# AIR QUALITY, ENERGY, AND GREENHOUSE GAS IMPACT REPORT

**TUSTIN LEGACY SPECIFIC PLAN AMENDMENT PROJECT**

**CITY OF TUSTIN, CALIFORNIA**

LSA

June 2024

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**CITY OF TUSTIN, CALIFORNIA**

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| °C | degrees Celsius |
| °F | degrees Fahrenheit |
| $\mu g/m^3$ | micrograms per cubic meter |
| AAQS | ambient air quality standards |
| AB | Assembly Bill |
| ADT | average daily trips |
| APN | Assessor's Parcel Number |
| AQMP | Air Quality Management Plan |
| Basin | South Coast Air Basin |
| BTU | British thermal units |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CAFE | Corporate Average Fuel Economy |
| CalEEMod | California Emissions Estimator Model |
| CalEPA | California Environmental Protection Agency |
| CALGreen Code | California Green Building Standards Code |
| CARB | California Air Resources Board |
| CAT | Climate Action Team |
| CBC | California Building Code |
| CBSC | California Building Standards Commission |
| CCAA | California Clean Air Act |
| CCR | California Code of Regulations |

| | |
|---|---|
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| $CH_4$ | methane |
| City | City of Tustin |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| $CO_2e$ | carbon dioxide equivalent |
| County | County of Orange |
| CPUC | California Public Utilities Commission |
| DPM | diesel particulate matter |
| du/ac | dwelling units per acre |
| EIA | Energy Information Administration |
| EIR | Environmental Impact Report |
| EMFAC | California Emissions Factor Model |
| EO | Executive Order |
| GHG | greenhouse gas |
| GPA | General Plan Amendment |
| GWh | gigawatt-hour |
| GWP | global warming potential |
| $H_2S$ | hydrogen sulfide |
| HE | Housing Element |
| HFCs | hydrofluorocarbons |
| I-5 | Interstate 5 |
| IPCC | Intergovernmental Panel on Climate Change |

| | |
|---|---|
| kWh | kilowatt-hour |
| lbs/day | pounds per day |
| LCFS | Low Carbon Fuel Standard |
| LST | Local Significance Threshold |
| $mg/m^3$ | milligrams per cubic meter |
| MMT | million metric tons |
| MMT $CO_2e$ | million metric tons of carbon dioxide equivalent |
| Modified Project | Specific Plan Amendment |
| mpg | miles per gallon |
| mph | miles per hour |
| MPO | Metropolitan Planning Organization |
| MT | metric tons |
| MT $CO_2e$ | metric tons of carbon dioxide equivalent |
| MT $CO_2e$/yr | metric tons of carbon dioxide equivalent per year |
| MT $CO_2e$/yr/SP | metric tons of carbon dioxide equivalent per year per service population |
| MW | megawatt |
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NHTSA | National Highway Traffic Safety Administration |
| NO | nitric oxide |
| $NO_2$ | nitrogen dioxide |
| $NO_X$ | nitrogen oxides |
| $O_3$ | ozone (or smog) |

| | |
|---|---|
| OPR | Governor's Office of Planning and Research |
| PA | Planning Area |
| PFCs | perfluorocarbons |
| PM | particulate matter |
| $PM_{2.5}$ | particulate matter less than 2.5 microns in size |
| $PM_{10}$ | particulate matter less than 10 microns in size |
| ppb | parts per billion |
| ppm | parts per million |
| PRC | Public Resources Code |
| project | Tustin Legacy Specific Plan Project |
| RCP | Regional Comprehensive Plan |
| RHNA | Regional Housing Needs Allocation |
| ROCs | reactive organic compounds |
| ROGs | reactive organic gases |
| RPS | Renewables Portfolio Standard |
| RTIP | Regional Transportation Improvement Program |
| RTP | Regional Transportation Plan |
| RTP/SCS | Regional Transportation Plan/Sustainable Communities Strategy |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| SCE | Southern California Edison |
| SCS | Sustainable Communities Strategy |
| $SF_6$ | sulfur hexafluoride |
| SLA | Surplus Land Act |

| | |
|---|---|
| $SO_2$ | sulfur dioxide |
| $SO_X$ | sulfur oxides |
| SoCalGas | Southern California Gas Company |
| sq ft | square foot/feet |
| sq mi | square mile |
| SR-55 | State Route 55 |
| SR-261 | State Route 261 |
| TAC | toxic air contaminant |
| TLSP | Tustin Legacy Specific Plan |
| UNFCCC | United Nations Framework Convention on Climate Change |
| USDOT | United States Department of Transportation |
| USEPA | United States Environmental Protection Agency |
| VMT | vehicle miles traveled |
| VOCs | volatile organic compounds |
| ZEV | zero-emission vehicle |
| ZNE | zero net energy |

# INTRODUCTION

This Air Quality, Energy, and Greenhouse Gas (GHG) Impact Report has been prepared to evaluate the potential air quality, energy, and GHG emissions impacts associated with the Tustin Legacy Specific Plan Amendment Project (proposed project or Modified Project) in the City of Tustin (City), County of Orange (County), California. This report follows the guidelines identified by the South Coast Air Quality Management District (SCAQMD) in its *California Environmental Quality Act (CEQA) Air Quality Handbook*,[1] and associated updates. In keeping with these guidelines, this analysis describes existing air quality, including air quality and GHG emissions generated from project-related sources, regional air pollution, and global climate change. In addition, this analysis discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

## PROJECT LOCATION

The City of Tustin is located in the central portion of Orange County and is surrounded by the cities of Irvine to the south; Santa Ana to the west; Orange and unincorporated Orange County to the north; and unincorporated Orange County to the east. Major freeways and highways within or bordering the City of Tustin are the Interstate 5 (I-5) freeway through the center, State Route 55 (SR-55) to the west, and State Route 261 (SR-261) to the east. The project location is shown in Figure 1.

The Tustin Legacy Specific Plan (TLSP) area encompasses approximately 1,606 acres which includes 1,511 acres in the southern Tustin and 95 acres in the northeastern Irvine. The TLSP area is generally bound by Red Hill Avenue to the west, Edinger Avenue to the north, Harvard Avenue to the east, and Barranca Parkway to the south. The local vicinity and the boundary of the TLSP area are shown in Figure 2.

The project area consists of three properties spread across two geographically defined areas, referred to as Neighborhoods in the TLSP: Neighborhood D and Neighborhood G.

- The portions of Neighborhood D that are identified within the Housing Element (HE) Sites Inventory include 84.73 acres of the total 190 acres of Neighborhood D North and 124 acres of Neighborhood D South. Parcels identified as housing sites within Neighborhood D North (HE Site 1A) included 39.87 acres, and D South (HE Site 1B) included at 44.86 acres. Neighborhood D North is generally bound by Valencia Avenue to the north, Tustin Ranch Road to the east, Warner Avenue to the south, and Armstrong Avenue to the west. Neighborhood D South is generally bound by Warner Avenue to the north, Tustin Ranch Road to the east, Barranca Parkway to the south, and Armstrong Avenue to the west.

- Neighborhood G is in the northeastern portion of the TLSP site, and the housing element inventory allocates approximately 50 acres of the 271 total acres as being available for

[1] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed April 2024).

residential development. Neighborhood G is generally bound by Edinger Avenue to the north, Jamboree Road to the east, Warner Avenue to the south, and Tustin Ranch Road to the west.

The TLSP Land Use Plan divides the TLSP area into a collection of neighborhoods, each with their own characteristics and set of functions to perform within the TLSP area. Housing Element Sites 1A and 1B are located in "Neighborhood D," and Site 2 is located in "Neighborhood G".

The TLSP area, including the Modified Project area, have a General Plan land use designation of Tustin Legacy Specific Plan (TLSP) and a zoning designation of SP1-Tustin Legacy.

The Land Use Plan for TLSP has been further divided into 13 separate Planning Areas (PA) and numbered sub-planning areas. Neighborhood D includes PAs 8, 13, and 14 and Neighborhood G includes PA 15. The Land Use Plan for TLSP contains ten land use designations, including an overlay designation: Mixed-Use Transit, Mixed-Use Urban, Commercial, Commercial/Business, Residential, Park, Tustin Legacy Park Overlay, Transitional/Emergency Housing, Education Village, and Public Street Right-of-Way. The land use designations have been assigned a PA number. PAs are the basis for the use and development regulations found within the TLSP.

## PROJECT DESCRIPTION

The proposed project consists of a Specific Plan Amendment to amend Neighborhoods D South, D North, and G to increase the allowed residential capacity, as shown in Table A, to be consistent with the 2021–2029 Housing Element Update. Changes between the Modified Project (the proposed Specific Plan Amendment) and the Approved Project (the current approved TLSP) are evaluated in this analysis.

The proposed upzoning would add a total of 855 additional residential units to the existing residential capacity of the Modified Project area. The Housing Element Update also included 1,356 buffer units that are intended to make up for any potential units that are not developed on the other Housing Element Update sites. Therefore, a total of 2,211 units have been incorporated into the residential caps of the TLSP Neighborhoods D North, D South, and G. The provision for the density bonus pursuant to the Surplus Land Act (SLA) is appliable to the TLSP area, and therefore, the application of the density bonus has been analyzed through the addition of 2,759 units. Together, the Housing Element Update Regional Housing Needs Allocation (RHNA) units, buffer units, and density bonus units total an additional 4,970 units.

### Proposed Specific Plan Amendment

The proposed Specific Plan Amendment (or Modified Project) proposes increased allowed capacity for the future development of residential units within the Modified Project areas, Neighborhood D South, Neighborhood D North, and Neighborhood G, consistent with the approved 2021–2029 Housing Element of the City of Tustin General Plan. Proposed additional capacity would include the housing units allocated the TLSP to accommodate the City's RHNA, buffer units included as part of the Housing Element, and density bonus units available to developers under the SLA. Density bonus is applicable to all undeveloped residential land uses within the TLSP area, including the newly added 6$^{th}$ cycle RHNA units, as well as the remaining buildout capacity of the existing residential land uses within the TLSP area.

### *Neighborhood D North/Planning Area 8*

Neighborhood D (PAs 8, 13, and 14) within the TLSP is currently designated as Mixed-Use Urban, which is envisioned as an active living, working, shopping, and recreational environment. According to the approved TLSP, Neighborhood D North is not designated to accommodate any residential.

The 39.87-acre portion of Neighborhood D North identified for increased housing capacity within the 2021–2029 Housing Element include APNs 430-381-38, -41, -91, and -95. The Modified Project would add 555 dwelling units to Neighborhood D buildout capacity, consistent with the adopted Housing Element.

Housing units added to the TLSP area to accommodate the City's RHNA are considered shortfall sites subject to the requirements of Government Code Section 65583.2(h). In order to comply with the requirements of Government Code Section 65583.2(h), the City has identified a portion of Neighborhood D North (APNs 430-381-41 and 430-381-91) to be zoned as exclusively residential land use. These parcels would accommodate a minimum of 203 units. Therefore, the project would include, as part of the Specific Plan Amendment, the designation of APNs 430-381-41 and 430-381-91 as exclusively residential land use. The remaining parcels, 430-381-38 and -95, would be anticipated to accommodate 352 dwelling units (555 total units).

In addition to the 555 units required for the City to meet their RHNA shortfall, 1,356 buffer units were allocated to Neighborhood D North. Buffer units were incorporated as contingency in the event that the City becomes unable to meet their RHNA during the 2021–2029 Housing Element period. These units have been incorporated into the new proposed housing capacity under the TLSP Specific Plan Amendment, providing a total residential maximum buildout of 1,911 units (555 units + 1,356 buffer units).

### *Neighborhood D South/Planning Areas 13 and 14*

Neighborhood D South (PAs 13 and14) is currently designated as Mixed-Use Urban, which is envisioned as an active living, working, shopping, and recreational environment. According to the approved TLSP, Neighborhood D South is designated to accommodate 1,672 residential units.

The portion of Neighborhood D South identified for increased housing capacity within the 2021–2029 Housing Element include South Brookfield Tract 18197, Lot 2 and Lots 5–13. The 2021–2029 Housing Element added 100 units to Neighborhood D South, increasing total residential capacity of Neighborhood D South from 1,672 to 1,772.

### *Neighborhood G/Planning Area 15*

Neighborhood G (PA 15) within the TLSP is currently designated as Mixed-Use Urban, which is envisioned as an active living, working, shopping, and recreational environment, mixed-use transit-oriented development and residential uses. A maximum of 2,814 dwelling units and 1,095,200 square feet (sq ft) are the identified maximum capacities in Neighborhood G. The Mixed-Use Transit designation provides flexibility for residential, office, commercial retail, and commercial service uses in a vertical or horizontal configuration. This Planning Area also contains a portion of the Tustin Legacy Park Overlay.

The portion of Neighborhood G identified for increased housing capacity within the 2021–2029 Housing Element includes APNs 430-381-27 to -29, 430-391-03, -27, -28, -56, and -59 to -64. The Modified Project would add 200 dwelling units to the Neighborhood G buildout, increasing the capacity from 2,814 to 3,014 residential units.

### *Nonresidential Uses of TLSP*

In addition to the proposed changes above, the TLSP would be amended to reflect updates to nonresidential development by land use type. These changes have been made due to a series of factors, including entitled/built projects, forecasted market conditions, and anticipated future development. Overall, the changes amongst the various nonresidential land uses would result in a balanced condition (see Table A below).

## Specific Plan Buildout

Individual sites, or neighborhoods, within the TLSP do not have minimum or maximum densities; however, there is a development cap on the number of housing units in each of the neighborhoods.

The current 2017 TLSP (or Approved Project) identifies a total capacity of 6,813 residential units and 9,532,419 sq ft of nonresidential capacity within the TLSP area. The proposed TLSP identifies a total capacity of 9,024 residential units and 9,532,419 sq ft of nonresidential capacity within the TLSP area (see Table A). More specifically, the Approved Project identifies a total of 4,486 residential units and 3,248,890 sq ft of nonresidential capacity within the Modified Project area. The proposed Modified Project identifies a total capacity of 6,697 residential units and 3,249,500 sq ft of nonresidential capacity within the TLSP area.

While the proposed Specific Plan Amendment would increase the residential capacity by 2,211 units, the provision for State density bonus is appliable to the Modified Project site. The proposed allowed residential capacity increase of 2,211 and the potential of 2,759 density bonus units, for a total of 4,970 units, will be analyzed as part of the project.

Changes in residential and nonresidential development capacity between the Approved Project and proposed Modified Project are captured in Table A. Although no development is proposed as part of the project, for analysis purposes, the project buildout year is assumed to be 2045. Additionally, this analysis assumes that project construction activities could occur anytime beginning January 2025. Construction activities would include site preparation, grading, building construction, paving, and architectural coatings.

Buildout of the Approved Project would generate approximately 100,611 average daily trips (ADT)[2] while buildout of the Modified Project would generate approximately 116,289 ADT, resulting in an increase in 15,678 ADT. Future development would be constructed in compliance with the version of the California Title 24 Energy Efficiency Standards (Title 24 energy standards) and the Title 24 California Green Building Standards Code (CALGreen Code) in effect at the time building permit applications are submitted.

2 EPD Solutions, Inc. 2024. *Tustin Legacy Specific Plan Trip Generation*.

## Table A: Comparison of Approved Project to Modified Project

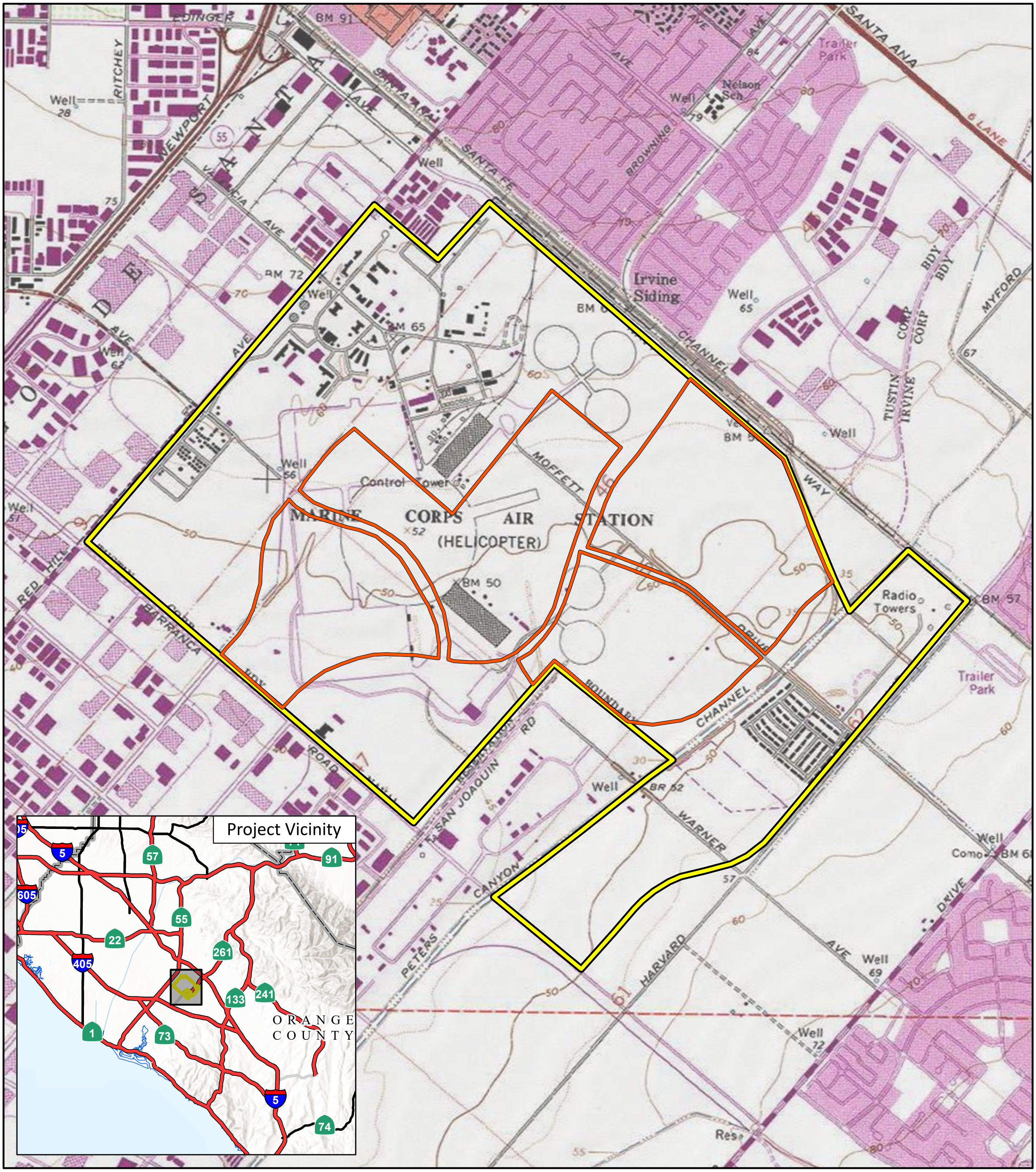
| Land Use | Unit | Neighborhood D South (PAs 13 & 14) | | Neighborhood D North (PA 8) | | Neighborhood G (PA 15) | | Approved Total | Proposed Total | Modified Project – Approved Project |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Approved Project[1] | Modified Project[2] | Approved Project[1] | Modified Project[2, 3] | Approved Project[1] | Modified Project[3] | | | |
| Single Family Housing | DU | - | 117 | - | - | - | 692 | - | 809 | 809 |
| Multi-Family Housing | DU | 1,672 | 1,655 | - | 1,911 | 2,814 | 2,322 | 4,486 | 5,888 | 1,402 |
| Hotel | SF | 165,600 | 36,000 | - | 36,000 | - | - | 165,600 | 72,000 | (93,600) |
| Neighborhood Commercial | SF | - | - | - | - | 95,200 | - | 95,200 | - | (95,200) |
| Community Commercial | SF | 20,400 | 10,000 | 1,547,690 | 1,038,690 | - | 36,500 | 1,568,090 | 1,085,190 | (482,900) |
| Office | SF | 420,000 | 443,000 | - | 473,000 | - | 704,700 | 420,000 | 1,620,700 | 1,200,700 |
| Continuing Care – Senior Housing | SF | - | 117,000 | - | - | 1,000,000 | 354,000 | 1,000,000 | 471,000 | (529,000) |
| | DU | - | 521 | - | - | 404 | 270 | 404 | 791 | 387 |
| High School | STU | - | - | 1,784 | 1,784 | - | - | 1,784 | 1,784 | - |
| Park – Legacy Park (Passive) | AC | 6 | 6 | 54 | 54 | 31 | 31 | 91.0 | 91.0 | - |
| Park – Sports Park (Active) | AC | - | - | 45 | 45 | - | - | 45.0 | 45.0 | - |
| **Total Residential** | **DU** | **1,672** | **1,772** | **-** | **1,911** | **2,814** | **3,014** | **4,486** | **6,697** | **2,211** |
| **Total Nonresidential** | **SF** | **606,000** | **606,000** | **1,547,690** | **1,547,690** | **1,095,200** | **1,095,200** | **3,248,890** | **3,248,890** | **-** |
| *Density Bonus* | | - | 655 | - | 956 | - | 1,148 | - | 2,759 | 2,759 |
| **Potential Residential Buildout w/ Density Bonus** | | **1,672** | **2,427** | **-** | **2,867** | **2,814** | **4,162** | **4,486** | **9,456** | **4,970** |

