.07	0.06	0.42	1.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	150	150	0.01	< 0.005	—	151
Total	0.09	0.06	1.13	7.97	< 0.005	0.02	—	0.02	0.02	—	0.02	—	297	297	0.01	< 0.005	—	298

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.11	0.00	5.32	53.1	0.00	0.00	—	0.00	0.00	—	0.00	—	1,176	1,176	0.02	< 0.005	—	1,177
Off-Highway Trucks	0.03	0.03	0.15	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	70.6	70.6	< 0.005	< 0.005	—	70.9
Other General Industrial Equipment	0.55	0.46	3.26	7.78	0.01	0.17	—	0.17	0.16	—	0.16	—	1,275	1,275	0.05	0.01	—	1,279
Total	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.11	0.00	5.32	53.1	0.00	0.00	—	0.00	0.00	—	0.00	—	1,176	1,176	0.02	< 0.005	—	1,177
Off-Highway Trucks	0.03	0.03	0.15	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	70.6	70.6	< 0.005	< 0.005	—	70.9
Other General Industrial Equipment	0.55	0.46	3.26	7.78	0.01	0.17	—	0.17	0.16	—	0.16	—	1,275	1,275	0.05	0.01	—	1,279
Total	0.70	0.49	8.73	61.3	0.01	0.18	—	0.18	0.16	—	0.16	—	2,521	2,521	0.08	0.01	—	2,527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.01	0.00	0.69	6.90	0.00	0.00	—	0.00	0.00	—	0.00	—	139	139	< 0.005	< 0.005	—	139
Off-Highway Trucks	< 0.005	< 0.005	0.02	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.33	8.33	< 0.005	< 0.005	—	8.36
Other General Industrial Equipment	0.07	0.06	0.42	1.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	150	150	0.01	< 0.005	—	151
Total	0.09	0.06	1.13	7.97	< 0.005	0.02	—	0.02	0.02	—	0.02	—	297	297	0.01	< 0.005	—	298

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	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. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Site Preparation	Site Preparation	7/1/2025	7/31/2025	5.00	23.0	—
Grading	Grading	8/1/2025	10/30/2025	5.00	65.0	—
Utilities and Basin Liner	Building Construction	10/31/2025	4/29/2026	5.00	129	—
Construction of Greenhoues 1-4	Building Construction	12/29/2025	4/29/2026	5.00	88.0	—
Germination Building	Building Construction	2/28/2026	7/31/2026	5.00	110	—
Construction of Greenhoues 5-6	Building Construction	8/1/2027	9/30/2027	5.00	44.0	—
Construction of Greenhouses 7-8	Building Construction	8/1/2028	9/29/2028	5.00	44.0	—
Construction of Greenhouses 9-10	Building Construction	8/1/2029	10/1/2029	5.00	44.0	—
Construction of Greenhouses 11-12	Building Construction	8/1/2029	10/1/2029	5.00	44.0	—
Construction of Greenhouse 13	Building Construction	8/1/2030	8/30/2030	5.00	22.0	—
Adjacent Parking Lot	Paving	2/28/2026	7/31/2026	5.00	110	—
Architectural Coating	Architectural Coating	2/28/2026	7/31/2026	5.00	110	—

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
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Site Preparation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Site Preparation	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Site Preparation	Trenchers	Diesel	Average	2.00	8.00	40.0	0.50
Grading	Excavators	Diesel	Average	0.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Grading	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Utilities and Basin Liner	Cranes	Diesel	Average	1.00	7.00	367	0.29
Utilities and Basin Liner	Forklifts	Diesel	Average	0.00	8.00	82.0	0.20
Utilities and Basin Liner	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Utilities and Basin Liner	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Utilities and Basin Liner	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Construction of Greenhouses 1-4	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhouses 1-4	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Construction of Greenhouses 1-4	Generator Sets	Diesel	Average	3.00	8.00	14.0	0.74
Construction of Greenhouses 1-4	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 1-4	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Construction of Greenhouses 1-4	Surfacing Equipment	Diesel	Average	1.00	8.00	399	0.30
Construction of Greenhouses 1-4	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Germination Building	Cranes	Diesel	Average	0.00	7.00	367	0.29
Germination Building	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Germination Building	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Germination Building	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Germination Building	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Germination Building	Surfacing Equipment	Diesel	Average	1.00	8.00	399	0.30
Construction of Greenhoues 5-6	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhoues 5-6	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Construction of Greenhoues 5-6	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhoues 5-6	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhoues 5-6	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhoues 5-6	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