Source: EPD Solutions, Inc. 2024.
Note :
[1] Approved Project refers to the 2017 TLSP.
[2] Modified Project refers to the proposed TSLP Amendment.
[3] Neighborhood D North includes 1,356 buffer units.
AC = acre

## Table A: Comparison of Approved Project to Modified Project

| Land Use | Unit | Neighborhood D South (PAs 13 & 14) | | Neighborhood D North (PA 8) | | Neighborhood G (PA 15) | | Approved Total | Proposed Total | Modified Project – Approved Project |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Approved Project[1] | Modified Project[2] | Approved Project[1] | Modified Project[2, 3] | Approved Project[1] | Modified Project[3] | | | |

DU = dwelling unit
PA = Planning Area
SF = square feet
STU = students
TLSP = Tustin Legacy Specific Plan




LSA

TLSP Area

Modified Project Site

FIGURE 1

0 1000 2000
FEET

SOURCE: USGS 7.5' Quad - *Tustin (1981)*, CA

*Tustin Legacy Specific Plan Amendment*

Project Location

J:\ESL2201.74\GIS\Pro\Tustin Legacy Specific Plan Amendment\Tustin Legacy Specific Plan Amendment.aprx (6/21/2024)


TLSP Area

Modified Project Site

FIGURE 2

N

0 930 1860

FEET

SOURCE: Google Maps (2023)

*Tustin Legacy Specific Plan Amendment*

Project Site

J:\ESL2201.74\GIS\Pro\Tustin Legacy Specific Plan Amendment\Tustin Legacy Specific Plan Amendment.aprx (6/21/2024)

## EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses which are sensitive to air quality. Impacts on sensitive receptors are of particular concern because they are the population most vulnerable to the effects of air pollution. The TLSP area is surrounded primarily by residential, commercial, and office uses. The areas adjacent to the TLSP area include the following uses:

- **Northwest:** Business commercial, warehousing, and office uses opposite of Red Hill Avenue;
- **Northeast:** Metrolink train tracks/station Como Channel (stormwater), Tustin Meadows & Peppertree Residential Communities, warehousing and office uses opposite Edinger Avenue;
- **Southwest:** Restaurants, retail, office, and storage uses opposite Barranca Parkway;
- **Southeast:** Tustin Field Residential Community, OC Succulents Nursery, Creekside Education Center, parkland, and Columbus Grove Residential Community;
- **South:** Residential, warehousing, and commercial uses.

The closest sensitive receptor to the TLSP area is The Bowery mixed-use development located approximately 140 feet west of the TLSP boundary. Additionally, residences could be within 50 feet of the perimeter of the Modified Project area.

# BACKGROUND

This section provides current background information on air pollutants and their health effects. It also provides current regulatory background information, including information from the California Air Resources Board's (CARB) Air Quality and Land Use Handbook[3] (CARB Handbook); a description of the general health risks of toxics, and the significance criteria for project evaluation. In addition, this section provides background information on energy usage in the project area and provides regulatory background information, including federal, State, and local energy regulations.

## AIR POLLUTANTS AND HEALTH EFFECTS

Both State and federal governments have established health-based ambient air quality standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS], respectively) for six criteria air pollutants:[4] carbon monoxide (CO), ozone ($O_3$), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no known direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides ($NO_X$) and volatile organic compounds (VOCs).

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous outdoor work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses

3 California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

4 Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

### Ozone

Rather than being directly emitted, ozone ($O_3$ or smog) is formed by photochemical reactions between $NO_X$ and VOCs. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.

### Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

### Particulate Matter

Particulate matter (PM) is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are 10 microns or less in diameter, or $PM_{10}$. Fine, suspended particulate matter with an aerodynamic diameter of 2.5 microns or less, or $PM_{2.5}$, is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of $PM_{10}$ and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as byproducts of fuel combustion; through abrasion, such as tire or brake lining wear; or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

### Nitrogen Dioxide

Nitrogen dioxide ($NO_2$) is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of $NO_2$. Aside from its contribution to ozone formation, $NO_2$ also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. $NO_2$ may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. $NO_2$ decreases lung function and may reduce resistance to infection.

### Sulfur Dioxide

Sulfur dioxide ($SO_2$) is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous $SO_2$ levels in the region. $SO_2$ irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

### Lead

Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead (Pb) released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California. On October 15, 2008, the United States Environmental Protection Agency (USEPA) strengthened the NAAQS for lead by lowering it from 1.5 to 0.15 micrograms per cubic meter ($\mu g/m^3$). The USEPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas, resulting in an increase in 76 monitors nationally.

### Volatile Organic Compounds

Volatile organic compounds (VOCs) (also known as reactive organic gases [ROGs] and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

### Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the USEPA and the CARB. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

TACs do not have ambient air quality standards (AAQS), but are regulated by the USEPA, the CARB, and the SCAQMD. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[5] High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter (DPM) is emitted from mobile sources—primarily “off-road” sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as “on-road” sources such as trucks and buses traveling on freeways and local roadways.

5 CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

Although not specifically monitored, recent studies indicate that exposure to DPM may contribute significantly to a cancer risk (a risk of approximately 500 to 700 in 1,000,000) that is greater than all other measured TACs combined.[6] The technology for reducing DPM emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. The CARB anticipated that by 2020, average statewide DPM concentrations will decrease by 85 percent from levels in 2000 with full implementation of the CARB's Diesel Risk Reduction Plan,[7] meaning that the statewide health risk from DPM is expected to decrease from 540 cancer cases in 1,000,000 to 21.5 cancer cases in 1,000,000. The CARB 2000 Diesel Risk Reduction Plan is still the most recent version and has not been updated.

Table B summarizes the sources and health effects of air pollutants discussed in this section. Table C presents a summary of CAAQS and NAAQS.

## Table B: Sources and Health Effects of Air Pollutants

| Pollutants | Sources | Primary Effects |
|---|---|---|
| Carbon Monoxide (CO) | • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust<br>• Natural events, such as decomposition of organic matter | • Reduced tolerance for exercise<br>• Impairment of mental function<br>• Impairment of fetal development<br>• Death at high levels of exposure<br>• Aggravation of some heart diseases (angina) |
| Nitrogen Dioxide ($NO_2$) | • Motor vehicle exhaust<br>• High temperature stationary combustion<br>• Atmospheric reactions | • Aggravation of respiratory illness<br>• Reduced visibility<br>• Reduced plant growth<br>• Formation of acid rain |
| Ozone ($O_3$) | • Atmospheric reaction of organic gases with nitrogen oxides in sunlight | • Aggravation of respiratory and cardiovascular diseases<br>• Irritation of eyes<br>• Impairment of cardiopulmonary function<br>• Plant leaf injury |
| Lead (Pb) | • Contaminated soil | • Impairment of blood functions and nerve construction<br>• Behavioral and hearing problems in children |
| Suspended Particulate Matter ($PM_{2.5}$ and $PM_{10}$) | • Stationary combustion of solid fuels<br>• Construction activities<br>• Industrial processes<br>• Atmospheric chemical reactions | • Reduced lung function<br>• Aggravation of the effects of gaseous pollutants<br>• Aggravation of respiratory and cardiorespiratory diseases<br>• Increased cough and chest discomfort<br>• Soiling<br>• Reduced visibility |
| Sulfur Dioxide ($SO_2$) | • Combustion of sulfur-containing fossil fuels<br>• Smelting of sulfur-bearing metal ores Industrial processes | • Aggravation of respiratory diseases (asthma, emphysema)<br>• Reduced lung function<br>• Irritation of eyes<br>• Reduced visibility<br>• Plant injury<br>• Deterioration of metals, textiles, leather, finishes, coatings, etc. |

Source: California Air Resources Board (2015).

[6] CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

[7] Ibid.

## Table C: Federal and State Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards[a] | | Federal Standards[b] | | |
|---|---|---|---|---|---|---|
| | | Concentration[c] | Method[d] | Primary[c,e] | Secondary[c,f] | Method[g] |
| **Ozone ($O_3$)[h]** | 1-Hour | 0.09 ppm (180 $\mu g/m^3$) | Ultraviolet Photometry | – | Same as Primary Standard | Ultraviolet Photometry |
| | 8-Hour | 0.07 ppm (137 $\mu g/m^3$) | | 0.070 ppm (137 $\mu g/m^3$) | | |
| **Respirable Particulate Matter ($PM_{10}$)[i]** | 24-Hour | 50 $\mu g/m^3$ | Gravimetric or Beta Attenuation | 150 $\mu g/m^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 $\mu g/m^3$ | | – | | |
| **Fine Particulate Matter ($PM_{2.5}$)[i]** | 24-Hour | - | | 35 $\mu g/m^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 12 $\mu g/m^3$ | Gravimetric or Beta Attenuation | 9.0 $\mu g/m^3$ [o] | | |
| **Carbon Monoxide (CO)** | 8-Hour | 9.0 ppm (10 $mg/m^3$) | Non-Dispersive Infrared Photometry (NDIR) | 9 ppm (10 $mg/m^3$) | – | Non-Dispersive Infrared Photometry (NDIR) |
| | 1-Hour | 20 ppm (23 $mg/m^3$) | | 35 ppm (40 $mg/m^3$) | | |
| | 8-Hour (Lake Tahoe) | 6 ppm (7 $mg/m^3$) | | – | – | |
| **Nitrogen Dioxide ($NO_2$)[j]** | Annual Arithmetic Mean | 0.03 ppm (57 $\mu g/m^3$) | Gas Phase Chemi-luminescence | 53 ppb (100 $\mu g/m^3$) | Same as Primary Standard | Gas Phase Chemi-luminescence |
| | 1-Hour | 0.18 ppm (339 $\mu g/m^3$) | | 100 ppb (188 $\mu g/m^3$) | - | |
| **Lead (Pb)[l,m]** | 30-Day Average | 1.5 $\mu g/m^3$ | Atomic Absorption | – | – | High-Volume Sampler and Atomic Absorption |
| | Calendar Quarter | – | | 1.5 $\mu g/m^3$ (for certain areas)[l] | Same as Primary Standard | |
| | Rolling 3-Month Average[i] | – | | 0.15 $\mu g/m^3$ | | |
| **Sulfur Dioxide ($SO_2$)[k]** | 24-Hour | 0.04 ppm (105 $\mu g/m^3$) | Ultraviolet Fluorescence | 0.14 ppm (for certain areas) | – | Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method) |
| | 3-Hour | – | | – | 0.5 ppm (1300 $\mu g/m^3$) | |
| | 1-Hour | 0.25 ppm (655 $\mu g/m^3$) | | 75 ppb (196 $\mu g/m^3$)[k] | – | |
| | Annual Arithmetic Mean | – | | 0.030 ppm (for certain areas)[k] | – | |
| **Visibility-Reducing Particles[l]** | 8-Hour | See footnote n | Beta Attenuation and Transmittance through Filter Tape. | No Federal Standards | | |
| **Sulfates** | 24-Hour | 25 $\mu g/m^3$ | Ion Chromatography | | | |
| **Hydrogen Sulfide** | 1-Hour | 0.03 ppm (42 $\mu g/m^3$) | Ultraviolet Fluorescence | | | |
| **Vinyl Chloride[j]** | 24-Hour | 0.01 ppm (26 $\mu g/m^3$) | Gas Chromatography | | | |

Source: California Air Resources Board (2016) (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

*Table notes are provided on the following page.*

[a] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter ($PM_{10}$, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For $PM_{10}$, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact USEPA for further clarification and current national policies.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[e] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[f] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[g] Reference method as described by the USEPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the USEPA.

[h] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour $PM_{10}$ standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[k] On June 2, 2010, a new 1-hour $SO_2$ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 $SO_2$ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[l] The CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[m] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[n] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

[o] On February 7, 2024, the federal annual $PM_{2.5}$ standard was revised from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$.

°C = degrees Celsius
$\mu g/m^3$ = micrograms per cubic meter
CARB = California Air Resources Board
$mg/m^3$ = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

## ENERGY

### Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2022, California's electricity was generated primarily by natural gas (47.5 percent), renewable sources (52.2 percent), large hydroelectric (7.2 percent), nuclear (8.7 percent), coal (<1.0 percent), and other unspecified sources. Total electric generation in California in 2022 was 287,220 gigawatt-hours (GWh), up 3.4 percent from the 2021 total generation of 277,764 GWh.[8]

The Modified Project area is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[9] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,604 GWh for the residential sector and 54,266 GWh for the non-residential sector). Total electricity consumption in Orange County in 2022 was 20,244 GWh (20,243,721,856 kilowatt hours [kWh]), including 7,830 GWh for the residential sector and 12,414 GWh for the non-residential sector.[10]

### Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

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8 California Energy Commission (CEC). 2021a. *2020 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation (accessed April 2024).

9 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed April 2024).

10 CEC. 2023b. Electricity Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed April 2024).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[11]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the Modified Project area. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[12] According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 5,026 million therms (2,230 million therms for the residential sector). Total natural gas consumption in Orange County in 2021 was 573 million therms (572,454,744 therms), including 352 million therms for the residential sector and 221 million therms for the non-residential sector.[13]

### Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2021.[14] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This act, which originally mandated a national fuel economy standard of 35 mpg by year 2020[15], applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, in 2021, total gasoline consumption in California was 289,918 thousand barrels

11 CEC. 2021b. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed April 2024).

12 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed April 2024).

13 CEC. 2023c. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed April 2024).

14 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed April 2024).

15 U.S. Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed April 2024).

(12.2 billion gallons) or 1,464.7 trillion British Thermal Units (BTU).[16] Of the total gasoline consumption, 273,289 thousand barrels (11.5 billion gallons) or 1,380.7 trillion BTU were consumed for transportation.[17] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 1.2 billion gallons of gasoline and approximately 157.1 million gallons of diesel will be consumed from vehicle trips in Orange County in 2024.

## GREENHOUSE GASES

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2° Celsius (°C) or 1.1 ± 0.4° Fahrenheit (°F) in the 20$^{th}$ century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide ($CO_2$) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[18]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- $CO_2$
- Methane ($CH_4$)
- Nitrous oxide ($N_2O$)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride ($SF_6$)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as $CO_2$, methane, and $N_2O$, some gases, like HFCs, PFCs, and $SF_6$ are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is

[16] U.S. Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed April 2024).

[17] Ibid.

[18] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of $CO_2$ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "$CO_2$ equivalents" ($CO_2e$). Table D shows the GWP for each type of GHG. For example, $SF_6$ is 23,900 times more potent at contributing to global warming than $CO_2$.

## Table D: Global Warming Potential of Greenhouse Gases

| Gas | Atmospheric Lifetime (Years) | Global Warming Potential (100-Year Time Horizon) |
|---|---|---|
| Carbon Dioxide | 50-200 | 1 |
| Methane | 12 | 25 |
| Nitrous Oxide | 114 | 310 |
| HFC-23 | 270 | 11,700 |
| HFC-134a | 14 | 140 |
| HFC-152a | 1.4 | 140 |
| PFC: Tetrafluoromethane ($CF_4$) | 50,000 | 6,500 |
| PFC: Hexafluoromethane ($C_2F_6$) | 10,000 | 9,200 |
| Sulfur Hexafluoride ($SF_6$) | 3,200 | 23,900 |

Source: *Second Update to the Climate Change Scoping Plan: Building on the Framework* (CARB 2017). Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents (accessed April 2024).
CARB = California Air Resources Board
HFC = hydrofluorocarbons
PFC = perfluorocarbons

The following discussion summarizes the characteristics of the six GHGs and black carbon.

### Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, as carbon dioxide ($CO_2$). Natural sources of $CO_2$ include the respiration (breathing) of humans, animals, and plants, volcanic out gassing, decomposition of organic matter and evaporation from the oceans. Human caused sources of $CO_2$ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of $CO_2$ each year, far outweighing the 7 billion tons of manmade emissions of $CO_2$ each year. Nevertheless, natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of manmade $CO_2$, and consequently, the gas is building up in the atmosphere.

In 2021, total annual $CO_2$ accounted for approximately 81.2 percent of California's overall GHG emissions.[19] Transportation is the single largest source of $CO_2$ in California, which is primarily comprised of on-road travel. Electricity production, industrial and residential sources also make important contributions to $CO_2$ emissions in California.

### Methane

Methane ($CH_4$) is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human-generated $CH_4$ emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of $CH_4$ in California. Total annual emissions of $CH_4$ accounted for approximately 9.8 percent of GHG emissions in California in 2021.[20]

### Nitrous Oxide

Nitrous oxide ($N_2O$) is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit $N_2O$, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated $N_2O$ emissions in California. Nitrous oxide emissions accounted for approximately 3.4 percent of GHG emissions in California in 2021.[21]

### Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[22] PFCs and $SF_6$ are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and $SF_6$ accounted for about 5.6 percent of GHG emissions in California in 2021.[23]

### Black Carbon

Black carbon is the most strongly light-absorbing component of PM formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of $PM_{2.5}$ and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in

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19 CARB. 2022. *GHGs Descriptions & Sources in California*. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed April 2024).

20 Ibid.

21 Ibid.

22 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

23 CARB. 2022. op. cit.

the atmosphere, black carbon can absorb one million times more energy than $CO_2$.[24] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global warming.

Most U.S. emissions of black carbon come from mobile sources (52 percent), particularly from diesel-fueled vehicles. The other major source of black carbon is open biomass burning, including wildfires, although residential heating and industry also contribute. The CARB estimates that the annual black carbon emissions in California will be reduced approximately 50 percent below 2013 levels by 2030.[25]

[24] U.S. Environmental Protection Agency (USEPA). 2015. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed April 2024).

[25] CARB. 2017b. *Short-Lived Climate Pollutant Reduction Strategy.* March. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf (accessed April 2024).

# REGULATORY SETTING

## AIR QUALITY REGULATIONS

The USEPA and the CARB regulate direct emissions from motor vehicles. The SCAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

### Federal Regulations

*Federal Clean Air Act*

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The Federal Clean Air Act Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the Clean Air Act, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

### State Regulations

*California Clean Air Act*

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain CAAQS for CO, $O_3$, $SO_2$, and $NO_2$ by the earliest practical date. The California Clean Air Act provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

*California Air Resources Board*

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

**Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act.** Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

**The California Air Resources Board Handbook.** The CARB has developed an Air Quality and Land Use Handbook[26] which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land uses that can produce air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to help land use agencies determine when to further examine project sites for actual health risk associated with the location of new sensitive land uses.

## Regional Regulations

### *South Coast Air Quality Management District*

The SCAQMD has jurisdiction over most air quality matters in the South Coast Air Basin (Basin). This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of

[26] CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the CAA and the CCAA. The SCAQMD prepares plans to attain CAAQS and NAAQS. SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

The proposed project could be subject to the following SCAQMD rules and regulations:[27]

- **Regulation IV - Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events.
  - **Rule 402 - Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance, or annoyance to businesses, property, or the public.
  - **Rule 403 - Fugitive Dust:** This rule requires the prevention, reduction, or mitigation of fugitive dust emissions from a project site. Rule 403 restricts visible fugitive dust to a project property line, restricts the net $PM_{10}$ emissions to less than 50 $\mu g/m^3$ and restricts the tracking out of bulk materials onto public roads. Additionally, Rule 403 requires an applicant to utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, Rule 403 requires that a contingency plan be prepared if so determined by the USEPA. In addition, SCAQMD Rule 403(e), Additional Requirements for Large Operations, includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control training class in the South Coast Air Basin.
- **Regulation XI - Source Specific Standards:** Regulation XI sets emissions standards for different sources.
  - **Rule 1113 - Architectural Coatings:** This rule limits the amount of VOCs from architectural coatings and solvents, which lowers the emissions of odorous compounds.

The SCAQMD is responsible for demonstrating regional compliance with AAQS but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring

[27] SCAQMD. 2024. South Coast AQMD Rule Book. Website: https://www.aqmd.gov/home/rules-compliance/rules (accessed April 2024).

the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.[28]

The Final 2022 Air Quality Management Plan is the currently adopted AQMP. Key elements of the Final 2022 AQMP include the following:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality objectives
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the $O_3$ strategy
- Attainment of the 1-hour $O_3$ standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures)

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low $NO_X$ technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

### *Southern California Association of Governments*

SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air

[28] SCAQMD. 2022. *Final 2022 Air Quality Management Plan*. December 2.

quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024)[29] on April 4, 2024. Connect SoCal 2024 is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal 2024, would reach the GHG emissions reduction target set by CARB, including the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

## Local Regulations

### *City of Tustin General Plan*

The City of Tustin addresses air quality in the Conservation, Open Space, and Recreation Element of the City of Tustin General Plan.[30] The Conservation, Open Space, and Recreation Element contains policies that work to improve air quality and reduce particulate emissions. The following policies are applicable to the proposed project:

- **Policy 1.1:** Cooperate with the South Coast Air Quality Management District and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.

- **Policy 1.2:** Design safe and efficient vehicular access to commercial land uses from arterial streets to insure efficient vehicular ingress and egress.

[29] Southern California Association of Governments (SCAG). 2024. Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1712261565 (accessed April 2024).

[30] City of Tustin. 2017. *City of Tustin General Plan*. July.

- **Policy 1.3:** Locate multiple family developments close to commercial areas to encourage pedestrian rather than vehicular travel.
- **Policy 1.7:** Create the maximum possible opportunities for bicycles as an alternative transportation mode and recreational use.
- **Policy 2.1:** Reduce vehicle trips through incentives, regulations and/or Transportation Demand Management (TDM) programs.
- **Policy 2.2:** Reduce total vehicle miles traveled (VMT) through incentives, regulations and/or Transportation Demand Management.
- **Policy 2.6:** Encourage non-motorized transportation through the provision of bicycle and pedestrian pathways.
- **Policy 2.7:** Encourage employer rideshare and transit incentives programs by local businesses.
- **Policy 2.8:** Manage non-residential parking supply to discourage auto use, while ensuring that economic development goals will not be sacrificed.

## ENERGY REGULATORY SETTING

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs state response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

## Federal Regulations

### *Energy Policy Act of 2005*

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

### *Corporate Average Fuel Economy (CAFE) Standards*

On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

## State Regulations

### *Assembly Bill 1575, Warren-Alquist Act*

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

### *Senate Bill 1389, Energy: Planning and Forecasting*

In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023 Integrated Energy Policy Report.*[31] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

### *Renewable Portfolio Standard*

SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[32]

### *Title 24, California Building Code*

Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years, with the most recent update consisting of the 2022 CBC that became effective January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24.

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31 CEC. 2023a. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

32 California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed April 2024).

### *California Green Building Standards Code (CALGreen Code)*

In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

### *California Energy Efficiency Strategic Plan*

On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

## Regional Regulations

There are no regional regulations that apply to the proposed project.

## Local Regulations

### *City of Tustin General Plan*

The City of Tustin addresses energy in the Conservation, Open Space, and Recreation Element of the City of Tustin General Plan.[33] The Conservation, Open Space, and Recreation Element contains policies that work to reduce energy consumption. The following policies are applicable to the proposed project:

- **Policy 4.1:** Promote energy conservation in all sectors of the City including residential, commercial, and industrial.

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[33] City of Tustin. 2017. op. cit.

- **Policy 4.2:** Promote local recycling of wastes and the use of recycled materials.

## GREENHOUSE GAS REGULATORY SETTING

This section describes regulations related to GHGs at the federal, State, and local level.

### Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate $CO_2$ emissions under the CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the Clean Air Act, finding that six GHGs ($CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, $SF_6$) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

In October 2012, the USEPA and the NHTSA, on behalf of the U.S. Department of Transportation, issued final rules to further reduce GHG emissions and improve CAFE standards for light-duty vehicles for model years 2017 and beyond (77 *Federal Register* 62624). The NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon (mpg), limiting vehicle emissions to 163 grams of $CO_2$ per mile for the fleet of cars and light-duty trucks by model year 2025 (77 *Federal Register* 62630).

On March 31, 2022, the NHTSA finalized the CAFE standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

### State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

#### *Assembly Bill 1493 (2002)*

In a response to the transportation sector's significant contribution to California's $CO_2$ emissions, AB 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of CCAA Preemption was not granted by the USEPA until June 30, 2009. The CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019; however, the Biden administration restored California's waiver in 2021.

#### *Executive Order S-3-05 (2005)*

Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the executive order established California's GHG emissions reduction targets, which established the following goals:

- GHG emissions should be reduced to 2000 levels by 2010;
- GHG emissions should be reduced to 1990 levels by 2020; and
- GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

The Secretary of the California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various State agencies in order to collectively and efficiently reduce GHGs. A biannual progress report must be submitted to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and report possible mitigation and adaptation plans to address these impacts.

The Secretary of CalEPA leads this Climate Action Team (CAT) made up of representatives from State agencies as well as numerous other boards and departments. The CAT members work to coordinate statewide efforts to implement global warming emission reduction programs and the State's Climate Adaptation Strategy. The CAT is also responsible for reporting on the progress made toward meeting the statewide GHG targets that were established in the executive order and further defined under AB 32, the "Global Warming Solutions Act of 2006." The first CAT Report to the Governor and the Legislature was released in March 2006, which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the executive order. The most recent report was released in December 2020.

#### *Assembly Bill 32 (2006), California Global Warming Solutions Act*

California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of $CO_2e$. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT $CO_2e$, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT $CO_2e$ under a business-as-usual scenario (this is a reduction of 42 MMT $CO_2e$, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT $CO_2e$);
- The Low-Carbon Fuel Standard (15.0 MMT $CO_2e$);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT $CO_2e$); and
- A renewable portfolio standard for electricity production (21.3 MMT $CO_2e$).

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[34] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

Most recently, the 2022 Scoping Plan[35] was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

#### *Senate Bill 97 (2007)*

SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code [PRC], Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA.

The California Natural Resources Agency adopted the amendments to the *State CEQA Guidelines* in November 2018, which went into effect in December 2018. The amendments do not identify a

34 CARB. 2017a. *California's 2017 Climate Change Scoping Plan*. November.

35 CARB. 2021. *2022 Scoping Plan Update*. May 10. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed April 2024).

threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

### *Senate Bill 375 (2008)*

SB 375, the Sustainable Communities and Climate Protection Act, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. On September 23, 2010, the CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the Metropolitan Planning Organization (MPOs); the targets require a 6 to 15 percent reduction by 2020 and between 13 to 19 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs such as the Fresno Council of Governments will work with local jurisdictions in the development of Sustainable Communities Strategy (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. Pursuant to SB 375, the Los Angeles/Southern California reduction targets for per capita vehicular emissions were 8 percent by 2020 and are 19 percent by 2035 as shown in Table E.

**Table E: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets**

| Metropolitan Planning Organization | By 2020 (percent) | By 2035 (percent) |
|---|---|---|
| San Francisco Bay Area | 10 | 19 |
| San Diego | 15 | 19 |
| Sacramento | 7 | 19 |
| Central Valley/San Joaquin | 6–13 | 13–16 |
| Los Angeles/Southern California | 8 | 19 |

Source: California Air Resources Board (2018).

### *Executive Order B-30-15 (2015)*

Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

*Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act*

SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

*Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197*

In summer 2016 the Legislature passed, and the Governor signed, SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million $CO_2e$ and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

*Senate Bill 100*

On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

*Executive Order B-55-18*

EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of $CO_2e$ from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

### *Assembly Bill 1279*

AB 1279 was signed in September of 2022, and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

### *Title 24, Part 11, Building Standards Code and CALGreen Code*

In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is updated every 3 years and was most recently updated in 2022 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2023.

### *California Building Efficiency Standards (Title 24, Part 6)*

The California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. The current set of standards was adopted in 2022 and applies to projects seeking building permits on or after January 1, 2023. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

### *Cap and Trade*

The development of a cap-and-trade program was included as a key reduction measure of the CARB AB 32 Climate Change Scoping Plan. The cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. The cap-and-trade emissions trading program developed by the CARB took effect on January 1, 2012, with enforceable compliance obligations beginning January 1, 2013. The cap-and-trade program aims to regulate GHG emissions from the largest producers in the State by setting a statewide firm limit, or cap, on allowable annual GHG emissions. The cap was set in 2013 at approximately 2 percent below the emissions forecast for 2020. In 2014, the cap declined approximately 2 percent. Beginning in 2015 and continuing through

2020, the cap has been declining approximately 3 percent annually. The CARB administered the first auction on November 14, 2012, with many of the qualified bidders representing corporations or organizations that produce large amounts of GHG emissions, including energy companies, agriculture and food industries, steel mills, cement companies, and universities. On January 1, 2015, compliance obligation began for distributors of transportation fuels, natural gas, and other fuels. The cap-and-trade program was initially slated to sunset in 2020 but the passage of SB 398 in 2017 extended the program through 2030.

#### *Executive Order N-79-20*

EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

#### *Low Carbon Fuel Standard*

In January 2007, EO S-01-07 established a Low Carbon Fuel Standard (LCFS). This executive order calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that an LCFS for transportation fuels be established for California. The LCFS applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. In June 2007, CARB adopted the LCFS under AB 32 pursuant to Health and Safety Code Section 38560.5, and, in April 2009, CARB approved the new rules and carbon intensity reference values with new regulatory requirements taking effect in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is accomplished by ensuring that the number of "credits" earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the "deficits" earned from selling higher intensity fuels. In response to certain court rulings, CARB re-adopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016. In 2018, CARB approved amendments to the regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote zero emission vehicle (ZEV) adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector.

#### *Advanced Clean Cars Program*

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 40 percent fewer GHGs and 75 percent fewer smog-forming emissions than 2012 model year vehicles.

### *Executive Order B-48-18*

In January 2018, Governor Brown signed EO B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the EV charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS program, and recommend how to ensure affordability and accessibility for all drivers.

## Regional Regulations

### *South Coast Air Quality Management District*

In 2008, the SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans,*[36] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. The SCAQMD has not presented a finalized version of these thresholds to the governing board.

The SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, the SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the year 2020 and post-2020 emissions targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State will be able to accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

[36] SCAQMD. 2008b. *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans*.

### *Southern California Association of Governments*

On April 4, 2024, SCAG adopted Connect SoCal 2024.[37] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The 2024–2050 RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[38] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; SCAG is required to consider local land use controls when drafting the SCS.

The horizon year for Connect SoCal 2024 is 2050 and the plan projects that by 2050, 66 percent of new households and 54 percent of new jobs will be located in Priority Development Areas, either near transit or in walkable communities. The objectives of Connect SoCal 2024 are to create a region with: transit as a backbone of the transportation system; more Complete Streets where people and safety are prioritized; policies that encourage emerging technologies and mobility innovations that support rather than hamper regional goals; more housing, jobs, and mobility options closer together in Priority Development Areas to preserve natural lands and open spaces; more housing to address the existing housing need as defined by the RHNA; safe and fluid movement of goods, with a commitment to the broad deployment of zero- and near-zero emission technologies.

## Local Regulations

### *City of Tustin*

The City of Tustin has not prepared a Climate Action Plan. The air quality and energy policies from the City of Tustin General Plan, identified above, would also work to reduce GHG emissions.

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37 SCAG. 2024. op. cit.
38 Ibid.

# SETTING

This section provides the current SCAQMD attainment status, climate and air quality, ambient air quality monitoring results, and GHG emissions inventory.

## ATTAINMENT STATUS

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for all State standards. An *attainment* designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A *nonattainment* designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An *unclassified* designation signifies that data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for $O_3$, CO, and $NO_2$ as either does not meet the primary standards, or cannot be classified, or better than national standards. For $SO_2$, areas are designated as does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards.

Table F provides a summary of the attainment status for the Basin with respect to NAAQS and CAAQS.

### Table F: Attainment Status of Criteria Pollutants in the South Coast Air Basin

| Pollutant | State | Federal |
|---|---|---|
| $O_3$ 1 hour | Nonattainment | Extreme Nonattainment |
| $O_3$ 8 hour | Nonattainment | Extreme Nonattainment |
| $PM_{10}$ | Nonattainment | Attainment/Maintenance |
| $PM_{2.5}$ | Nonattainment | Serious Nonattainment |
| CO | Attainment | Attainment/Maintenance |
| $NO_2$ | Attainment | Attainment/Maintenance |
| $SO_2$ | N/A | Attainment/Unclassified |
| Lead | Attainment | Attainment[1] |
| All others | Attainment/Unclassified | Attainment/Unclassified |

Source: South Coast Air Quality Management District (2018).
[1] Except in Los Angeles County.
CO = carbon monoxide
N/A = not applicable
$NO_2$ = nitrogen dioxide
$O_3$ = ozone
$PM_{10}$ = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
$SO_2$ = sulfur dioxide

## EXISTING CLIMATE AND AIR QUALITY

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the South Coast Air Basin some of the worst air pollution in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s°F. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the Modified Project area is the Tustin Irvine Ranch Station.[39] The monthly average maximum temperature recorded at this station ranged from 66.8°F in January to 85.2°F in August, with an annual average maximum of 75.4°F. The monthly average minimum temperature recorded at this station ranged from 40.2°F in January to 59.1°F in August, with an annual average minimum of 49.4°F. These levels are representative of the project area.

The majority of annual rainfall in the Basin occurs between November and March. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Average monthly rainfall at the Tustin Irvine Ranch Station varied from 0.01 inch in July to 2.67 inches in February, with an annual total of 12.86 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days when the air appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the project area blow predominantly from the south-southwest, with relatively low velocities. Wind speeds in the project area average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north, or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and $NO_X$ because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and $NO_X$ to form photochemical smog. Smog is a general term that is naturally occurring fog that has become mixed with smoke or pollution. In this context it is better described as a form of air pollution

[39] Western Regional Climate Center. n.d. Recent Climate in the West. Website: http://www.wrcc.dri.edu, (accessed April 2024).

produced by the photochemical reaction of sunlight with pollutants that have been released into the atmosphere, especially by automotive emissions.

## AIR QUALITY MONITORING RESULTS

Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the Modified Project area is located at 1630 Pampas Lane in Anaheim.

Pollutant monitoring results for years 2020 to 2022 at the Anaheim ambient air quality monitoring station, shown in Table G, indicate that air quality in the area has generally been moderate. As indicated in the monitoring results, the federal $PM_{10}$ standard was not exceeded during the 3-year period. The State $PM_{10}$ standard was exceeded five times in 2020, once in 2021, and once in 2022. Similarly, the federal $PM_{2.5}$ standard had 12 exceedances in 2020, 10 exceedances in 2021, and no exceedances in 2022. The State 1-hour ozone standard was exceeded six times in 2021, no times in 2021, and once in 2022. The State 8-hour ozone standard was exceeded 16 times in 2020, no times in 2021, and once in 2022. The federal 8-hour standard was exceeded 15 times in 2021, no times in 2021, and once in 2022. The CO and $NO_2$ standards were not exceeded in this area during the 3-year period. $SO_2$ data were not available from 2020 to 2022 at air quality monitoring stations in Orange County.

## GREENHOUSE GAS EMISSIONS INVENTORY

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emission inventories.

### Global Emissions

Worldwide emissions of GHGs in 2020 totaled 22.9 billion metric tons (MT) of $CO_2e$. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change.[40]

### United States Emissions

In 2021, the year for which the most recent data are available, the United States emitted about 5,586.0 million metric tons of $CO_2e$ (MMT $CO_2e$) after accounting for sequestration from the land sector. Overall, emissions in 2021 increased by 6 percent since and were 17 percent lower than 2005 levels. The increase in total GHG emissions was driven by an increase in $CO_2$ emissions from fossil fuel combustion.

[40] United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed April 2024).

## Table G: Ambient Air Quality at the Anaheim Monitoring Station

| Pollutant | Standard | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| **Carbon Monoxide (CO)** | | | | |
| Maximum 1-hour concentration (ppm) | | 2.3 | 2.1 | 2.4 |
| Number of days exceeded: | State: > 20 ppm | 0 | 0 | 0 |
| | Federal: > 35 ppm | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | 1.7 | 1.5 | 1.4 |
| Number of days exceeded: | State: > 9 ppm | 0 | 0 | 0 |
| | Federal: > 9 ppm | 0 | 0 | 0 |
| **Ozone ($O_3$)** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.142 | 0.089 | 0.102 |
| Number of days exceeded: | State: > 0.09 ppm | 6 | 0 | 1 |
| Maximum 8-hour concentration (ppm) | | 0.098 | 0.068 | 0.077 |
| Number of days exceeded: | State: > 0.07 ppm | 16 | 0 | 1 |
| | Federal: > 0.07 ppm | 15 | 0 | 1 |
| **Coarse Particulates ($PM_{10}$)** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 74.8 | 63.6 | 67.0 |
| Number of days exceeded: | State: > 50 µg/m$^3$ | 5 | 1 | 1 |
| | Federal: > 150 µg/m$^3$ | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 30.8 | 23.4 | 20.9 |
| Exceeded for the year: | State: > 20 µg/m$^3$ | Yes | Yes | Yes |
| | Federal: > 50 µg/m$^3$ | No | No | No |
| **Fine Particulates ($PM_{2.5}$)** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 64.8 | 54.4 | 33.1 |
| Number of days exceeded: | Federal: > 35 µg/m$^3$ | 12 | 10 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 12.4 | 11.6 | 9.9 |
| Exceeded for the year: | State: > 12 µg/m$^3$ | Yes | No | No |
| | Federal: > 12 µg/m$^3$ [a] | No | No | No |
| **Nitrogen Dioxide ($NO_2$)** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.071 | 0.067 | 0.053 |
| Number of days exceeded: | State: > 0.250 ppm | 0 | 0 | 0 |
| Annual arithmetic average concentration (ppm) | | 0.013 | 0.012 | 0.012 |
| Exceeded for the year: | Federal: > 0.053 ppm | No | No | No |
| **Sulfur Dioxide ($SO_2$)** | | | | |
| Maximum 1-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 0.25 ppm | ND | ND | ND |
| Maximum 24-hour concentration (ppm) | | ND | ND | ND |
| Number of days exceeded: | State: > 0.04 ppm | ND | ND | ND |
| | Federal: > 0.14 ppm | ND | ND | ND |
| Annual arithmetic average concentration (ppm) | | ND | ND | ND |
| Exceeded for the year: | Federal: > 0.030 ppm | ND | ND | ND |

Sources: CARB (2023) and USEPA (2023).