Construction of Greenhouses 7-8	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhouses 7-8	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Construction of Greenhouses 7-8	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 7-8	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 7-8	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouses 7-8	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Construction of Greenhouses 9-10	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhouses 9-10	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Construction of Greenhouses 9-10	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 9-10	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 9-10	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouses 9-10	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Construction of Greenhouses 11-12	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhouses 11-12	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Construction of Greenhouses 11-12	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 11-12	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 11-12	Welders	Diesel	Average	0.00	8.00	46.0	0.45

Construction of Greenhouses 11-12	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Construction of Greenhouse 13	Cranes	Diesel	Average	2.00	7.00	367	0.29
Construction of Greenhouse 13	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Construction of Greenhouse 13	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouse 13	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouse 13	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouse 13	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
Adjacent Parking Lot	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Adjacent Parking Lot	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Adjacent Parking Lot	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Site Preparation	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Site Preparation	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Site Preparation	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Site Preparation	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Site Preparation	Trenchers	Diesel	Tier 3	2.00	8.00	40.0	0.50
Grading	Excavators	Diesel	Average	0.00	8.00	36.0	0.38

Grading	Graders	Diesel	Tier 3	2.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 3	4.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Grading	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Tier 3	1.00	8.00	150	0.36
Utilities and Basin Liner	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Utilities and Basin Liner	Forklifts	Diesel	Average	0.00	8.00	82.0	0.20
Utilities and Basin Liner	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Utilities and Basin Liner	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Utilities and Basin Liner	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Construction of Greenhouses 1-4	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29
Construction of Greenhouses 1-4	Forklifts	Diesel	Tier 3	4.00	8.00	82.0	0.20
Construction of Greenhouses 1-4	Generator Sets	Diesel	Average	3.00	8.00	14.0	0.74
Construction of Greenhouses 1-4	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 1-4	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Construction of Greenhouses 1-4	Surfacing Equipment	Diesel	Tier 3	1.00	8.00	399	0.30
Construction of Greenhouses 1-4	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48

Germination Building	Cranes	Diesel	Average	0.00	7.00	367	0.29
Germination Building	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Germination Building	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Germination Building	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Germination Building	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Germination Building	Surfacing Equipment	Diesel	Tier 3	1.00	8.00	399	0.30
Construction of Greenhoues 5-6	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29
Construction of Greenhoues 5-6	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Construction of Greenhoues 5-6	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhoues 5-6	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhoues 5-6	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhoues 5-6	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48
Construction of Greenhouses 7-8	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29
Construction of Greenhouses 7-8	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Construction of Greenhouses 7-8	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 7-8	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 7-8	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouses 7-8	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48
Construction of Greenhouses 9-10	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29

Construction of Greenhouses 9-10	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Construction of Greenhouses 9-10	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 9-10	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 9-10	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouses 9-10	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48
Construction of Greenhouses 11-12	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29
Construction of Greenhouses 11-12	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Construction of Greenhouses 11-12	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouses 11-12	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouses 11-12	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouses 11-12	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48
Construction of Greenhouse 13	Cranes	Diesel	Tier 3	2.00	7.00	367	0.29
Construction of Greenhouse 13	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Construction of Greenhouse 13	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Construction of Greenhouse 13	Tractors/Loaders/Backhoes	Diesel	Average	0.00	7.00	84.0	0.37
Construction of Greenhouse 13	Welders	Diesel	Average	0.00	8.00	46.0	0.45
Construction of Greenhouse 13	Air Compressors	Diesel	Tier 3	2.00	8.00	37.0	0.48
Adjacent Parking Lot	Pavers	Diesel	Tier 3	1.00	8.00	81.0	0.42