[a] On February 7, 2024, the federal annual $PM_{2.5}$ standard was revised from 12.0 µg/m$^3$ to 9.0 µg/m$^3$. However, since the data presented in Table G is through 2022, it is uses the 12.0 µg/m$^3$ standard that was in effect through 2022.

µg/m$^3$ = micrograms per cubic meter
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

In 2021, $CO_2$ emissions from fossil fuel combustion increased by 7 percent relative to the previous year. This increase in fossil fuel consumption emissions was due primarily to economic activity rebounding after the height of the COVID-19 pandemic. Of the five major sectors—residential and commercial, agricultural, industry, transportation, and electricity generation—transportation accounted for the highest amount of GHG emissions in 2021 (approximately 28 percent), with electricity generation second at 25 percent and emissions from industry third at 23 percent.[41]

### State of California Emissions

The State emitted approximately 381.3 MMT $CO_2e$ emissions in 2021, 12.1 MMT $CO_2e$ higher than 2020 levels and 49.7 MMT $CO_2e$ below the 2020 GHG limit of 431 MMT $CO_2e$.[42] CARB estimates that transportation was the source of approximately 38 percent of the State's GHG emissions in 2021. The next largest sources included industrial sources at approximately 19 percent and electricity generation at 16 percent. The remaining sources of GHG emissions were commercial and residential activities at 10 percent, agriculture at 8 percent, high GWP at 6 percent, and waste at 2 percent.[43]

41 USEPA. 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. Website: https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf (accessed April 2024).

42 CARB. 2023. *California Greenhouse Gas Emissions for 2000 to 2021, Trends of Emissions and Other Indicators Report*. Website: https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf (accessed April 2024).

43 Ibid.

# METHODOLOGY

The methodology used to estimate air quality, energy use, and GHG impacts is described below. This analysis evaluates the Modified Project and compares the potential impacts to impacts associated with the Approved Project as described below.

## CONSTRUCTION EMISSIONS

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include demolition, site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model version 2022.1 (CalEEMod) computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the Modified Project area. Two CalEEMod runs were prepared for the proposed project, one evaluating the Modified Project and one evaluating the Approved Project.

Although no development is proposed as part of the project, for analysis purposes, the project buildout year is assumed to be 2045 for both the Approved Project and the Modified Project. Additionally, this analysis assumes that project construction activities associated with both the Approved Project and the Modified Project could occur anytime beginning January 2025. Construction activities would include site preparation, grading, building construction, paving, and architectural coatings. This analysis also assumes that the Approved Project and Modified Project would comply with SCAQMD Rule 403 measures, consistent with Mitigation Measure (MM) AQ-1 from the 2017 Subsequent Environmental Impact Report for the Tustin Legacy Specific Plan (2017 SEIR). In addition, this analysis assumes the use of Tier 4 construction equipment consistent with 2017 SEIR MM AQ-5, which was also included in CalEEMod. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

## OPERATIONAL EMISSIONS

The air quality analysis includes estimating emissions associated with long-term operation of the proposed project. Consistent with the SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As identified above, two CalEEMod runs were prepared for the proposed project, one evaluating the Modified Project and one evaluating the Approved Project.

As identified in Table A of the Project Description, the Approved Project includes 4,486 multi-family residential units, 550 hotel rooms, 95,200 sq ft of neighborhood commercial uses, 1,568,090 sq ft of community commercial uses, 420,000 sq ft of office uses, 404 continuing care/senior housing units, a high school with 1,784 students, 91 acres of passive park space, and 45 acres of active park space.

The analysis was conducted using land use codes *Apartments Mid Rise*, *Hotel*, *Strip Mall*, *Regional Shopping Center*, *General Office Building*, *Retirement Community*, *High School*, and *City Park*. Trip generation rates used in CalEEMod for the Approved Project were based on the trip generation rate of 100,611 ADT.

The analysis of the Modified Project included 809 single-family residential units, 8,647 multi-family housing units, 241 hotel rooms, 1,085,190 sq ft of community commercial uses, 1,620,700 sq ft of office uses, 791 continuing care/senior housing units, a high school with 1,784 students, 91 acres of passive park space, and 45 acres of active park space. The analysis was conducted using land use codes *Single Family Housing*, *Apartments Mid Rise*, *Hotel*, *Regional Shopping Center*, *General Office Building*, *Retirement Community*, *High School*, and *City Park* assuming a total trip generation of 116,289 ADT. This analysis also assumes that buildout associated with the Modified Project would not include any woodburning hearths or wood stoves. Where project-specific data were not available, default assumptions (e.g., energy usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions.

## ENERGY USE

The analysis of electricity/natural gas usage is based on the CalEEMod modeling conducted by LSA, which quantifies energy use for project operations. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was conservatively estimated for the year 2024 of the proposed project based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB EMission FACtor Model (EMFAC2021) model. Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB EMFAC2021 model.

The analysis focuses on the three sources of energy that are relevant to the proposed project: electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, construction fuel, and fuel use from operations are quantified and compared to that consumed in Orange County. The electricity use of the proposed project is analyzed as a whole on an annual basis. Electricity use was estimated for the project using default energy intensities by land use type in CalEEMod.

## GREENHOUSE GAS ANALYSIS

Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the Approved Project and Modified Project.

# THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions 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 is nonattainment under applicable federal or State ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

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

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. The SCAQMD's current guidelines, its *CEQA Air Quality Handbook* with associated updates, were followed in this assessment of air quality and GHG impacts for the proposed project.

## CRITERIA POLLUTANT THRESHOLDS

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the South Coast Air Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table H lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

### Table H: Regional Thresholds for Construction and Operational Emissions

| Emissions Source | Pollutant Emissions Threshold (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOCs | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ | $SO_X$ |
| Construction | 75 | 100 | 550 | 150 | 55 | 150 |
| Operations | 55 | 55 | 550 | 150 | 55 | 150 |

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed April 2024).

CO = carbon monoxide
lbs/day = pounds per day
$NO_X$ = nitrogen oxides
$PM_{10}$ = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
$SO_X$ = sulfur oxides
VOCs = volatile organic compounds

## LOCAL MICROSCALE CONCENTRATION STANDARDS

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

## GREENHOUSE GAS THRESHOLD

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2. Consistency with a locally adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. The 10,000 MT of $CO_2e$ per year (MT $CO_2e$/yr) threshold for industrial uses would be recommended for use by all lead agencies. Under Option 1, separate screening thresholds are proposed for residential projects (3,500 MT $CO_2e$/yr), commercial projects (1,400 MT $CO_2e$/yr), and mixed-use projects (3,000 MT $CO_2e$/yr). Under Option 2, a single numerical screening-level threshold of 3,000 MT $CO_2e$/yr would be used for all non-industrial projects.

- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per capita efficiency targets. SCAQMD is not recommending use of a percent emissions reduction target. Instead, SCAQMD proposes a 2020 efficiency target of 4.8 MT $CO_2e$/yr per service population (for project-level analyses and 6.6 MT $CO_2e$/yr per service population for plan-level projects (e.g., program-level projects such as general plans). The GHG efficiency metric divides annualized GHG emissions by the service population, which is the sum of residents and employees, per the following equation:

  *Rate of Emission: GHG Emissions (MT $CO_2e$/yr) ÷ Service Population*

  The efficiency evaluation consists of comparing the project's efficiency metric to efficiency targets. Efficiency targets represent the maximum quantity of emissions each resident and employee in the State of California could emit in various years based on emissions levels necessary to achieve the statewide GHG emissions reduction goals. A project that results in a lower rate of emissions would be more efficient than a project with a higher rate of emissions, based on the same service population. The metric considers GHG reduction measures integrated into a project's design and operation (or through mitigation). The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for the CARB's 2008 Scoping Plan.

  Relative to the 2035 target date, this target date was selected to be consistent with the GHG reduction target date of SB 375. Overall, GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. This 40 percent reduction was applied to the 2020 targets, resulting in an efficiency threshold for plans of 4.1 MT $CO_2e$/yr and an efficiency threshold at the project level of 3.0 MT $CO_2e$/yr.

For the purpose of this analysis, the proposed project will be compared to the SCAQMD screening-level Tier 3 Numerical Screening Threshold of 3,000 MT $CO_2e$/yr for all land use type projects. Because it is not yet known whether full buildout allowed under the TLSP would occur, this analysis does not compare the project's emissions to the service population threshold. In addition, the proposed project is also evaluated for compliance with the 2022 Scoping Plan and the 2024–2050 RTP/SCS.

# IMPACTS ANALYSIS

This section identifies the air quality, energy, and GHG emissions impacts associated with implementation of the proposed project.

## AIR QUALITY IMPACTS

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

### Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

Consistency with the 2022 AQMP would be achieved if the project is consistent with the goals, objectives, and assumptions in this plan to achieve the federal and State air quality standards. Per SCAQMD's *CEQA Air Quality Handbook*, there are two main indicators of a project's consistency with the AQMP:

- **Indicator 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or emission reductions in the AQMP.

- **Indicator 2:** Whether the project would exceed the assumptions in the AQMP. The AQMP strategy is, in part, based on projections from local general plans.

***Indicator 1:*** As demonstrated below, the proposed project would result in significant and unavoidable long-term operational pollutant emissions. As such, the proposed project would not be consistent with Indicator 1.

***Indicator 2:*** The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities.

The proposed project involves a Specific Plan Amendment to amend the TLSP to increase the allowed residential capacity, consistent with the 2021–2029 Housing Element Update. As discussed in the Project Description, the proposed upzoning would add a total of 855 additional residential units to the existing residential capacity of the Modified Project area. The Housing Element Update also included 1,356 buffer units that are intended to make up for any potential units that are not developed on the other Housing Element Update sites. Therefore, a total of 2,211 units have been incorporated into the residential caps of the TLSP Neighborhoods D North, D South, and G. The provision for density bonus pursuant to the Surplus Land Act is appliable to the TLSP area, and therefore, the application of density bonus has been analyzed through the addition of 2,759 units. Together, the Housing Element Update RHNA units, buffer units, and density bonus; units total an additional 4,970 units. The proposed project would not directly result in physical development but upon approval of the Modified Project, the Modified Project area could accommodate 4,970 additional units. As such, this analysis evaluates whether the project would exceed the 2022 AQMP's assumptions.

With respect to determining the proposed project's consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2024–2050 RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2024–2050 RTP/SCS, in 2019, the City's population was 80,400 residents and the City had 27,000 households and 51,700 jobs. Households are forecast to increase by approximately 6,800 households by 2035 and 7,000 households by 2050 and employment are forecast to increase by approximately 14,600 jobs by 2035 and 19,600 jobs by 2050.[44]

The City's 2021–2029 Housing Element identifies several adequate sites that are able to accommodate the development of up to additional housing units for the City to meet its estimated housing growth needs identified in the SCAG's RHNA allocation. As identified above, the proposed project would accommodate up to 4,970 additional units to help the City meet its RHNA allocation.

The development of 4,970 housing units would result in approximately 14,314 additional residents based on the estimated 2.88 persons per household[45] in Tustin. Future development implemented in accordance with the proposed Specific Plan Amendment would accommodate planned regional housing growth included in the SCAG RHNA and would be required to adhere to the General Plan. Therefore, since the purpose of the proposed project is to accommodate planned regional housing growth included in the SCAG RHNA, the proposed project would not exceed the growth assumptions in the SCAG's 2024–2050 RTP/SCS or the AQMP.

In addition, the proposed project would not include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, it is unlikely that the proposed project would interfere with SCAQMD's goals for improving air quality in the region. The proposed project would not conflict with the 2022 AQMP and, as such, would not jeopardize attainment of the CAAQS and

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[44] Southern California Association of Governments (SCAG). 2024. *Connect SoCal 2024 Demographics & Growth Forecast.* Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839 (accessed May 2024).

[45] State of California, Department of Finance. 2023. *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change*. May.

NAAQS in the area under the jurisdiction of the SCAQMD. The proposed project is therefore considered consistent with Indicator 2.

***Summary:*** Based on the discussion above, the proposed project would have the potential to conflict or obstruct implementation of applicable air quality plans under Indicator 1 because the proposed project would result in significant and unavoidable long-term operational pollutant emissions. As discussed below, although there is no feasible mitigation to reduce operational pollutant emissions to a less than significant level, SEIR MM AQ-3, SEIR MM AQ-4, and MM AQ-7 would require future projects to conduct a project-specific air quality assessment and implement all feasible measures to reduce operational impacts. However, impacts would be significant and unavoidable.

### Criteria Pollutant Analysis

The Basin is designated as non-attainment for $O_3$ and $PM_{2.5}$ for federal standards and non-attainment for $O_3$, $PM_{10}$, and $PM_{2.5}$ for State standards. The SCAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

#### *Construction Emissions*

It is important to note that the proposed project would not, in and of itself entitle, propose, or otherwise require the construction of new development. The proposed project includes a Specific Plan Amendment to increase the allowed residential capacity for the future development of residential units within the Modified Project areas, Neighborhood D South, Neighborhood D North, and Neighborhood G, consistent with the approved 2021–2029 Housing Element of the City of Tustin General Plan.

Construction activities associated with the residential and nonresidential development capacity associated with buildout of the TLSP would be through the buildout year 2045, which would cause short-term emissions of criteria air pollutants. The primary source of emissions is the operation of construction equipment. Before development can take place, a project will be required to be analyzed for conformance with the General Plan, TLSP, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Construction activities would include site preparation, grading, building construction, architectural coating, and paving activities. Construction-related effects on air quality are typically greatest during the grading phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at construction sites. Unless properly controlled, vehicles leaving construction sites would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. $PM_{10}$ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. $PM_{10}$ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403 (Fugitive Dust), which would require the contractor to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related $PM_{10}$ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, $SO_2$, $NO_X$, VOCs and some soot particulate ($PM_{2.5}$ and $PM_{10}$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for development envisioned under the Approved Project and Modified Project using CalEEMod. As described in the Methodology section above, information regarding a specific development project is not yet known; however, for the purposes of this analysis, future development envisioned under the TLSP would occur through the buildout year 2045. Additionally, this analysis assumes that construction activities could occur anytime beginning January 2025. Table I lists the tentative schedule, and Table J lists the potential construction equipment to be used during project construction under each phase of construction. Construction-related emissions are presented in Table K. CalEEMod output sheets are included in Appendix A.

## Table I: Tentative Project Construction Schedule

| Phase Number | Phase Name | Phase Start Date | Phase End Date | Number of Days/Week | Number of Days |
|---|---|---|---|---|---|
| 1 | Site Preparation | 1/6/2025 | 8/15/2025 | 5 | 160 |
| 2 | Grading | 8/18/2025 | 3/26/2027 | 5 | 420 |
| 3 | Building Construction | 3/29/2027 | 5/1/2043 | 5 | 4200 |
| 4 | Paving | 5/4/2043 | 6/24/2024 | 5 | 300 |
| 5 | Architectural Coating | 12/22/20369 | 1/6/2046 | 5 | 2100 |

Source: Compiled by LSA assuming construction would start January 2025 and end January 2045 and assuming architectural coating would overlap with building construction activities (May 2024).

## Table J: Diesel Construction Equipment Utilized by Construction Phase

| Construction Phase | Off-Road Equipment Type | Off-Road Equipment Unit Amount | Hours Used per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8 | 367 | 0.4 |
| | Tractors/Loaders/Backhoes | 4 | 8 | 84 | 0.37 |
| Grading | Excavators | 2 | 8 | 36 | 0.38 |
| | Graders | 1 | 8 | 148 | 0.41 |
| | Rubber Tired Dozers | 1 | 8 | 367 | 0.4 |
| | Scrapers | 2 | 8 | 423 | 0.48 |
| | Tractors/Loaders/Backhoes | 2 | 8 | 84 | 0.37 |
| Building Construction | Cranes | 1 | 7 | 367 | 0.29 |
| | Forklifts | 3 | 8 | 82 | 0.2 |
| | Generator Sets | 1 | 8 | 14 | 0.74 |
| | Tractors/Loaders/Backhoes | 3 | 7 | 84 | 0.37 |
| | Welders | 1 | 8 | 46 | 0.45 |
| Paving | Pavers | 2 | 8 | 81 | 0.42 |
| | Paving Equipment | 2 | 8 | 89 | 0.36 |
| | Rollers | 2 | 8 | 36 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6 | 37 | 0.48 |

Source: Compiled by LSA using CalEEMod defaults (May 2024).
CalEEMod = California Emissions Estimator Model

## Table K: Project Construction Emissions

| Project Construction | Maximum Pollutant Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOCs | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| **Approved Project** | | | | | | |
| **Approved Project Peak Daily Emissions** | **38.0** | **43.7** | **188.0** | **0.2** | **55.0** | **13.4** |
| SCAQMD Thresholds | 75.0 | 100.0 | 550.0 | 150.0 | 150.0 | 55.0 |
| **Exceed?** | **No** | **No** | **No** | **No** | **No** | **No** |
| **Modified Project** | | | | | | |
| **Modified Project Peak Daily Emissions** | **64.6** | **70.0** | **334.7** | **0.3** | **101.1** | **24.4** |
| SCAQMD Thresholds | 75.0 | 100.0 | 550.0 | 150.0 | 150.0 | 55.0 |
| **Exceeds?** | **No** | **No** | **No** | **No** | **No** | **No** |
| **Difference (Modified Project – Approved Project)** | **26.6** | **26.3** | **146.7** | **0.1** | **46.1** | **11.0** |

Source: Compiled by LSA (May 2024).
CO = carbon monoxide
lbs/day = pounds per day
$NO_X$ = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
$PM_{10}$ = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
$SO_X$ = sulfur oxides
VOCs = volatile organic compounds

As shown in Table K, construction emissions associated with future development as envisioned under the Modified Project would be higher than construction emissions associated with the Approved Project due to the increase in residential capacity. However, as demonstrated in Table K, construction emissions associated with the Modified Project would not exceed the SCAQMD thresholds for VOCs, $NO_X$, CO, sulfur oxides ($SO_X$), $PM_{2.5}$, or $PM_{10}$ emissions.

In addition, the previously adopted 2017 SEIR mitigation measures would be required to be implemented with each development project under the proposed TLSP Amendment. This includes 2017 SEIR MM AQ-1 that requires consistency with SCAQMD rules 402 and 403, 2017 SEIR MM AQ-2 that requires the use of low VOC architectural coatings, and 2017 SEIR MM AQ-5 that requires use of Tier 4 construction equipment.

**2017 SEIR MM AQ-1** During construction of the proposed project, the City, and/or developer and its contractors shall be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. The City and its contractors shall use the measures presented in SCAQMD Rule 403 Tables 1, 2 and 3 (presented in Tables 5-1, 5-2 and 5-3 of the FEIS/EIR Addendum). This compliance measure shall be included in the contractor's specifications and verified on City projects by the Department of Public Works.

**2017 SEIR MM AQ-2** Prior to issuance of grading permits, the project applicant shall use low VOC architectural coatings for all interior and exterior painting operations.

**2017 SEIR MM AQ-5** Applicants for new development projects within the Tustin Legacy Specific Plan shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (USEPA) Tier 4 emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower during construction activities, unless it can be demonstrated to the City of Tustin that such equipment is not available.

Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's regulations.

Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for USEPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Tustin. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.

With implementation of 2017 SEIR MM AQ-1, 2017 SEIR MM AQ-2, and 2017 SEIR MM AQ-5, future construction of development projects envisioned under the Modified Project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard.