Adjacent Parking Lot	Paving Equipment	Diesel	Tier 3	1.00	8.00	89.0	0.36
Adjacent Parking Lot	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	30.0	8.80	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	5.30	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	8.80	LDA,LDT1,LDT2
Grading	Vendor	5.00	5.30	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Utilities and Basin Liner	—	—	—	—
Utilities and Basin Liner	Worker	50.0	8.80	LDA,LDT1,LDT2
Utilities and Basin Liner	Vendor	6.00	5.30	HHDT,MHDT
Utilities and Basin Liner	Hauling	0.00	20.0	HHDT
Utilities and Basin Liner	Onsite truck	—	—	HHDT
Construction of Greenhouses 1-4	—	—	—	—
Construction of Greenhouses 1-4	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 1-4	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 1-4	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 1-4	Onsite truck	—	—	HHDT

Germination Building	—	—	—	—
Germination Building	Worker	67.0	8.80	LDA,LDT1,LDT2
Germination Building	Vendor	5.72	5.30	HHDT,MHDT
Germination Building	Hauling	0.00	20.0	HHDT
Germination Building	Onsite truck	—	—	HHDT
Construction of Greenhoues 5-6	—	—	—	—
Construction of Greenhoues 5-6	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhoues 5-6	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhoues 5-6	Hauling	0.00	20.0	HHDT
Construction of Greenhoues 5-6	Onsite truck	—	—	HHDT
Construction of Greenhouses 7-8	—	—	—	—
Construction of Greenhouses 7-8	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 7-8	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 7-8	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 7-8	Onsite truck	—	—	HHDT
Construction of Greenhouses 9-10	—	—	—	—
Construction of Greenhouses 9-10	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 9-10	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 9-10	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 9-10	Onsite truck	—	—	HHDT
Construction of Greenhouses 11-12	—	—	—	—
Construction of Greenhouses 11-12	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 11-12	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 11-12	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 11-12	Onsite truck	—	—	HHDT
Construction of Greenhouse 13	—	—	—	—
Construction of Greenhouse 13	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouse 13	Vendor	9.00	5.30	HHDT,MHDT

Construction of Greenhouse 13	Hauling	0.00	20.0	HHDT
Construction of Greenhouse 13	Onsite truck	—	—	HHDT
Adjacent Parking Lot	—	—	—	—
Adjacent Parking Lot	Worker	15.0	8.80	LDA,LDT1,LDT2
Adjacent Parking Lot	Vendor	—	5.30	HHDT,MHDT
Adjacent Parking Lot	Hauling	0.00	20.0	HHDT
Adjacent Parking Lot	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	67.0	8.80	LDA,LDT1,LDT2
Architectural Coating	Vendor	7.00	5.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	30.0	8.80	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	5.30	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	8.80	LDA,LDT1,LDT2
Grading	Vendor	5.00	5.30	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Utilities and Basin Liner	—	—	—	—
Utilities and Basin Liner	Worker	50.0	8.80	LDA,LDT1,LDT2
Utilities and Basin Liner	Vendor	6.00	5.30	HHDT,MHDT

Utilities and Basin Liner	Hauling	0.00	20.0	HHDT
Utilities and Basin Liner	Onsite truck	—	—	HHDT
Construction of Greenhouses 1-4	—	—	—	—
Construction of Greenhouses 1-4	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 1-4	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 1-4	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 1-4	Onsite truck	—	—	HHDT
Germination Building	—	—	—	—
Germination Building	Worker	67.0	8.80	LDA,LDT1,LDT2
Germination Building	Vendor	5.72	5.30	HHDT,MHDT
Germination Building	Hauling	0.00	20.0	HHDT
Germination Building	Onsite truck	—	—	HHDT
Construction of Greenhoues 5-6	—	—	—	—
Construction of Greenhoues 5-6	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhoues 5-6	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhoues 5-6	Hauling	0.00	20.0	HHDT
Construction of Greenhoues 5-6	Onsite truck	—	—	HHDT
Construction of Greenhouses 7-8	—	—	—	—
Construction of Greenhouses 7-8	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 7-8	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 7-8	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 7-8	Onsite truck	—	—	HHDT
Construction of Greenhouses 9-10	—	—	—	—
Construction of Greenhouses 9-10	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 9-10	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 9-10	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 9-10	Onsite truck	—	—	HHDT
Construction of Greenhouses 11-12	—	—	—	—

Construction of Greenhouses 11-12	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouses 11-12	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouses 11-12	Hauling	0.00	20.0	HHDT
Construction of Greenhouses 11-12	Onsite truck	—	—	HHDT
Construction of Greenhouse 13	—	—	—	—
Construction of Greenhouse 13	Worker	45.0	8.80	LDA,LDT1,LDT2
Construction of Greenhouse 13	Vendor	9.00	5.30	HHDT,MHDT
Construction of Greenhouse 13	Hauling	0.00	20.0	HHDT
Construction of Greenhouse 13	Onsite truck	—	—	HHDT
Adjacent Parking Lot	—	—	—	—
Adjacent Parking Lot	Worker	15.0	8.80	LDA,LDT1,LDT2
Adjacent Parking Lot	Vendor	—	5.30	HHDT,MHDT
Adjacent Parking Lot	Hauling	0.00	20.0	HHDT
Adjacent Parking Lot	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	67.0	8.80	LDA,LDT1,LDT2
Architectural Coating	Vendor	7.00	5.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

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)
Architectural Coating	0.00	0.00	18,000	6,000	105,459

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	23.0	0.00	—
Grading	—	—	358	0.00	—
Adjacent Parking Lot	0.00	0.00	0.00	0.00	40.4

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	0.00	0%
Industrial Park	0.00	0%
Other Non-Asphalt Surfaces	40.4	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005

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
General Light Industry	10.1	0.00	120	8,885	83.0	0.00	988	73,149
Industrial Park	15.7	0.00	0.00	4,101	283	0.00	0.00	73,809
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	10.1	0.00	120	8,885	83.0	0.00	988	73,149
Industrial Park	15.7	0.00	0.00	4,101	283	0.00	0.00	73,809
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

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)
0	0.00	18,000	6,000	105,459

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00	204	0.0330	0.0040	0.00
Industrial Park	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00	204	0.0330	0.0040	0.00
Industrial Park	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	0.00
Industrial Park	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	0.00
Industrial Park	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	30.0	—
Industrial Park	0.00	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	30.0	—
Industrial Park	0.00	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	10.0	4.00	52.0	0.38
Off-Highway Trucks	Diesel	Average	1.00	1.00	160	0.38
Other General Industrial Equipment	Diesel	Average	3.00	6.00	160	0.38

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	10.0	4.00	52.0	0.38
Off-Highway Trucks	Diesel	Average	1.00	1.00	160	0.38

Other General Industrial Equipment	Diesel	Average	3.00	6.00	160	0.38

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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

5.18.1.2. Mitigated

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

5.18.1.2. Mitigated

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)

5.18.2.2. Mitigated

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	5.58	annual days of extreme heat
Extreme Precipitation	4.75	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	44.6	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 ¾ 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	N/A	N/A	N/A	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	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
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	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	11.7
AQ-PM	8.00
AQ-DPM	8.70
Drinking Water	64.8
Lead Risk Housing	12.1
Pesticides	97.3
Toxic Releases	9.03
Traffic	9.21
Effect Indicators	—
CleanUp Sites	83.9
Groundwater	100
Haz Waste Facilities/Generators	96.5
Impaired Water Bodies	99.2
Solid Waste	83.5