### *Operational Air Quality Impacts*

Operational activities associated with buildout envisioned under the Modified Project would result in long-term air pollutant emissions associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment). Before development can take place, a project will be required to be analyzed for conformance with the General Plan, TLSP, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

$PM_{10}$ emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of $PM_{10}$ occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles. Buildout associated with the Approved Project would generate approximately 100,611 ADT while buildout associated with the Modified Project would generate approximately 116,289 ADT, resulting in an increase in 15,678 ADT.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. Major sources of energy demand for the proposed project could include building mechanical systems, such as heating and air conditioning. The residential units would be constructed in compliance with the version of the Title 24 energy standards and the CALGreen Code in effect at the time building permit applications are submitted.

Typically, area source emissions consist of direct sources of air emissions located within the Modified Project area, including architectural coatings, consumer products, and the use of landscape maintenance equipment.

Long-term operation emissions associated with development consistent with the Approved Project and Modified Project were calculated using CalEEMod. Model results are shown in Table L below. CalEEMod output sheets are included in Appendix A.

## Table L: Project Operational Emissions

| Emission Type | Pollutant Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOCs** | **$NO_X$** | **CO** | **$SO_X$** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Approved Project** | | | | | | |
| Approved Project Mobile Sources | 215.0 | 115.7 | 1,473.0 | 4.0 | 464.1 | 118.7 |
| Approved Project Area Sources | 228.1 | 68.9 | 416.3 | 0.5 | 5.9 | 5.8 |
| Approved Project Energy Sources | 1.3 | 22.4 | 12.9 | 0.1 | 1.8 | 1.8 |
| **Total Approved Project Emissions** | **444.4** | **207.1** | **1,902.2** | **4.6** | **471.7** | **126.3** |
| **SCAQMD Thresholds** | **55.0** | **55.0** | **550.0** | **150.0** | **150.0** | **55.0** |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Modified Project** | | | | | | |
| Modified Project Mobile Sources | 217.5 | 120.0 | 1,551.9 | 4.2 | 497.6 | 127.3 |
| Modified Project Area Sources | 391.9 | 144.5 | 776.9 | 1.0 | 12.2 | 12.1 |
| Modified Project Energy Sources | 2.9 | 50.0 | 27.4 | 0.3 | 4.0 | 4.0 |
| **Total Modified Project Emissions** | **612.3** | **314.5** | **2,356.1** | **5.5** | **513.8** | **143.3** |
| **SCAQMD Thresholds** | **55.0** | **55.0** | **550.0** | **150.0** | **150.0** | **55.0** |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Increase in Emissions (Modified Project – Approved Project)** | **167.9** | **107.4** | **453.9** | **0.9** | **42.1** | **17.0** |

Source: Compiled by LSA (May 2024).
CO = carbon monoxide
lbs/day = pounds per day
$NO_X$ = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
$PM_{10}$ = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
$SO_X$ = sulfur oxides
VOCs = volatile organic compounds

The results shown in Table L indicate that operation-related emissions associated with future development as envisioned under the Modified Project would be higher than emissions associated with the Approved Project due to the increase in residential capacity. The results shown in Table L indicate that emissions associated with future development envisioned under the Modified Project would not exceed the significance criteria for $SO_X$; however, emissions of VOCs, $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$ would exceed SCAQMD thresholds.

The exact timing of implementation and phasing for future development envisioned under the TLSP may vary based on a number of factors, including market and economic demands, as well as physical constraints or timing of infrastructure improvements. As such, it is possible that construction activities would still be underway while parts of the project become operational. Since the project is a programmatic level document and the timing of projects that would be developed under the TLSP are unknown at this time, the precise combination of emissions that would occur is unknown. However, since operational emissions associated with buildout envisioned under the Modified Project would exceed SCAQMD thresholds, it is assumed that combined emissions would also exceed the significance threshold established by the SCAQMD for daily project emissions.

The previously adopted 2017 SEIR mitigation measures would be required to be implemented with each development project under the proposed TLSP Amendment. In the previously adopted measures includes the following:

**2017 SEIR MM AQ-3**

Prior to the issuance of development permits for new non-residential projects with 100 or more employees, and expanded projects where additional square footage would result in a total of 100 or more employees, the City of Tustin and the City of Irvine, as applicable, shall impose a mix of TDM measures which, upon estimation, would result in an average vehicle ridership of at least 1.5, for each development with characteristics that would be reasonably conducive to successful implementation of such TDM measures. These TDM measures may include one or more of the following, as determined appropriate and feasible by each city on a case-by-case basis:

- Establish preferential parking for carpool vehicles.
- Provide bicycle parking facilities.
- Provide shower and locker facilities.
- Provide carpool and vanpool loading areas.
- Incorporate bus stop improvements into facility design.
- Implement shuttles to shopping, eating, recreation, and/or parking and transit facilities.
- Construct remote parking facilities.
- Provide pedestrian circulation linkages.
- Construct pedestrian grade separations.
- Establish carpool and vanpool programs.
- Provide cash allowances, passes, and other public transit and purchase incentives.
- Establish parking fees for single occupancy vehicles.
- Provide parking subsidies for rideshare vehicles.
- Institute a computerized commuter rideshare matching system.
- Provide a guaranteed ride-home program for ridesharing.
- Establish alternative work week, flex-time, and compressed work week schedules.

- Establish telecommuting or work-at-home programs. Provide additional vacation and compensatory leave incentives.
- Provide on-site lunch rooms/cafeterias and commercial service such as banks, restaurants, and small retail.
- Provide on-site day care facilities.
- Establish an employee transportation coordinator(s).

**2017 SEIR MM AQ-4**

If not required under each individual development's TDM plan, the City of Tustin and the City of Irvine, as applicable, shall implement the following measures, as determined appropriate or feasible by each city on a case by case basis:

- Reschedule truck deliveries and pickups for off peak hours.
- Implement lunch shuttle service from a worksite(s) to food establishments.
- Implement compressed work week schedules where weekly work hours are compressed into fewer than five days, such as 9/80, 4/40, or 3/36.
- Provide on site child care and after school facilities or contribute to off site developments within walking distance.
- Provide on site employee services such as cafeterias, banks, etc.
- Implement a pricing structure for single occupancy employee parking, and/or provide discounts to ride sharers.
- Construct off site pedestrian facility improvements such as overpasses and wider sidewalks.
- Include retail services within or adjacent to residential subdivisions.
- Provide shuttles to major rail transit centers or multi modal stations.
- Contribute to regional transit systems (e.g., right of way, capital improvements, etc.).
- Synchronize traffic lights on streets impacted by development.

- Construct, contribute, or dedicate land for the provision of off site bicycle trails linking the facility to designated bicycle commuting routes.
- Include residential units within a commercial development.
- Provide off site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on site improvements, such as bicycle paths.
- Include bicycle parking facilities such as bicycle lockers.
- Include showers for bicycling and pedestrian employees' use.
- Construct on site pedestrian facility improvements, such as building access, which is physically separated from street and parking lot traffic, and walk paths.

In addition to 2017 SEIR MM AQ-3 and 2017 SEIR MM AQ-4, MM AQ-7 would require the implementation of all feasible measures to reduce operational impacts associated with future residential development envisioned under the Modified Project.

**MM AQ-7**

Prior to issuance of building permits, the City of Tustin shall identify project design details and specifications, where feasible, to document implementation and compliance with the following emission reduction measures. Implementation of the following measures, where applicable, are considered to be applicable, feasible, and effective in reducing criteria pollutant emissions generated by the project:

- Exceed Title 24 standards by 20 percent.
- Install programmable thermostat timers and smart meters.
- Install energy efficient appliances and high-efficiency electric hot water heaters.
- Incorporate design features (e.g., pollution prevention, pollution reduction, barriers, landscaping, ventilation systems, or other measures) at the proposed residential uses to minimize the potential impacts of air pollution on sensitive receptors.
- Incorporate fuel-efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, boiler units, and low or zero-emitting architectural coatings. Utilize only Energy Star heating, cooling, and lighting devices, and appliances.

- Utilize energy-efficient design features, including appropriate site orientation, use of lighter color roofing and building materials, and use of deciduous shade trees and windbreak trees to reduce fuel consumption for heating and cooling.

- Provide bicycle parking/storage facilities on site. Bicycle parking facilities should be near destination points and easy to find. At least one bicycle parking space for every 20 vehicle parking spaces should be provided.

- Provide building access and paths which are physically separated from street parking lot traffic and that eliminate physical barriers such as walls, berms, landscaping and slopes that impede the use of pedestrians, bicycle facilities, or public transportation vehicles.

- Link culs-de-sac and dead-end streets to encourage pedestrian and bicycle travel.

- Provide traffic reduction modifications to Project roads, such as: narrower streets, speed platforms, bulb-outs, and intersection modifications designed to reduce vehicle speeds and to encourage pedestrian and bicycle travel.

- Provide preferential parking spaces near the entrance of buildings for those who carpool/vanpool/rideshare and provide signage.

- Install 240-volt electrical outlets or Level 3 chargers in parking lots and garages that would enable charging of electric vehicles.

- Maximize the planting of trees in landscaping and parking lots.

- Install outdoor electrical outlets to promote the use of electric lawn mowers and leaf blowers.

While these mitigation measures would reduce criteria air pollutant emissions generated during operational activities associated with future development envisioned under the proposed TLSP Amendment, there is currently not enough information to quantify emissions of specific development that may take place under the TLSP. Without quantification to guarantee a less than significant finding, future development projects may still exceed the SCAQMD regional significance thresholds. Therefore, operation of the proposed project would result in a significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the Basin is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be significant and unavoidable.

### *Long-Term Microscale (CO Hot Spot) Analysis*

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Anaheim monitoring station, the closest station to the City of Tustin, showed a highest recorded 1-hour concentration of 2.4 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.7 ppm (the State standard is 9 ppm) during the past 3 years (Table G). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

Buildout associated with the Approved Project would generate approximately 100,611 ADT, including 5,118 AM peak hour trips and 338 PM peak hour trips while buildout associated with the Modified Project would generate approximately 116,289 ADT, including 8,370 AM peak hour trips and 11,123 PM peak hour trips. As such, the Modified Project would result in an increase in 15,678 ADT, including 3,251 AM peak hour trips and 1,777 PM peak hour trips. The proposed project would not result in any operational deficiencies to the surrounding roadway system. The evaluation of the study area intersections shows that the addition of traffic associated with new development allowed under the Modified Project is not expected to create significant level of service changes under buildout conditions. Therefore, project traffic would not create any significant adverse impacts to nearby intersections.

Therefore, given the extremely low level of CO concentrations in the City, and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly or result in the CO concentrations exceeding the State or federal CO standards.

## Health Risk on Nearby Sensitive Receptors

As discussed previously, the proposed project would not, in and of itself entitle, propose, or otherwise require the construction of new development. The proposed project includes a Specific Plan Amendment to increase the allowed residential capacity for the future development of residential units within the Modified Project areas, Neighborhood D South, Neighborhood D North, and Neighborhood G, consistent with the approved 2021–2029 Housing Element of the City of Tustin General Plan.

The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors such as residential land uses in the immediate vicinity of the opportunity sites as a result of construction and operational activities. The thresholds are based on standards established by the SCAQMD in its Localized Significance Thresholds (LST) Methodology[46] and are measured against construction and operational emissions that occur on a specific project site. These emissions are primarily generated from heavy-duty construction equipment and grading and trenching activities. However, the LSTs are applicable to projects at the project-specific level and are not applicable to programmatic documents, such as the proposed project. Construction and operational emissions associated with the proposed project, would however, have the potential to cause or contribute to localized air quality impacts to nearby residential land uses. Localized construction impacts of future residential development could potentially exceed the LSTs, particularly for construction of areas larger than 5 acres or areas with more intense construction activities. To address this, regulatory measures (e.g., SCAQMD Rule 201 for a permit to operate, Rule 403 for fugitive dust control, Rule 1113 for architectural coatings, Rule 1403 for new source review, and CARB's Airborne Toxic Control Measures) are currently in place, and mitigation would be imposed at the project level, which may include use of special equipment.

Although LSTs are applicable to projects at the project-specific level and are not applicable to programmatic documents, such as the proposed project, this analysis conservatively evaluates localized construction emissions associated with development consistent with the proposed project based on the SCAQMD's LST Methodology. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the nearby Central Orange County (SRA 17). SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances. Although the closest existing sensitive receptors are located approximately 140 feet from the project area boundary; this analysis conservatively assumes the SCAQMD's minimum distance of 25 meters to account for future sensitive receptors that may be constructed within 25 meters. It is also assumed that the maximum daily disturbed acreage during construction would be 5 acres. The results of the analysis are shown in Table M below.

## Table M: Project Localized Construction Emissions (lbs/day)

| Source | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| On-Site Project Construction Emissions | 19.4 | 35.3 | 7.8 | 4.0 |
| Localized Significance Threshold | 183.0 | 1,253.0 | 13.0 | 7.0 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA (May 2024).
CO= carbon monoxide
lbs/day = pounds per day
$NO_x$= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
$PM_{10}$= particulate matter less than 10 microns in size

The results of the LST analysis, summarized in Table M, indicates that the project would not result in an exceedance of the SCAQMD LSTs during project construction. In addition, the previously adopted 2017 SEIR mitigation measures would be required to be implemented with each development

46 SCAQMD. 2021. Localized Significance Thresholds. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds (accessed April 2024).

project under the proposed TLSP Amendment. Implementation of 2017 MM AQ-6 requires a project-specific assessment of potential project-related localized quality impacts and implementation of feasible mitigation measures to reduce emissions.

**2017 SEIR MM AQ-6** Prior to the issuance of grading permits, the applicants for individual new developments shall evaluate localized construction-related air quality impacts. Localized construction emissions shall be evaluated to the South Coast Air Quality Management District's Localized Significance Thresholds for construction. Applicable mitigation measures to reduce potential localized construction-related air quality impacts shall be included in the evaluation, as necessary, to minimize impacts to the extent feasible and shall be implemented. The evaluation shall be submitted to the City of Tustin for review. In addition, all recommended mitigation measures shall be noted on all construction plans submitted to the City of Tustin Building and Public Works Department for verification.

It should be noted that the amount of emissions from a project does not necessarily correspond to the concentrations of air pollutants. A dispersion modeling analysis would be necessary to calculate health risk from project implementation. However, since it is not possible to translate the amount of an unknown future specific project's emissions to a particular concentration, it is not possible to calculate the risk factor for a particular health effect at the time of this analysis.

Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Particulate matter can also lead to a variety of health effects in people. These include premature death of people with heart or lung disease, heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Regional emissions of criteria pollutants contribute to these known health effects. The SCAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals and that they are not exposed to elevated concentrations of criteria pollutants in the Basin. To achieve the health-based standards established by the USEPA, the SCAQMD prepares an AQMP that details regional programs to attain the ambient air quality standards.

Although the analysis for the proposed project identifies that construction emissions associated with development envisioned as part of the proposed project would not exceed the SCAQMD's thresholds for VOCs, $NO_X$, CO, $SO_X$, $PM_{2.5}$, or $PM_{10}$ emissions, it should be noted that not exceeding the SCAQMD's numeric regional mass daily thresholds does not necessarily correspond to a determination for health risk impacts to sensitive receptors. This is because the mass daily thresholds are in pounds per day emitted into the air, whereas health effects are determined based on the concentration of emissions in the air at a particular receptor (e.g., ppm by volume of air, or $\mu g/m^3$ of air). State and federal ambient air quality standards were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions.

However, the SCAQMD acknowledges that they have only been able to correlate potential health outcomes for very large emissions sources; specifically, 6,620 pounds per day (lbs/day) of $NO_X$, and

89,180 lbs/day of VOCs were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone.[47] As identified in Table K above, construction associated with the Modified Project would generate a maximum of 70.0 lbs/day of $NO_X$ and 64.6 lbs/day of VOCs and as shown in Table L, operation of the proposed project would generate a maximum of 314.5 lbs/day of $NO_X$ and 612.3 lbs/day of VOCs. Therefore, it is not expected that any future development associated with the proposed project would generate 6,620 lbs/day of $NO_X$ or 89,180 lbs/day of VOC emissions. Therefore, emissions associated with the proposed project are not sufficiently high enough to correlate health effects on a Basin-wide level.

Current scientific, technological, and modeling limitations prevent the relation of expected adverse air quality impacts to likely health consequences. For this reason, this discussion explains why it is not feasible to provide such an analysis.

The proposed project includes a Specific Plan Amendment to increase the allowed residential capacity for the future development of residential units within the Modified Project areas, Neighborhood D South, Neighborhood D North, and Neighborhood G, consistent with the approved 2021–2029 Housing Element of the City of Tustin General Plan. As discussed above, once a specific development project is proposed, the project would be reviewed in accordance with CEQA and would require further evaluation at the project level to demonstrate whether emissions would exceed SCAQMD's LSTs and require project-specific mitigation.

In addition, the project would be required to comply with SCAQMD standard conditions, including Rule 403 (Fugitive Dust) to control fugitive dust and Rule 1113 (Architectural Coatings) to control VOC emissions from paint. Furthermore, any necessary mitigation would be imposed at the project level once such future projects are proposed.

### Asbestos

Naturally occurring asbestos (NOA) refers to the asbestos mineral as a natural component of soils or rocks, as opposed to asbestos in commercial products or other processing operations. Ultramafic rocks may contain asbestos or asbestos-like materials. Naturally occurring asbestos can be released from rocks or soils by routine human activities, such as construction, mining, agriculture, or natural weathering processes. If NOA is disturbed and fibers are released into the air it may become a health risk from inhalation. According to the California Geological Survey, no such rock has been identified in the project vicinity[48]. When demolition is proposed during construction, the demolition of existing buildings may expose asbestos used in building materials. The proposed project would not include any demolition. Therefore, the potential risk for naturally occurring asbestos during project construction is small and would not be significant.

[47] Supreme Court of California. 2015. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno, Plaintiffs and Appellants, v. County of Fresno, Defendant and Despondent, and Friant Ranch, L.P., Real Part in Interest and Despondent.* April.

[48] California Geological Survey, n.d. Areas with Potential for Naturally Occurring Asbestos. Website: https://www.arcgis.com/apps/webappviewer/index.html?id=da4b648958844134adc25ff002dbea1c (accessed April 2024).

### Odors

During construction of future development envisioned under the proposed project, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and once operational, development envisioned under the proposed project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people.

## ENERGY IMPACTS

The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project.

### Energy Consumption

The proposed project would increase the demand for energy through day-to-day operations and fuel consumption associated with project construction. This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

#### *Construction Energy Use*

Construction activities associated with the residential and nonresidential development capacity associated with buildout of the TLSP would be through the buildout year 2045, which would cause fuel consumption associated with construction activities. The primary source of emissions is the operation of construction equipment. Before development can take place, a project will be required to be analyzed for conformance with the General Plan, TLSP, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Construction activities would include grading, site preparation, building construction, architectural coating, and paving activities. Construction activities require energy associated with the manufacture and transportation of building materials, grading activities, and building construction. Construction activities also typically require electricity to power construction-related equipment and do not involve the consumption of natural gas.

Transportation energy represents the largest energy use during construction and would be from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from a site would be anticipated to use diesel fuel, whereas construction workers traveling to and from a site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. Fuel consumption estimates are presented in Table N. CalEEMod output sheets are included in Appendix A, and detailed energy calculations are included in Appendix B.

### Table N: Energy Consumption Estimates during Construction

| Energy Type | Total Energy Consumption | Annual Energy Consumption |
|---|---|---|
| **Approved Project** | | |
| Approved Project Diesel Fuel (total gallons) | 11,271,055.1 | 563,552.8 |
| Approved Project Gasoline (total gallons) | 19,386,047.1 | 969,302.4 |
| **Modified Project** | | |
| Modified Project Diesel Fuel (total gallons) | 14,444,946.8 | 722,247.3 |
| Modified Project Gasoline (total gallons) | 35,955,276.2 | 1,797,763.8 |
| **Increase in Energy Usage (Modified Project – Approved Project)** | | |
| Increase in Diesel Fuel (total gallons) | 3,173,891.7 | 158,694.6 |
| Increase in Gasoline (total gallons) | 16,569,229.1 | 828,461.5 |

Source: Compiled by LSA (May 2024).