Sensitive Population	—
Asthma	48.0
Cardio-vascular	15.8
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	63.0
Housing	5.01
Linguistic	45.4
Poverty	28.6
Unemployment	26.9

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	61.45258565
Employed	61.79905043
Median HI	72.86025921
Education	—
Bachelor's or higher	63.26190171
High school enrollment	17.87501604
Preschool enrollment	28.78224047
Transportation	—
Auto Access	70.20402926
Active commuting	84.53740536
Social	—
2-parent households	98.29334018
Voting	97.60041062

Neighborhood	—
Alcohol availability	93.08353651
Park access	5.646092647
Retail density	1.065058386
Supermarket access	18.22148082
Tree canopy	80.45682022
Housing	—
Homeownership	79.5970743
Housing habitability	80.75195688
Low-inc homeowner severe housing cost burden	44.56563583
Low-inc renter severe housing cost burden	90.87642756
Uncrowded housing	62.10701912
Health Outcomes	—
Insured adults	38.59874246
Arthritis	0.0
Asthma ER Admissions	56.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	44.8
Cognitively Disabled	52.2
Physically Disabled	27.7
Heart Attack ER Admissions	79.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	3.6
SLR Inundation Area	0.0
Children	87.0
Elderly	8.4
English Speaking	73.6
Foreign-born	32.0
Outdoor Workers	3.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	96.3
Traffic Density	8.8
Traffic Access	0.0
Other Indices	—
Hardship	31.5
Other Decision Support	—
2016 Voting	88.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	43.0

Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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	Schedule provided by applicant with addition of architectural coating.
Construction: Off-Road Equipment	Applicant provided list
Construction: Trips and VMT	Applicant provided data, assuming same number of trips as germination building construction
Construction: On-Road Fugitive Dust	All workers and vendors will be traveling on unpaved road for approx 0.09 miles (150 meters) of the total trip length. Adjusted % to account for that travel
Construction: Architectural Coatings	Only germination building will be painted. Total square footage is 24,000 with 75% for interior and 25% for exterior
Operations: Vehicle Data	10 worker trips and 8 vendor trips. 100% primary and either 100% W-O or O-O. Vendor trips would travel 18 miles (weighted average)
Operations: Fleet Mix	Worker trips assumed to be a mix of light-duty vehicle and vendor trips 100% HHD
Operations: Road Dust	99% to account for ~150 m of unpaved road
Operations: Architectural Coatings	Accounts only for the germination building square footage
Operations: Energy Use	Natural gas use estimated based on billing; attributed to stationary source equipment. Removed non-lighting electrical use from greenhouses. No new electricity

Operations: Water and Waste Water	Water usage would not increase with the project compared to existing conditions
Operations: Solid Waste	The project would haul approximately 2.5 tons per month of waste to the landfill, which is approximately 30 tons per year
Operations: Off-Road Equipment	1x yard mule 160 hp,10x forklifts 52 hp, 3x ATV 160 hp
Operations: Off-Road Equipment EF	—
Operations: Landscape Equipment	No landscaping

Appendix A.2

Project Basis for Stationary Sources on Plantel Eastside Expansion

Table 1 Quantity and Capacity of Combustion Equipment

Equipment	Count	Rated Heat Input (MMBtu/hr)	Operational Hours/day (actual)	Daily Heat Input Limit (mmbtu/day)	Daily Fuel Use (mmscf/day)
Holland Heaters HHB 120	416	0.4096	24	2,044.5	1.947
Raypak Hi Delta boiler (new)	1	0.4	24	4.8	0.005
Hot Water Boiler (existing tray washer incremental usage)	1	1	4		

Table 2 Emission Factors and Basis

Equipment	EFs, lb/MMBtu							
	NOx	VOC	CO	SOx	PM	PM10	PM2.5	GHG
Holland Heaters HHB 120	0.058	0.005	0.015	0.014	0.0075	0.0075	0.0075	117
Raypak Hi Delta boiler (new)	0.024	0.005	0.297	0.014	0.0075	0.0075	0.0075	117
Tray Washer	0.024	0.005	0.297	0.014	0.0075	0.0075	0.0075	117