Note: The annual energy consumption was calculated by averaging the total energy consumption over the approximately 20-year buildout period.

As indicated in Table N, development envisioned under the Modified Project would consume approximately 722,247.3 gallons of diesel fuel per year and approximately 1,797,763.8 gallons of gasoline per year during construction, which is an increase of 158,694.6 gallons of diesel fuel per year and approximately 828,461.5 gallons of gasoline per year over the Approved Project. Based on fuel consumption obtained from EMFAC2021, approximately 1.2 billion gallons of gasoline and approximately 157.1 million gallons of diesel will be consumed from vehicle trips in Orange County in 2024. Therefore, the energy usage associated with buildout envisioned under the Modified Project would increase the annual construction generated fuel use in Orange County approximately by approximately 0.5 percent for diesel fuel usage and by 0.1 percent for gasoline fuel usage. As such, project construction would have a minimal effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

#### *Operational Energy Use*

Operational activities associated with the additional housing units and remaining commercial buildout capacity consistent with the buildout envisioned as part of the proposed project would result in energy demand associated with natural gas use, electricity consumption, and fuel used for vehicle trips. Energy consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod. In addition, the proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle trips. Trip generation rates for the proposed project were based on the project's trip generation estimates. Buildout associated with the Approved Project would generate approximately 100,611 ADT while buildout associated with the Modified Project would generate approximately 116,289 ADT, resulting in an increase in 15,678 ADT. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage in Orange County.

Electricity, natural gas, and fuel usage estimates associated with the proposed project are shown in Table O.

### Table O: Energy Consumption Estimates during Operation

| Energy Type | Annual Energy Consumption |
|---|---|
| **Approved Project** | |
| Electricity Consumption (kWh/year) | 45,612,144 |
| Natural Gas Consumption (therms/year) | 867,801 |
| Gasoline (gallons/year) | 2,505,724.1 |
| Diesel Fuel (gallons/year) | 263,739.9 |
| **Modified Project** | |
| Electricity Consumption (kWh/year) | 82,337,291 |
| Natural Gas Consumption (therms/year) | 1,946,109 |
| Gasoline (gallons/year) | 9,171,101.1 |
| Diesel Fuel (gallons/year) | 965,303.8 |
| **Increase in Energy Usage (Modified Project – Approved Project)** | |
| Electricity Consumption (kWh/year) | 36,725,147 |
| Natural Gas Consumption (therms/year) | 1,078,308 |
| Gasoline (gallons/year) | 6,665,377 |
| Diesel Fuel (gallons/year) | 701,564 |

Source: Compiled by LSA (May 2024).
kWh = kilowatt-hours

As shown in Table O, the estimated electricity demand associated with development consistent with the Modified Project is 82,337,291 kWh per year, which is an increase in 36,725,147 kWh per year over the Approved Project. Total electricity consumption in Orange County in 2022 was 20,244 GWh (20,243,721,856 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in Orange County by approximately 0.4 percent.

Additionally, as shown in Table O, the estimated natural gas demand associated with development consistent with the Modified Project is 1,946,109 therms per year, which is an increase in 1,078,308 therms per year over the Approved Project. Total natural gas consumption in Orange County in 2022 was 573 million therms (572,454,744 therms). Therefore, operation of the proposed project would increase the annual natural gas consumption in Orange County by approximately 0.3 percent.

Electrical and natural gas demand associated with future operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. All future development would be required to adhere to all federal, State, and local requirements for energy efficiency, including the latest Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

Buildout envisioned under the Modified Project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle trips. As shown in Table O, the increase in fuel use associated with the vehicle trips generated by the proposed project is estimated at approximately 9,171,101.1 gallons of gasoline and 965,303.8 gallons of diesel fuel per year, which is an increase in 6,665,377 gallons of gasoline and 701,564 gallons of diesel fuel per year over buildout associated with the Approved Project. Based on fuel consumption obtained from EMFAC2021, approximately 1.2 billion gallons of gasoline and approximately 157.1 million gallons of diesel will be consumed from vehicle trips in Orange County in 2024. Therefore, vehicle trips associated with the buildout envisioned under the Modified Project would increase the annual fuel use in Orange County by approximately 0.8 percent for gasoline fuel usage and approximately 0.6 percent for diesel fuel usage. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Although future development, as envisioned under the Modified Project would result in an increase in demand for electricity, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts because all of the opportunity sites are already served by utilities or directly adjacent to existing urban development. Similarly, natural gas infrastructure is not anticipated due to cumulative development. Transportation energy use would also increase; however, this transportation energy use would not represent a major amount of energy use when compared to the amount of existing development and to the total number of vehicle trips and VMT throughout Orange County and the region. As such, the buildout associated with the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

### Conflict with Renewable Energy or Energy Efficiency Plans

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC's *2023 Integrated Energy Policy Report* provide the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage associated with future development envisioned under the Modified Project during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the Modified Project would be relatively small in comparison to the overall use in Orange County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy.

## GREENHOUSE GAS IMPACTS

This section describes the potential GHG impacts associated with implementation the proposed project.

### Generation of Greenhouse Gas Emissions

This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. The SCAQMD has not addressed emission thresholds for construction in its *CEQA Air Quality Handbook*; however, the SCAQMD requires quantification and disclosure. Thus, an evaluation of the project's impacts related to the release of GHG emissions for both construction and operational phases of the project is described below.

#### *Short-Term Greenhouse Gas Emissions*

Construction activities associated with the construction of residential and nonresidential development capacity would cause short-term GHG emissions. Construction activities with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as $CO_2$, $CH_4$, and $N_2O$. Furthermore, $CH_4$ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, the SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined by the SCAQMD as 30 years[49], added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Using CalEEMod, it is estimated that development envisioned under the Approved Project would generate approximately 114,287.0 MT $CO_2e$ during construction of the project. When annualized over the 30-year life of the project, annual emissions would be 3,809.6 MT $CO_2e$.

49 The SCAQMD has identified the average operational lifespan of buildings to be 30 years. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf (accessed April 2024).

Additionally, it is estimated that development envisioned under the Modified Project would generate approximately 201,303.0 MT $CO_2e$ during construction of the project. When annualized over the 30-year life of the project, annual emissions would be 6,710.0 MT $CO_2e$.

*Long-Term Greenhouse Gas Emissions*

Operational activities associated with the residential and nonresidential development capacity consistent with the buildout envisioned as part of the TLSP would result in long-term GHG emissions associated with mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance within the Modified Project area. Energy source emissions would be generated at off-site utility providers because of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Following guidance from the SCAQMD, GHG emissions were estimated for the Approved Project and Modified Project using CalEEMod. Table P shows the calculated GHG emissions.

## Table P: Greenhouse Gas Emissions (MT/yr)

| Emissions Source | Operational Emissions (MT/yr) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| **Approved Project** | | | | |
| Approved Project Mobile Sources | 55,046.0 | 2.4 | 2.4 | 55,820.0 |
| Approved Project Area Sources | 1,142.9 | <0.1 | <0.1 | 1,144.5 |
| Approved Project Energy Sources | 15,610.0 | 1.1 | 0.1 | 15,665.0 |
| Approved Project Water Sources | 790.2 | 13.2 | 0.3 | 1,213.4 |
| Approved Project Waste Sources | 641.7 | 64.1 | 0.0 | 2,245.2 |
| **Total Approved Project Emissions** | **73,230.0** | **80.8** | **2.8** | **76,088.1** |
| Approved Project Amortized Construction Emissions | | | | **3,809.6** |
| **Total Approved Project Annual Emissions** | | | | **79,897.7** |
| SCAQMD Threshold | | | | 3,000 |
| **Exceed?** | | | | **Yes** |
| **Modified Project** | | | | |
| Modified Project Mobile Sources | 68,399.0 | 2.9 | 2.9 | 69,330.0 |
| Modified Project Area Sources | 2,350.6 | 0.1 | <0.1 | 2,353.7 |
| Modified Project Energy Sources | 30,192.0 | 2.1 | 0.2 | 30,296.0 |
| Modified Project Water Sources | 1,695.3 | 25.0 | 0.6 | 2,501.2 |
| Modified Project Waste Sources | 1,097.7 | 109.7 | 0.0 | 3,840.4 |
| **Modified Project Emissions** | **103,735** | **139.8** | **3.6** | **108,321.3** |
| Modified Project Amortized Construction Emissions | | | | 6,710.1 |
| **Total Modified Project Annual Emissions** | | | | **115,031.4** |
| SCAQMD Threshold | | | | 3,000 |
| **Exceed?** | | | | **Yes** |

## Table P: Greenhouse Gas Emissions (MT/yr)

| Emissions Source | Operational Emissions (MT/yr) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| Increase in Emissions (Modified Project – Approved Project) | | | | 35,133.7 |

Source: Compiled by LSA (May 2024).
$CH_4$ = methane
$CO_2$ = carbon dioxide
$CO_2e$ = carbon dioxide equivalent
MT/yr = metric tons per year
$N_2O$ = nitrous oxide
SCAQMD = South Coast Air Quality Management District

As discussed above, according to SCAQMD, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT $CO_2e$/yr. Based on the analysis results, the Modified Project would result in approximately 115,031.4 MT $CO_2e$/yr, an increase of approximately 35,133.7 MT $CO_2e$/yr over the Approved Project, which would exceed the SCAQMD threshold of 3,000 MT $CO_2e$/yr.

However, before development can occur, once a specific development project is proposed, it would be required to be analyzed for conformance with the General Plan, TLSP, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. As demonstrated above, the likely scale and extent of buildout associated with future projects envisioned under the Modified Project would likely exceed the SCAQMD thresholds.

The previously adopted 2017 SEIR mitigation measures would be required to be implemented with each development project under the proposed TLSP Amendment. As listed previously in the Air Quality discussion, this includes 2017 SEIR MM AQ-3, 2017 SEIR MM AQ-4, and MM AQ-7. While these mitigation measures would reduce GHG emissions generated during operational activities associated with future development envisioned under the proposed TLSP Amendment, emissions would continue to exceed the SCAQMD threshold of 3,000 MT $CO_2e$/yr, and impacts would continue to be significant and unavoidable.

### Consistency with Greenhouse Gas Emissions Reduction Plans

An evaluation of the proposed project's consistency with the 2022 Scoping Plan and the 2024–2050 RTP/SCS is provided below.

#### *2022 Scoping Plan*

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, AB 1279, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels.

The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 1279 establishes State policy to achieve net zero GHG emissions no later than 2045 and for Statewide anthropogenic GHG emissions to be reduced to at least 85 percent below 1990 levels by 2045.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As identified above, buildout of the proposed project would be required to comply with the latest Title 24 and CALGreen Code standards regarding water efficiency and energy conservation requirements. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, buildout associated with the proposed project would be required to comply with the latest Title 24 and CALGreen Code standards, which include a variety of different measures, including reduction of wastewater and water use. In addition, the project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the Modified Project area would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

*2024–2050 Regional Transportation Plan/Sustainable Communities Strategy*

SCAG's 2024–2050 RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2024–2050 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit oriented communities. The 2024–2050 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2024–205. RTP/SCS, would reach the GHG emissions reduction target set by CARB, including the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). The 2024–2050 RTP/SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the 2024–2050 RTP/SCS but provides incentives for consistency for governments and developers.

The objectives of the 2024–2050 RTP/SCS are to create a region with: transit as a backbone of the transportation system; more Complete Streets where people and safety are prioritized; policies that encourage emerging technologies and mobility innovations that support rather than hamper regional goals; more housing, jobs, and mobility options closer together in Priority Development Areas to preserve natural lands and open spaces; more housing to address the existing housing need as defined by the RHNA; safe and fluid movement of goods, with a commitment to the broad deployment of zero- and near-zero emission technologies.

With respect to determining the proposed project's consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2024–2050 RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2024–2050 RTP/SCS, in 2019, the City's population was 80,400 residents and the City had 27,000 households and 51,700 jobs. Households are forecast to increase by approximately 6,800 households by 2035 and 7,000 households by 2050 and employment are forecast to increase by approximately 14,600 jobs by 2035 and 19,600 jobs by 2050.[50]

[50] SCAG. 2024. *Connect SoCal 2024 Demographics & Growth Forecast.* Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839 (accessed May 2024).

The proposed project includes a Specific Plan Amendment to amend the TLSP to increase the allowed residential capacity, consistent with the 2021–2029 Housing Element Update. As discussed in the Project Description, the proposed project would not directly result in physical development but upon approval of the Modified Project, the Modified Project area could accommodate 4,970 additional units to help the City meet its RHNA allocation.

The development of 4,970 housing units would result in approximately 14,314 additional residents based on the estimated 2.88 persons per household[51] in Tustin. Future development implemented in accordance with the proposed Specific Plan Amendment would accommodate planned regional housing growth included in the SCAG RHNA and would be required to adhere to the General Plan. Therefore, since the purpose of the proposed project is to accommodate planned regional housing growth included in the SCAG RHNA, the proposed project would not exceed the growth assumptions in the SCAG's 2024–2050 RTP/SCS. Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the 2024–2050 RTP/SCS.

Implementing SCAG's 2024–2050 RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets. The proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per capita emissions levels by 2035. As identified above, the proposed project would help the City meet its RHNA allocation, which is consistent with SCAG's objectives to provide more housing in Priority Development Areas to preserve natural lands and open spaces and to address the existing housing need as defined by the RHNA. As such, the proposed project would be consistent with SCAG's 2024–2050 RTP/SCS.

Although the proposed project would be consistent with the identified measures and goals from the 2022 Scoping Plan and 2024–2050 RTP/SCS, the proposed project would result in a significant and unavoidable impact for GHG emissions based on SCAQMD thresholds. As such, the proposed project would not comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 Scoping Plan, EO B-30-15, and AB 197 and would not be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed project would conflict with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs.

## CUMULATIVE IMPACTS

This section presents information regarding potential cumulative impacts associated with the proposed project. As defined in the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area. Below is a list of cumulative projects; however, because of the lack of available emissions data for the cumulative projects, cumulative

[51] State of California, Department of Finance. 2023. *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change*. May.

emissions were not evaluated quantitatively. Table Q lists the cumulative projects and provides a brief description and the distances from the TLSP area.

### Cumulative Air Quality Impacts

The cumulative impact area for air quality related to the proposed project is the South Coast Air Basin. Each project in the Basin is required to comply with SCAQMD rules and regulations and is subject to independent review. Future development that may take place with implementation of the project would contribute criteria pollutants to the area during project construction and operation.

The Basin is currently designated as a nonattainment area for the federal $O_3$ standard and $PM_{2.5}$ standard and as a nonattainment area for the State $O_3$, $PM_{10}$, and $PM_{2.5}$ standard. Thus, the Basin has not met the federal and State standards for these air pollutants. As identified above, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

## Table Q: Cumulative Projects List

| Project | Project Address | Project Description | Distance from the TLSP Area |
|---|---|---|---|
| **City of Santa Ana Projects** | | | |
| Warner/Redhill (The Bowery) | 2300 Red Hill Avenue, Santa Ana, CA | Demolition of three industrial buildings (approximately 154,096 sq ft) and construction of a mixed-use development with 1,100 multi-family residential units and approximately 80,000 sq ft of commercial space. | 140 feet |
| PacifiCenter New Building | 1700 St. Andrew Place, Santa Ana, CA | Demolition of an office building (approximately 171,330 sq ft) and construction of three separate industrial buildings totaling 161,500 sq ft and comprising of a combination of warehouse, manufacturing, and office uses. | 3,920 feet |
| Bristol Office Plaza New Building | 1400 St. Gertrude Place, Santa Ana, CA | Construction of a new single-story commercial building totaling 7,000 sq ft, surface parking, and landscape/open space area. The commercial building would be used for professional/medical offices and include a pharmacy. | 13,790 feet |
| Anchor Stone Christian Church | 2938 Daimler Street, Santa Ana, CA | Convert existing 3,843 sq ft of office space to a church. | 2,515 feet |
| Park 55 Development | 1221 Dyer Road, Santa Ana, CA | Demolish two industrial buildings (approximately 157,000 sq ft) and construct 3 new industrial buildings. Building one would be 69,300 sq ft, building two would be 47,300 sq ft, and building three would be 59,400 sq ft. | 4,215 feet |
| **City of Tustin Projects** | | | |
| Tustin Marketplace | 2961 El Camino Real, Tustin, CA 92782 | A total of 900 additional dwelling units. | 5,580 feet |

## Table Q: Cumulative Projects List

| Project | Project Address | Project Description | Distance from the TLSP Area |
|---|---|---|---|
| Housing Overlay Zone | | | |
| The Landing at Tustin Legacy | Portion of Neighborhood D South Tustin, CA | 114 three-story detached homes, 117 three-story triplex townhomes, and 176 stacked flats and townhomes. | Within TLSP area |
| ATEP - Goddard Preschool | 1629 Victory Road, Tustin, CA | New construction of 14,689 sq ft preschool (26 staff, 220 kids). | Within TLSP area |
| ATEP - Saddleback Buildings | 1634 Valencia Avenue, Tustin, CA | Two new educational buildings: 20,950 sq ft culinary arts and 36,700 sq ft auto tech. | Within TLSP area |
| ATEP - Advantech NA Campus | Red Hill Avenue and Victory Road, Tustin, CA | New 6-story, 108,942 sq ft headquarters office building and 2-story, 78,837 sq ft warehouse facility on an approximately 10-acre property. | Within TLSP area |
| ATEP - Legacy Medical Plaza | Red Hill Avenue and Victory Road, Tustin, CA | Two-story medical office building of approximately 50,000 sq ft. | Within TLSP area |
| The Hill Mixed Use Project | 13751 and 13841 Red Hill Avenue, Tustin, CA | New mixed-use project, including 137 residential rental units and 7,000 sq ft of retail space. | 8,340 feet |
| Farmers and Merchants Bank | 13612 Newport Avenue, Tustin, CA | Demolition of an existing 5,485 sq ft restaurant to construct a new 6,315 sq ft bank. | 10,700 feet |
| City Ventures | 14042 Newport Avenue, Tustin, CA | New construction of 42 residential units (including 7 live/work) on a vacant parcel. | 8,795 feet |
| Warner Corporate Plaza | 1371 Warner Avenue, Tustin, CA | Extensive renovation of existing 11-building business park, and includes approximately 19,000 sq ft of additions to office buildings and various site improvements. | 545 feet |
| Centurion Plaza Redevelopment | 15661 Red Hill Avenue, Tustin, CA | Redevelopment of site with two new industrial warehouse buildings (142,690 sq ft total). | 140 feet |
| New industrial buildings | 1100 Valencia and 1101 Bell, Tustin, CA | Redevelopment of site with two new industrial buildings (133,940 sq ft and 177,830 sq ft). | 2,235 feet |
| Panatoni 2 Industrial Building | 14321 and 14351 Myford, Tustin, CA | Redevelopment of site with new 148,437 sq ft industrial building. | 2,500 feet |
| Conceptual Industrial Redevelopment | 14511 Myford, Tustin, CA | Addition to existing industrial warehouse (43,579 sq ft existing, 103,480 sq ft proposed). | 2,015 feet |
| **City of Irvine Projects** | | | |
| 184-unit apartment building | 2602 McGaw Avenue, Irvine, CA | Project is 75-foot tall, 7-story residential building comprised of 5 levels of residential units on top of 2 levels of above-ground parking structure, including 24,430 sq ft single-story office/warehouse building (7,932 sq ft of office and 16,498 sq ft of industrial) would be demolished to allow for the residential development. | 4,090 feet |
| New childcare facility associated with Westcliff University | 2941 Alton Parkway, Irvine, CA | The project would include a new childcare facility associated with Westcliff University, including a 3,441 sq ft athletics office, 4,634 sq ft athletics therapy, and 14,292 sq ft preschool, totaling 22,367 sq ft. | 2,695 feet |

## Table Q: Cumulative Projects List

| Project | Project Address | Project Description | Distance from the TLSP Area |
|---|---|---|---|

Source: EPD Solutions, Inc. (February 2024).