Table 3 Natural Gas Combustion Emissions for Plantel Eastside Expansion

Equipment	PTE, lb/hr							
	NOx	VOC	CO	SOx	PM	PM10	PM2.5	GHG
Holland Heaters HHB 120	9.90	0.92	2.51	2.33	1.28	1.28	1.28	19934.10
Raypak Hi Delta boiler (new)	0.01	0.00	0.12	0.01	0.00	0.00	0.00	46.80
Tray Washer	0.024	0.005	0.30	0.014	0.008	0.008	0.008	117
Total	9.937	0.928	2.927	2.353	1.288	1.288	1.288	20,098

Equipment	PTE, lb/day							
	NOx	VOC	CO	SOx	PM	PM10	PM2.5	GHG
Holland Heaters HHB 120	119	11	30	28	15	15	15	239,209
Raypak Hi Delta boiler (new)	0.12	0.03	1.42	0.07	0.04	0.04	0.04	561.60
Tray Washer	0.10	0.02	1.19	0.05	0.03	0.03	0.03	468
Total	119	11	33	28	15	15	15	240,239

Equipment	PTE, tpy							
	NOx	VOC	CO	SOx	PM	PM10	PM2.5	GHG
Holland Heaters HHB 120	5.6	0.5	1.4	1.3	0.7	0.7	0.7	11,263.2
Raypak Hi Delta boiler (new)	0.006	0.001	0.067	0.003	0.002	0.002	0.002	26.4
Tray Washer	0.036	0.008	0.433	0.020	0.011	0.011	0.011	85
	5.637	0.529	1.919	1.342	0.735	0.735	0.735	11,375.021

GHG MTCO2e/yr	10322.16

Appendix B

Proposed Project Combustion Equipment Details

Stationary Source Emissions Information

Raypak Heater

Holland Heater

Raypak

HI DELTA®

Simple design, reliable performance.

300 MBTUH - 2.3 MMBTUH

- H 84% Efficiency
- WH 83.1-85% Efficiency
- P 83.1% Efficiency[‡]

Click icon or view standalone page to learn more

Reliable Performance

- Simple multi-stage operation and fixed blower motors for reliable performance and easy maintenance
- Compatible with Cold Water Start and Cold Water Run systems for extended system protection
- Innovative patented burner "security blanket" minimizes downtime and prevents metal fatigue, extending the life of the unit

Venting Flexibility

- Direct vent capable
- Ducted combustion air ready with rear vent option available for easy installation in any space
- Cat I vertical venting, Cat III sidewall venting (no extractor required for most applications)

Installation Versatility

- Vertically stack units with no offset with the SureRack™ Kit – perfect for small areas*
- Indoor/outdoor construction with waterproof controls for enhanced durability and longer life
- Flex Gas Dual-Fuel System allows for rapid fuel switchover between natural gas and propane while firing for interruptible-fuel applications — in less than one minute.[‡]

Simple Controls

- VERSA IC controls with LCD display
- Easy front access for simple setup and troubleshooting
- Cascade up to 8 units in parallel or sequential modulation modes for precise control and optimization

Applicable for heating in hospitals, schools, industrial processes, and more.

Optional Features

- ☑ Cupronickel heat exchanger
- ☑ Fixed speed pump
- ☑ Flex Gas dual-fuel system
- ☑ Cold Water Protection
- ☑ BACnet gateway
- ☑ SureRack™

*Units remain fully serviceable when stacked.
†Not available on 2002C model.
‡Factory-installed and tested system.