Air pollution is inherently a cumulative type of impact measured across an air basin. The Air Quality Impacts section above includes an analysis of the project's contribution to cumulative air impacts. As demonstrated above, construction emissions associated with buildout envisioned under the Modified Project would not exceed the SCAQMD thresholds for VOCs, $NO_X$, CO, $SO_X$, $PM_{2.5}$, or $PM_{10}$ emissions. However, as discussed above, operational emissions associated with the future development of the Modified Project would exceed the SCAQMD LSTs for $PM_{10}$ during operational activities. Implementation of 2017 SEIR MM AQ-3, 2017 SEIR MM AQ-4, and MM AQ-7 would reduce criteria air pollutant emissions generated during operational activities associated with future development envisioned under the proposed TLSP Amendment. However, there is currently not enough information to quantify emissions of specific development that may take place under the TLSP. Without quantification to guarantee a less than significant finding, future development projects may still exceed the SCAQMD regional significance thresholds. Therefore, air quality emissions associated with future development that may occur under the proposed project would result in cumulatively considerable impact.

### Cumulative Energy Impacts

The geographic area for cumulative analysis of electricity is that of the SCE service area, while the geographic area for cumulative analysis of natural gas service is that of the SoCalGas service area. Buildout associated with the residential and nonresidential development capacity associated with the TLSP would result in an increased services demand in electricity and natural gas. Although the proposed project would result in an increase in demand for electricity, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts. As discussed previously, total electricity consumption in the SCE service area in 2022 was 85,870 GWh. By 2030, consumption is anticipated to increase by 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[52] While this forecast represents a large increase in electricity consumption, the proposed project's share of cumulative consumption would be negligible. The proposed project, in combination with cumulative development, is well within SCE's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. Total natural gas consumption in the SoCalGas service area in 2022 was 5,026 million therms. Between 2018 and 2030, total natural gas consumption in the SoCalGas service area is forecast to

[52] CEC. 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed April 2024).

remain steady for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy efficiency efforts.[53] The proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of cumulative development without additional facilities. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the other cumulative development within their respective service areas. Increased energy efficiency to comply with building energy efficiency standards would reduce energy consumption on a per-square-foot basis. Furthermore, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030. SCE and SoCalGas plan to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

Transportation energy use would also increase; however, this transportation energy use would not represent a major amount of energy use compared to the amount of existing development and to the total number of vehicle trips and VMT throughout Orange County and the region. The proposed project and cumulative development are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances, and reduce VMT.

As such, the proposed project would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable.

### Cumulative Greenhouse Gas Impacts

GHG impacts are by their nature cumulative impacts. Localized impacts of climate change are the result of the cumulative impact of global emissions. The combined benefits of reductions achieved by all levels of government help to slow or reverse the growth in GHG emissions. In the absence of comprehensive international agreements on appropriate levels of reductions achieved by each country, another measure of cumulative contribution is required. This serves to define the State's share of the reductions regardless of the activities or lack of activities of other areas of the U.S. or the world. Therefore, a cumulative threshold based on consistency with State targets and actions to reduce GHGs is an appropriate standard of comparison for significance determinations.

As previously stated, GHG emissions associated with the buildout under the Modified Project would exceed the SCAQMD threshold of 3,000 MT $CO_2e$/yr. Since GHGs are a global issue, it is unlikely that the project would generate enough GHG emissions to influence GHG emissions on its own; however, because project-related $CO_2e$ emissions would exceed the SCAQMD's threshold, the proposed project would have a significant contribution to cumulatively considerable GHG emissions impacts.

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53 Ibid.

# CONCLUSION

Based on the analysis presented above, construction associated with buildout envisioned under the Modified Project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403 would further reduce construction dust impacts. As demonstrated above, even with implementation of SEIR MM AQ-3, SEIR MM AQ-4, and MM AQ-7, operation-related air quality impacts associated with the Modified Project would exceed SCAQMD thresholds of significance, resulting in significant and unavoidable impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors and would also not result in other emissions (such as those leading to odors) affecting a substantial number of people. In addition, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Operation of the proposed project would generate GHG emissions that would have a significant effect on the environment and would therefore not be consistent with the 2024–2050 RTP/SCS or the goals of the 2022 Scoping Plan.

# APPENDIX A

# CALEEMOD OUTPUT SHEETS

# Tustin Legacy Specific Plan - Modified Project Custom Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Tustin Legacy Specific Plan - Modified Project |
| Construction Start Date | 1/6/2025 |
| Operational Year | 2045 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.50 |
| Precipitation (days) | 19.6 |
| Location | 33.71064826138891, -117.82125522627334 |
| County | Orange |
| City | Tustin |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 6824 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.23 |

## 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 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 809 | Dwelling Unit | 263 | 1,577,550 | 9,475,701 | — | 2,411 | — |
| Apartments Mid Rise | 8,647 | Dwelling Unit | 228 | 8,301,120 | 0.00 | — | 25,768 | — |
| Hotel | 241 | Room | 8.03 | 72,000 | 0.00 | — | — | — |
| Regional Shopping Center | 1,085 | 1000sqft | 24.9 | 1,085,190 | 0.00 | — | — | — |
| General Office Building | 1,621 | 1000sqft | 37.2 | 1,620,700 | 0.00 | — | — | — |
| Retirement Community | 791 | Dwelling Unit | 158 | 471,000 | 0.00 | — | 2,357 | — |
| High School | 1,784 | Student | 5.43 | 236,667 | 0.00 | 0.00 | — | — |
| City Park | 136 | Acre | 136 | 0.00 | 0.00 | 0.00 | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 64.3 | 67.8 | 335 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 114,098 | 114,098 | 3.23 | 8.04 | 116,897 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 64.6 | 70.0 | 298 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 110,568 | 110,568 | 3.37 | 8.04 | 113,055 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 45.7 | 48.7 | 209 | 0.21 | 0.28 | 71.2 | 71.5 | 0.27 | 17.0 | 17.3 | — | 78,338 | 78,338 | 2.41 | 5.76 | 80,203 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 8.34 | 8.89 | 38.2 | 0.04 | 0.05 | 13.0 | 13.1 | 0.05 | 3.10 | 3.15 | — | 12,970 | 12,970 | 0.40 | 0.95 | 13,279 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.87 | 19.5 | 36.2 | 0.06 | 0.18 | 7.83 | 7.93 | 0.18 | 3.98 | 4.08 | — | 6,789 | 6,789 | 0.27 | 0.06 | 6,815 |
| 2026 | 0.86 | 19.5 | 36.1 | 0.06 | 0.18 | 3.78 | 3.96 | 0.18 | 1.47 | 1.65 | — | 6,785 | 6,785 | 0.27 | 0.06 | 6,811 |
| 2027 | 23.4 | 67.8 | 335 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 114,098 | 114,098 | 3.23 | 8.04 | 116,897 |
| 2028 | 22.6 | 63.7 | 317 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 111,909 | 111,909 | 3.15 | 5.69 | 113,972 |
| 2029 | 21.9 | 61.8 | 300 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 109,712 | 109,712 | 3.15 | 5.69 | 111,743 |
| 2030 | 21.0 | 58.0 | 285 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 107,515 | 107,515 | 2.71 | 5.42 | 109,424 |
| 2031 | 20.0 | 56.5 | 270 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 105,314 | 105,314 | 2.67 | 5.42 | 107,195 |
| 2032 | 19.2 | 52.7 | 258 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 103,142 | 103,142 | 2.67 | 5.14 | 104,916 |
| 2033 | 18.5 | 51.4 | 246 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 101,104 | 101,104 | 2.40 | 5.14 | 102,848 |
| 2034 | 17.8 | 50.2 | 237 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 99,219 | 99,219 | 2.19 | 4.87 | 100,856 |
| 2035 | 17.9 | 48.8 | 228 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 97,459 | 97,459 | 2.19 | 4.87 | 99,077 |
| 2036 | 17.3 | 47.8 | 219 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 95,739 | 95,739 | 2.19 | 4.60 | 97,260 |
| 2037 | 64.3 | 47.2 | 250 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 107,410 | 107,410 | 2.33 | 4.71 | 108,965 |
| 2038 | 63.4 | 46.2 | 243 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 105,725 | 105,725 | 2.03 | 4.44 | 107,177 |
| 2039 | 59.7 | 45.6 | 238 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 104,507 | 104,507 | 2.03 | 4.44 | 105,946 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2040 | 59.5 | 45.0 | 231 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 103,421 | 103,421 | 1.81 | 4.44 | 104,844 |
| 2041 | 58.4 | 44.3 | 228 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 102,463 | 102,463 | 1.78 | 4.22 | 103,813 |
| 2042 | 58.2 | 43.9 | 224 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 101,613 | 101,613 | 1.78 | 3.95 | 102,875 |
| 2043 | 57.8 | 43.6 | 220 | 0.30 | 0.39 | 100 | 101 | 0.38 | 24.0 | 24.4 | — | 100,868 | 100,868 | 1.78 | 3.95 | 102,124 |
| 2044 | 46.5 | 9.76 | 43.6 | 0.02 | 0.12 | 15.2 | 15.3 | 0.11 | 3.56 | 3.67 | — | 14,256 | 14,256 | 0.17 | 0.09 | 14,289 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.87 | 19.5 | 36.1 | 0.06 | 0.18 | 7.83 | 7.93 | 0.18 | 3.98 | 4.08 | — | 6,780 | 6,780 | 0.27 | 0.06 | 6,805 |
| 2026 | 0.86 | 19.5 | 36.0 | 0.06 | 0.18 | 3.78 | 3.96 | 0.18 | 1.47 | 1.65 | — | 6,776 | 6,776 | 0.27 | 0.06 | 6,801 |
| 2027 | 23.2 | 70.0 | 298 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 110,568 | 110,568 | 3.37 | 8.04 | 113,055 |
| 2028 | 22.5 | 68.1 | 282 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 108,447 | 108,447 | 3.37 | 8.04 | 110,934 |
| 2029 | 21.5 | 64.0 | 267 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 106,313 | 106,313 | 3.15 | 8.04 | 108,794 |
| 2030 | 20.8 | 62.2 | 254 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 104,174 | 104,174 | 2.88 | 5.42 | 105,866 |
| 2031 | 19.7 | 58.4 | 241 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 102,030 | 102,030 | 2.85 | 5.42 | 103,720 |
| 2032 | 19.2 | 56.9 | 231 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 99,907 | 99,907 | 2.67 | 5.14 | 101,511 |
| 2033 | 18.5 | 55.5 | 221 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 97,913 | 97,913 | 2.40 | 5.14 | 99,510 |
| 2034 | 18.0 | 51.9 | 211 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 96,066 | 96,066 | 2.36 | 4.87 | 97,580 |
| 2035 | 17.4 | 50.7 | 204 | 0.29 | 0.36 | 85.7 | 86.0 | 0.35 | 20.5 | 20.9 | — | 94,341 | 94,341 | 2.36 | 4.87 | 95,855 |
| 2036 | 64.6 | 52.9 | 231 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 105,247 | 105,247 | 2.33 | 4.71 | 106,712 |
| 2037 | 64.2 | 51.7 | 224 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 103,732 | 103,732 | 2.30 | 4.71 | 105,196 |
| 2038 | 60.5 | 50.8 | 216 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 102,090 | 102,090 | 2.03 | 4.44 | 103,465 |
| 2039 | 59.7 | 47.1 | 211 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 100,894 | 100,894 | 2.03 | 4.44 | 102,269 |
| 2040 | 59.2 | 46.7 | 207 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 99,828 | 99,828 | 2.03 | 4.44 | 101,202 |
| 2041 | 58.6 | 46.1 | 203 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 98,889 | 98,889 | 1.99 | 4.44 | 100,263 |
| 2042 | 58.2 | 45.5 | 199 | 0.30 | 0.39 | 101 | 101 | 0.38 | 24.0 | 24.4 | — | 98,057 | 98,057 | 1.99 | 4.17 | 99,349 |
| 2043 | 57.7 | 45.1 | 195 | 0.30 | 0.39 | 100 | 101 | 0.38 | 24.0 | 24.4 | — | 97,323 | 97,323 | 1.78 | 4.17 | 98,610 |
| 2044 | 46.5 | 9.83 | 39.3 | 0.02 | 0.12 | 15.2 | 15.3 | 0.11 | 3.56 | 3.67 | — | 13,655 | 13,655 | 0.17 | 0.12 | 13,696 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2045 | 46.1 | 2.58 | 28.4 | < 0.005 | 0.03 | 15.1 | 15.1 | 0.03 | 3.53 | 3.56 | — | 12,001 | 12,001 | 0.11 | 0.11 | 12,036 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.54 | 11.7 | 22.3 | 0.04 | 0.09 | 4.44 | 4.53 | 0.09 | 2.13 | 2.23 | — | 4,197 | 4,197 | 0.17 | 0.04 | 4,212 |
| 2026 | 0.62 | 13.9 | 25.8 | 0.04 | 0.13 | 2.70 | 2.83 | 0.13 | 1.05 | 1.18 | — | 4,842 | 4,842 | 0.19 | 0.04 | 4,860 |
| 2027 | 12.8 | 42.6 | 174 | 0.17 | 0.23 | 46.6 | 46.9 | 0.22 | 11.3 | 11.5 | — | 61,792 | 61,792 | 1.88 | 4.38 | 63,221 |
| 2028 | 16.2 | 48.7 | 209 | 0.21 | 0.26 | 60.6 | 60.8 | 0.25 | 14.5 | 14.8 | — | 78,338 | 78,338 | 2.41 | 5.76 | 80,203 |
| 2029 | 15.3 | 45.6 | 198 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 76,587 | 76,587 | 2.25 | 5.74 | 78,434 |
| 2030 | 14.9 | 44.5 | 188 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 75,048 | 75,048 | 2.06 | 3.87 | 76,323 |
| 2031 | 14.1 | 41.8 | 178 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 73,504 | 73,504 | 2.03 | 3.87 | 74,770 |
| 2032 | 13.7 | 40.7 | 171 | 0.21 | 0.26 | 60.6 | 60.8 | 0.25 | 14.5 | 14.8 | — | 72,177 | 72,177 | 1.91 | 3.68 | 73,376 |
| 2033 | 13.2 | 39.5 | 163 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 70,547 | 70,547 | 1.71 | 3.67 | 71,731 |
| 2034 | 12.7 | 36.8 | 156 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 69,220 | 69,220 | 1.69 | 3.48 | 70,340 |
| 2035 | 12.5 | 36.1 | 150 | 0.21 | 0.26 | 60.4 | 60.7 | 0.25 | 14.5 | 14.7 | — | 67,979 | 67,979 | 1.69 | 3.48 | 69,093 |
| 2036 | 13.3 | 35.4 | 146 | 0.21 | 0.26 | 60.9 | 61.1 | 0.25 | 14.6 | 14.8 | — | 67,202 | 67,202 | 1.57 | 3.30 | 68,253 |
| 2037 | 45.7 | 36.8 | 165 | 0.21 | 0.28 | 71.0 | 71.3 | 0.27 | 16.9 | 17.2 | — | 74,795 | 74,795 | 1.64 | 3.36 | 75,867 |
| 2038 | 43.2 | 36.0 | 161 | 0.21 | 0.28 | 71.0 | 71.3 | 0.27 | 16.9 | 17.2 | — | 73,613 | 73,613 | 1.45 | 3.17 | 74,618 |
| 2039 | 42.8 | 33.5 | 156 | 0.21 | 0.28 | 71.0 | 71.3 | 0.27 | 16.9 | 17.2 | — | 72,755 | 72,755 | 1.45 | 3.17 | 73,756 |
| 2040 | 42.3 | 33.3 | 153 | 0.21 | 0.28 | 71.2 | 71.5 | 0.27 | 17.0 | 17.3 | — | 72,188 | 72,188 | 1.45 | 3.18 | 73,189 |
| 2041 | 41.9 | 32.6 | 150 | 0.21 | 0.28 | 71.0 | 71.3 | 0.27 | 16.9 | 17.2 | — | 71,317 | 71,317 | 1.42 | 3.17 | 72,311 |
| 2042 | 41.6 | 32.3 | 147 | 0.21 | 0.28 | 71.0 | 71.3 | 0.27 | 16.9 | 17.2 | — | 70,718 | 70,718 | 1.42 | 2.98 | 71,652 |
| 2043 | 35.9 | 15.3 | 67.3 | 0.08 | 0.15 | 30.7 | 30.8 | 0.14 | 7.30 | 7.44 | — | 29,879 | 29,879 | 0.50 | 1.04 | 30,207 |
| 2044 | 33.2 | 4.33 | 25.0 | 0.01 | 0.05 | 10.7 | 10.8 | 0.05 | 2.51 | 2.55 | — | 9,293 | 9,293 | 0.10 | 0.08 | 9,321 |
| 2045 | 0.54 | 0.03 | 0.35 | < 0.005 | < 0.005 | 0.17 | 0.18 | < 0.005 | 0.04 | 0.04 | — | 143 | 143 | < 0.005 | < 0.005 | 143 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.10 | 2.13 | 4.07 | 0.01 | 0.02 | 0.81 | 0.83 | 0.02 | 0.39 | 0.41 | — | 695 | 695 | 0.03 | 0.01 | 697 |
| 2026 | 0.11 | 2.54 | 4.70 | 0.01 | 0.02 | 0.49 | 0.52 | 0.02 | 0.19 | 0.21 | — | 802 | 802 | 0.03 | 0.01 | 805 |
| 2027 | 2.33 | 7.77 | 31.7 | 0.03 | 0.04 | 8.51 | 8.55 | 0.04 | 2.05 | 2.10 | — | 10,230 | 10,230 | 0.31 | 0.73 | 10,467 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2028 | 2.96 | 8.89 | 38.2 | 0.04 | 0.05 | 11.1 | 11.1 | 0.05 | 2.65 | 2.69 | — | 12,970 | 12,970 | 0.40 | 0.95 | 13,279 |
| 2029 | 2.79 | 8.33 | 36.1 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 12,680 | 12,680 | 0.37 | 0.95 | 12,986 |
| 2030 | 2.72 | 8.13 | 34.4 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 12,425 | 12,425 | 0.34 | 0.64 | 12,636 |
| 2031 | 2.58 | 7.63 | 32.4 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 12,169 | 12,169 | 0.34 | 0.64 | 12,379 |
| 2032 | 2.49 | 7.42 | 31.2 | 0.04 | 0.05 | 11.1 | 11.1 | 0.05 | 2.65 | 2.69 | — | 11,950 | 11,950 | 0.32 | 0.61 | 12,148 |
| 2033 | 2.42 | 7.21 | 29.8 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 11,680 | 11,680 | 0.28 | 0.61 | 11,876 |
| 2034 | 2.32 | 6.72 | 28.5 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 11,460 | 11,460 | 0.28 | 0.58 | 11,646 |
| 2035 | 2.28 | 6.59 | 27.3 | 0.04 | 0.05 | 11.0 | 11.1 | 0.05 | 2.64 | 2.69 | — | 11,255 | 11,255 | 0.28 | 0.58 | 11,439 |
| 2036 | 2.43 | 6.47 | 26.7 | 0.04 | 0.05 | 11.1 | 11.2 | 0.05 | 2.66 | 2.71 | — | 11,126 | 11,126 | 0.26 | 0.55 | 11,300 |
| 2037 | 8.34 | 6.72 | 30.1 | 0.04 | 0.05 | 13.0 | 13.0 | 0.05 | 3.09 | 3.14 | — | 12,383 | 12,383 | 0.27 | 0.56 | 12,561 |
| 2038 | 7.89 | 6.57 | 29.4 | 0.04 | 0.05 | 13.0 | 13.0 | 0.05 | 3.09 | 3.14 | — | 12,187 | 12,187 | 0.24 | 0.52 | 12,354 |
| 2039 | 7.81 | 6.11 | 28.5 | 0.04 | 0.05 | 13.0 | 13.0 | 0.05 | 3.09 | 3.14 | — | 12,045 | 12,045 | 0.24 | 0.52 | 12,211 |
| 2040 | 7.72 | 6.08 | 28.0 | 0.04 | 0.05 | 13.0 | 13.1 | 0.05 | 3.10 | 3.15 | — | 11,952 | 11,952 | 0.24 | 0.53 | 12,117 |
| 2041 | 7.64 | 5.96 | 27.4 | 0.04 | 0.05 | 13.0 | 13.0 | 0.05 | 3.09 | 3.14 | — | 11,807 | 11,807 | 0.24 | 0.52 | 11,972 |
| 2042 | 7.59 | 5.90 | 26.9 | 0.04 | 0.05 | 13.0 | 13.0 | 0.05 | 3.09 | 3.14 | — | 11,708 | 11,708 | 0.24 | 0.49 | 11,863 |
| 2043 | 6.55 | 2.79 | 12.3 | 0.01 | 0.03 | 5.59 | 5.62 | 0.03 | 1.33 | 1.36 | — | 4,947 | 4,947 | 0.08 | 0.17 | 5,001 |
| 2044 | 6.06 | 0.79 | 4.56 | < 0.005 | 0.01 | 1.95 | 1.96 | 0.01 | 0.46 | 0.47 | — | 1,539 | 1,539 | 0.02 | 0.01 | 1,543 |
| 2045 | 0.10 | 0.01 | 0.06 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 23.6 | 23.6 | < 0.005 | < 0.005 | 23.7 |