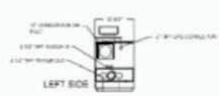
Hi Delta Boilers and Water Heaters Models 302C - 2342C

Model	MBTUH Input*	MBTUH Output*		Dimensions In.		
		Type H 84%	Type WH 85%†	A Width	G	K Flue
302C	300	252	255	38	3/4	6
402C	399	335	339	43	3/4	6
502C	500	420	425	52	1-1/4	8
652C	650	546	553	60-1/2	1-1/4	8
752C	750	630	638	67-1/2	1-1/4	8
902C	900	756	765	78	1-1/4	8
992C	990	832	842	57-1/8	2	10
1262C	1260	1058	1071	68-1/2	2	12
1532C	1530	1285	1301	79-7/8	2	12
1802C	1800	1512	1530	91-1/8	2	14
2002C‡	1999	1679	1699	102-1/2	2	14
2072C	2070	1739	1760	102-1/2	2	14
2342C	2340	1966	1989	113-7/8	2	16

* Ratings for models 302C-2342C for natural or propane gas and for elevations up to 4,500 ft. above sea level. For higher elevations consult the factory.
† These efficiencies are for a copper heat exchanger. See product submittal for CuNi efficiency data.
‡ Natural gas only. Not available for propane.

Hi Delta 302C-902C Boilers

Hi Delta 992C-2342C Boilers



MID EFFICIENCY

Learn more about **Hi Delta boilers at Raypak.com**

Learn more about **Hi Delta water heaters at Raypak.com**

Learn more about **Hi Delta pool heaters at Raypak.com**

Raypak® A Rheem® Company

HI DELTA® SS

A simple and compact solution for all your heating needs.

100 MBTUH - 399 MBTUH

H 84-85% Efficiency
WH 85% Efficiency

COLD WATER PROTECTION — Click icon or view standalone page to learn more.

MID EFFICIENCY

Reliable Performance

- Simple 2-stage firing for reliable heating
- Corrosion-resistant stainless-steel pump with flanges for enhanced operation and longer life
- Patented burner "security blanket" provides a streamlined air-gas pathway for complete sealed combustion

Venting Flexibility

- Direct vent capable and ducted combustion air ready
- Cat I vertical venting, Cat III sidewall venting (no extractor required for most applications) for easy installation

Installation Versatility

- Compact design perfect for small spaces (footprint is less than 6.9 ft^2 for all models)
- Durable construction for flexible indoor/outdoor installation
- Available for natural gas or propane to meet your needs

Simple Controls

- Electronic controller with outdoor reset varies the setpoint as the air temperature changes to optimize performance
- Simple status display lights for easier monitoring and troubleshooting

Applicable for hydronic heating for small office buildings, single-family homes, and more.

Optional Features

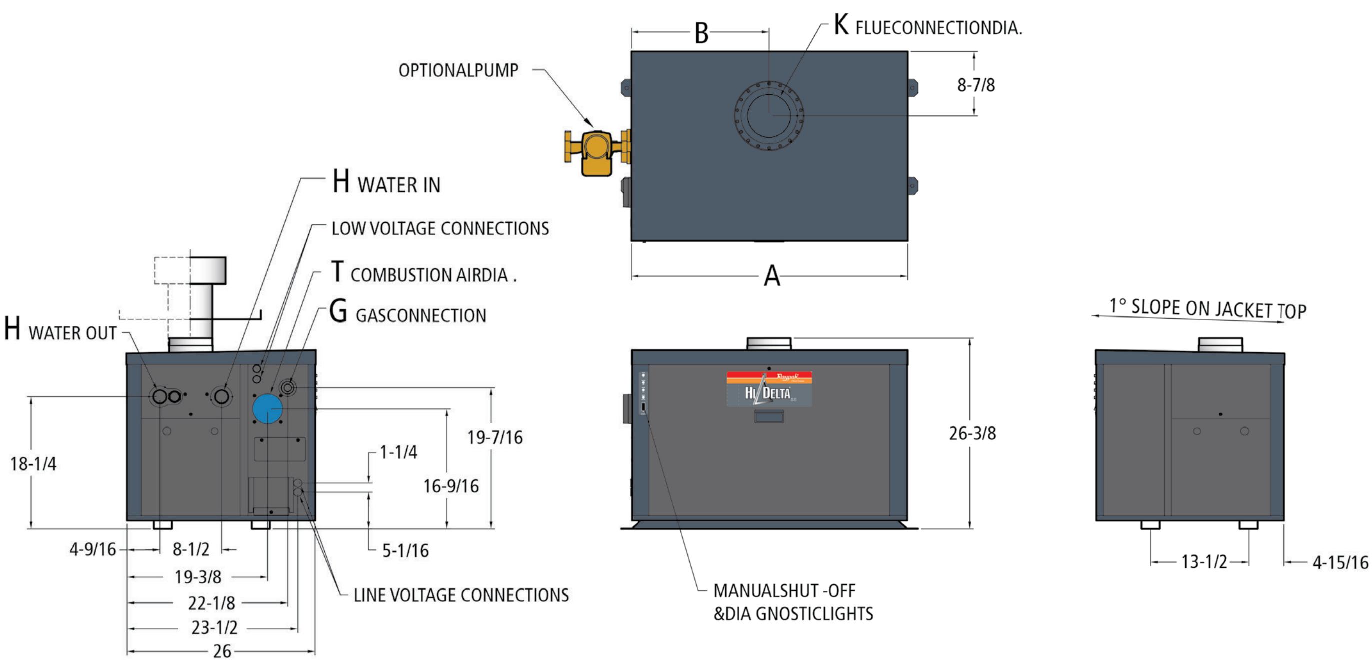
- ☑ Cupronickel heat exchanger[1]
- ☑ Temperature controllers
- ☑ Cold Water Protection
- ☑ Low water cut-off
- ☑ Fixed speed pump
- ☑ Bronze headers

[1]Water heater (WH) models only.

Hi Delta SS - Type H & WH
Models 101R - 401

Model	MBTUH Input	MBTUH Output	AFUE (%)	Dimensions (in.)				
				A Width	G (NPT)	H (NPT)	K Flue Ø	T Ø
HD101	100	84	85	18-9/16	3/4	1-1/2	4	4
HD151	150	126	85	21-7/8	3/4	1-1/2	4	4
HD201	199	167	85	25-1/16	3/4	1-1/2	5	4
HD251	250	210	85	28-5/16	3/4	1-1/2	5	4
HD301	299	251	85	31-9/16	3/4	1-1/2	5	4
HD401	399	335	84*	38-1/16	3/4	1-1/2	6	4

*Thermal efficiency



Learn more about **Hi Delta SS boilers** at Raypak.com

Learn more about **Hi Delta SS water heaters** at Raypak.com

Holland Heater Information

https://www.hollandheater.nl/en/agricultural/gas-heaters/hhb-series/

W O R L D W I D E

Holland Heater Export B.V.
Leehove 2
2678 MC DE LIER
THE NETHERLANDS

December 15, 2020

Re: Holland Heater Performance

To whom it may concern,

This letter confirms the guaranteed performance of the Holland Heater, model HHB120 at Plantel Nurseries in Santa Maria, CA.

Provided that the heaters are supplied with the correct gas pressure the heater will have the maximal emission levels:

CO: 1 PPM
NOX : 2,4 PPM
NO2 : 0,24 PPM
O2 : 20%
CO2: 0.50 %

Please let us know if you have any questions about the heater.

Sincerely,

Jan van Dijk

Jan van Dijk
President
Holland Heater Export BV.
+31-174-516741
VAT Nr: NL008875522B01

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Appendix C

Existing and Proposed Equipment Details and Existing Westside Facility Greenhouses

Photograph 1. Germination Building

Photograph 2. germination building

Photograph 3. Greenhouses

Photograph 4. Greenhouses

Photograph 5. Greenhouses

Photograph 6. Greenhouses

Photograph 7. Greenhouses

Yard mule (diesel). 1 currently, no additional with expansion

Photograph 8. Yard Mule

Photograph 9. Mules and forklifts

Photograph 10. Greenhouse Heater