## 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. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 612 | 311 | 2,356 | 5.52 | 17.7 | 496 | 514 | 17.4 | 126 | 143 | 8,100 | 812,420 | 820,520 | 847 | 21.7 | 848,486 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 541 | 315 | 1,553 | 5.32 | 17.2 | 496 | 513 | 17.1 | 126 | 143 | 8,100 | 793,479 | 801,579 | 848 | 22.5 | 829,689 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 579 | 183 | 1,996 | 4.45 | 6.61 | 481 | 488 | 6.43 | 122 | 128 | 8,100 | 618,465 | 626,564 | 844 | 22.0 | 654,467 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 106 | 33.4 | 364 | 0.81 | 1.21 | 87.8 | 89.0 | 1.17 | 22.3 | 23.4 | 1,341 | 102,394 | 103,735 | 140 | 3.64 | 108,355 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 217 | 110 | 1,552 | 4.25 | 1.52 | 496 | 498 | 1.42 | 126 | 127 | — | 432,845 | 432,845 | 16.9 | 16.7 | 438,343 |
| Area | 392 | 151 | 777 | 0.96 | 12.2 | — | 12.2 | 12.1 | — | 12.1 | 0.00 | 188,442 | 188,442 | 3.72 | 0.39 | 188,650 |
| Energy | 2.87 | 50.0 | 27.4 | 0.31 | 3.97 | — | 3.97 | 3.97 | — | 3.97 | — | 182,363 | 182,363 | 13.0 | 1.02 | 182,991 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,470 | 8,770 | 10,240 | 151 | 3.65 | 15,107 |
| Waste | — | — | — | — | — | — | — | — | — | — | 6,630 | 0.00 | 6,630 | 663 | 0.00 | 23,196 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 199 |
| Total | 612 | 311 | 2,356 | 5.52 | 17.7 | 496 | 514 | 17.4 | 126 | 143 | 8,100 | 812,420 | 820,520 | 847 | 21.7 | 848,486 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 218 | 120 | 1,465 | 4.08 | 1.53 | 496 | 498 | 1.42 | 126 | 127 | — | 415,998 | 415,998 | 17.6 | 17.5 | 421,646 |
| Area | 320 | 144 | 61.5 | 0.92 | 11.7 | — | 11.7 | 11.7 | — | 11.7 | 0.00 | 186,349 | 186,349 | 3.64 | 0.37 | 186,549 |
| Energy | 2.87 | 50.0 | 27.4 | 0.31 | 3.97 | — | 3.97 | 3.97 | — | 3.97 | — | 182,363 | 182,363 | 13.0 | 1.02 | 182,991 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,470 | 8,770 | 10,240 | 151 | 3.65 | 15,107 |
| Waste | — | — | — | — | — | — | — | — | — | — | 6,630 | 0.00 | 6,630 | 663 | 0.00 | 23,196 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 199 |
| Total | 541 | 315 | 1,553 | 5.32 | 17.2 | 496 | 513 | 17.1 | 126 | 143 | 8,100 | 793,479 | 801,579 | 848 | 22.5 | 829,689 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 215 | 119 | 1,474 | 4.05 | 1.50 | 481 | 482 | 1.40 | 122 | 123 | — | 413,134 | 413,134 | 17.3 | 17.3 | 418,757 |
| Area | 361 | 14.3 | 494 | 0.09 | 1.14 | — | 1.14 | 1.06 | — | 1.06 | 0.00 | 14,197 | 14,197 | 0.31 | 0.04 | 14,216 |
| Energy | 2.87 | 50.0 | 27.4 | 0.31 | 3.97 | — | 3.97 | 3.97 | — | 3.97 | — | 182,363 | 182,363 | 13.0 | 1.02 | 182,991 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,470 | 8,770 | 10,240 | 151 | 3.65 | 15,107 |
| Waste | — | — | — | — | — | — | — | — | — | — | 6,630 | 0.00 | 6,630 | 663 | 0.00 | 23,196 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 199 |
| Total | 579 | 183 | 1,996 | 4.45 | 6.61 | 481 | 488 | 6.43 | 122 | 128 | 8,100 | 618,465 | 626,564 | 844 | 22.0 | 654,467 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 39.2 | 21.7 | 269 | 0.74 | 0.27 | 87.8 | 88.0 | 0.26 | 22.3 | 22.5 | — | 68,399 | 68,399 | 2.87 | 2.86 | 69,330 |
| Area | 65.9 | 2.61 | 90.2 | 0.02 | 0.21 | — | 0.21 | 0.19 | — | 0.19 | 0.00 | 2,351 | 2,351 | 0.05 | 0.01 | 2,354 |
| Energy | 0.52 | 9.13 | 4.99 | 0.06 | 0.72 | — | 0.72 | 0.72 | — | 0.72 | — | 30,192 | 30,192 | 2.15 | 0.17 | 30,296 |
| Water | — | — | — | — | — | — | — | — | — | — | 243 | 1,452 | 1,695 | 25.0 | 0.60 | 2,501 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,098 | 0.00 | 1,098 | 110 | 0.00 | 3,840 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.0 |
| Total | 106 | 33.4 | 364 | 0.81 | 1.21 | 87.8 | 89.0 | 1.17 | 22.3 | 23.4 | 1,341 | 102,394 | 103,735 | 140 | 3.64 | 108,355 |

# 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64 | 14.7 | 28.3 | 0.05 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 5,295 | 5,295 | 0.21 | 0.04 | 5,314 |
| Dust From Material Movement | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64 | 14.7 | 28.3 | 0.05 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 5,295 | 5,295 | 0.21 | 0.04 | 5,314 |
| Dust From Material Movement | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28 | 6.46 | 12.4 | 0.02 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 2,321 | 2,321 | 0.09 | 0.02 | 2,329 |
| Dust From Material Movement | — | — | — | — | — | 3.36 | 3.36 | — | 1.73 | 1.73 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 1.18 | 2.26 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 384 | 384 | 0.02 | < 0.005 | 386 |
| Dust From Material Movement | — | — | — | — | — | 0.61 | 0.61 | — | 0.32 | 0.32 | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.73 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.04 | 0.04 | — | 166 | 166 | < 0.005 | 0.01 | 169 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.65 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.04 | 0.04 | — | 158 | 158 | < 0.005 | 0.01 | 160 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.29 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 70.4 | 70.4 | < 0.005 | < 0.005 | 71.4 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.05 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 11.7 | 11.7 | < 0.005 | < 0.005 | 11.8 |
| 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 |
| 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 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,622 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,622 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 5.17 | 9.41 | 0.02 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 1,756 | 1,756 | 0.07 | 0.01 | 1,762 |
| Dust From Material Movement | — | — | — | — | — | 0.96 | 0.96 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.94 | 1.72 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 291 | 291 | 0.01 | < 0.005 | 292 |
| Dust From Material Movement | — | — | — | — | — | 0.17 | 0.17 | — | 0.07 | 0.07 | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.05 | 0.84 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 190 | 190 | < 0.005 | 0.01 | 193 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.74 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 181 | 181 | < 0.005 | 0.01 | 183 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.20 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 48.9 | 48.9 | < 0.005 | < 0.005 | 49.5 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.09 | 8.09 | < 0.005 | < 0.005 | 8.20 |
| 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 |
| 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 |

## 3.5. Grading (2026) - Unmitigated

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

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.57 | 13.9 | 25.2 | 0.04 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 4,713 | 4,713 | 0.19 | 0.04 | 4,729 |
| Dust From Material Movement | — | — | — | — | — | 2.56 | 2.56 | — | 1.02 | 1.02 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 2.53 | 4.61 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 780 | 780 | 0.03 | 0.01 | 783 |
| Dust From Material Movement | — | — | — | — | — | 0.47 | 0.47 | — | 0.19 | 0.19 | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.79 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 187 | 187 | < 0.005 | 0.01 | 189 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.69 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 178 | 178 | < 0.005 | 0.01 | 180 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.51 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 129 | 129 | < 0.005 | 0.01 | 130 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | — | 21.3 | 21.3 | < 0.005 | < 0.005 | 21.6 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.7. Grading (2027) - Unmitigated

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

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,598 | 6,598 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13 | 3.23 | 5.88 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,098 | 1,098 | 0.04 | 0.01 | 1,101 |
| Dust From Material Movement | — | — | — | — | — | 0.60 | 0.60 | — | 0.24 | 0.24 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.59 | 1.07 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 182 | 182 | 0.01 | < 0.005 | 182 |
| Dust From Material Movement | — | — | — | — | — | 0.11 | 0.11 | — | 0.04 | 0.04 | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.65 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 175 | 175 | < 0.005 | 0.01 | 177 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.11 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29.5 | 29.5 | < 0.005 | < 0.005 | 29.9 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.88 | 4.88 | < 0.005 | < 0.005 | 4.94 |
| 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 |
| 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 |

## 3.9. Building Construction (2027) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 4.75 | 7.78 | 0.01 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 1,304 | 1,304 | 0.05 | 0.01 | 1,309 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03 | 0.87 | 1.42 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 216 | 216 | 0.01 | < 0.005 | 217 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.1 | 18.6 | 299 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 74,153 | 74,153 | 1.07 | 2.88 | 75,274 |
| Vendor | 0.94 | 40.5 | 21.1 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 37,548 | 37,548 | 2.06 | 5.13 | 39,218 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.0 | 19.1 | 262 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 70,597 | 70,597 | 1.25 | 2.88 | 71,494 |
| Vendor | 0.90 | 42.2 | 21.6 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 37,573 | 37,573 | 2.02 | 5.13 | 39,156 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9 | 11.6 | 148 | 0.00 | 0.00 | 40.5 | 40.5 | 0.00 | 9.48 | 9.48 | — | 38,928 | 38,928 | 0.68 | 1.57 | 39,468 |
| Vendor | 0.51 | 23.0 | 11.6 | 0.15 | 0.15 | 5.56 | 5.71 | 0.15 | 1.54 | 1.69 | — | 20,433 | 20,433 | 1.10 | 2.79 | 21,314 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.18 | 2.11 | 27.0 | 0.00 | 0.00 | 7.38 | 7.38 | 0.00 | 1.73 | 1.73 | — | 6,445 | 6,445 | 0.11 | 0.26 | 6,534 |
| Vendor | 0.09 | 4.20 | 2.11 | 0.03 | 0.03 | 1.02 | 1.04 | 0.03 | 0.28 | 0.31 | — | 3,383 | 3,383 | 0.18 | 0.46 | 3,529 |
| 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 |

## 3.11. Building Construction (2028) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,406 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,406 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.4 | 16.0 | 282 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 72,830 | 72,830 | 1.07 | 0.53 | 73,225 |
| Vendor | 0.90 | 38.9 | 20.4 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 36,682 | 36,682 | 1.99 | 5.13 | 38,341 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.2 | 18.7 | 247 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 69,341 | 69,341 | 1.25 | 2.88 | 70,237 |
| Vendor | 0.90 | 40.6 | 21.0 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 36,708 | 36,708 | 2.02 | 5.13 | 38,291 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.3 | 13.4 | 184 | 0.00 | 0.00 | 53.3 | 53.3 | 0.00 | 12.5 | 12.5 | — | 50,339 | 50,339 | 0.89 | 2.07 | 51,042 |
| Vendor | 0.67 | 29.0 | 14.8 | 0.19 | 0.19 | 7.32 | 7.52 | 0.19 | 2.03 | 2.22 | — | 26,281 | 26,281 | 1.45 | 3.68 | 27,438 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.80 | 2.45 | 33.6 | 0.00 | 0.00 | 9.72 | 9.72 | 0.00 | 2.28 | 2.28 | — | 8,334 | 8,334 | 0.15 | 0.34 | 8,451 |
| Vendor | 0.12 | 5.30 | 2.70 | 0.04 | 0.04 | 1.34 | 1.37 | 0.04 | 0.37 | 0.41 | — | 4,351 | 4,351 | 0.24 | 0.61 | 4,543 |
| 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 |

## 3.13. Building Construction (2029) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 20.7 | 15.8 | 266 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 71,600 | 71,600 | 1.07 | 0.53 | 71,972 |
| Vendor | 0.90 | 37.3 | 19.8 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 35,715 | 35,715 | 1.99 | 5.13 | 37,366 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 20.3 | 16.2 | 232 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 68,173 | 68,173 | 1.07 | 2.88 | 69,064 |
| Vendor | 0.87 | 39.0 | 20.3 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 35,743 | 35,743 | 1.99 | 5.13 | 37,324 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.4 | 11.6 | 173 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 49,356 | 49,356 | 0.76 | 2.06 | 50,046 |
| Vendor | 0.64 | 27.8 | 14.3 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 25,519 | 25,519 | 1.42 | 3.67 | 26,670 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.63 | 2.11 | 31.6 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 8,171 | 8,171 | 0.13 | 0.34 | 8,286 |
| Vendor | 0.12 | 5.08 | 2.61 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 4,225 | 4,225 | 0.24 | 0.61 | 4,415 |
| 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 |

## 3.15. Building Construction (2030) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 19.8 | 13.3 | 251 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 70,453 | 70,453 | 0.89 | 0.53 | 70,799 |
| Vendor | 0.90 | 36.0 | 19.2 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 34,665 | 34,665 | 1.72 | 4.86 | 36,220 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 19.6 | 16.0 | 220 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 67,084 | 67,084 | 1.07 | 0.53 | 67,274 |
| Vendor | 0.87 | 37.4 | 19.6 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 34,694 | 34,694 | 1.72 | 4.86 | 36,187 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.0 | 11.4 | 164 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 48,567 | 48,567 | 0.76 | 0.38 | 48,750 |
| Vendor | 0.64 | 26.9 | 13.8 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 24,770 | 24,770 | 1.23 | 3.47 | 25,855 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.56 | 2.09 | 30.0 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 8,041 | 8,041 | 0.13 | 0.06 | 8,071 |
| Vendor | 0.12 | 4.90 | 2.53 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 4,101 | 4,101 | 0.20 | 0.57 | 4,281 |
| 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 |

## 3.17. Building Construction (2031) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 18.7 | 13.1 | 237 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 69,404 | 69,404 | 0.89 | 0.53 | 69,730 |
| Vendor | 0.90 | 34.7 | 18.5 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 33,513 | 33,513 | 1.68 | 4.86 | 35,059 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 18.6 | 13.5 | 208 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 66,091 | 66,091 | 1.07 | 0.53 | 66,280 |
| Vendor | 0.87 | 36.1 | 19.0 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 33,542 | 33,542 | 1.68 | 4.86 | 35,035 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 13.3 | 9.64 | 154 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 47,845 | 47,845 | 0.76 | 0.38 | 48,023 |
| Vendor | 0.64 | 25.9 | 13.4 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 23,947 | 23,947 | 1.20 | 3.47 | 25,029 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.42 | 1.76 | 28.1 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,921 | 7,921 | 0.13 | 0.06 | 7,951 |
| Vendor | 0.12 | 4.73 | 2.45 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,965 | 3,965 | 0.20 | 0.57 | 4,144 |
| 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 |

## 3.19. Building Construction (2032) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 18.0 | 10.6 | 226 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 68,400 | 68,400 | 0.89 | 0.53 | 68,708 |
| Vendor | 0.90 | 33.4 | 17.9 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 32,346 | 32,346 | 1.68 | 4.59 | 33,803 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 18.0 | 13.3 | 198 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 65,135 | 65,135 | 0.89 | 0.53 | 65,319 |
| Vendor | 0.87 | 34.8 | 18.4 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 32,376 | 32,376 | 1.68 | 4.59 | 33,787 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.8 | 9.54 | 148 | 0.00 | 0.00 | 53.3 | 53.3 | 0.00 | 12.5 | 12.5 | — | 47,283 | 47,283 | 0.64 | 0.38 | 47,452 |
| Vendor | 0.65 | 24.9 | 13.0 | 0.19 | 0.19 | 7.32 | 7.52 | 0.19 | 2.03 | 2.22 | — | 23,177 | 23,177 | 1.20 | 3.29 | 24,201 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.33 | 1.74 | 26.9 | 0.00 | 0.00 | 9.72 | 9.72 | 0.00 | 2.28 | 2.28 | — | 7,828 | 7,828 | 0.11 | 0.06 | 7,856 |
| Vendor | 0.12 | 4.54 | 2.37 | 0.04 | 0.04 | 1.34 | 1.37 | 0.04 | 0.37 | 0.41 | — | 3,837 | 3,837 | 0.20 | 0.54 | 4,007 |
| 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 |

## 3.21. Building Construction (2033) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.3 | 10.6 | 214 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 67,545 | 67,545 | 0.89 | 0.53 | 67,837 |
| Vendor | 0.90 | 32.1 | 17.3 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 31,163 | 31,163 | 1.41 | 4.59 | 32,606 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.3 | 13.1 | 188 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 64,324 | 64,324 | 0.89 | 0.53 | 64,508 |
| Vendor | 0.87 | 33.6 | 17.8 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 31,193 | 31,193 | 1.41 | 4.59 | 32,597 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.4 | 9.39 | 140 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 46,567 | 46,567 | 0.64 | 0.38 | 46,730 |
| Vendor | 0.64 | 23.9 | 12.5 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 22,268 | 22,268 | 1.01 | 3.28 | 23,283 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.26 | 1.71 | 25.6 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,710 | 7,710 | 0.11 | 0.06 | 7,737 |
| Vendor | 0.12 | 4.36 | 2.28 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,687 | 3,687 | 0.17 | 0.54 | 3,855 |
| 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 |

## 3.23. Building Construction (2034) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.6 | 10.4 | 206 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 66,778 | 66,778 | 0.71 | 0.53 | 67,051 |
| Vendor | 0.90 | 31.0 | 17.0 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 30,044 | 30,044 | 1.38 | 4.32 | 31,400 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.8 | 10.8 | 179 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 63,594 | 63,594 | 0.89 | 0.53 | 63,778 |
| Vendor | 0.87 | 32.3 | 17.5 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 30,075 | 30,075 | 1.38 | 4.32 | 31,397 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9 | 7.58 | 134 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 46,039 | 46,039 | 0.64 | 0.38 | 46,198 |
| Vendor | 0.64 | 23.0 | 12.3 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 21,469 | 21,469 | 0.98 | 3.08 | 22,424 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.16 | 1.38 | 24.4 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,622 | 7,622 | 0.11 | 0.06 | 7,649 |
| Vendor | 0.12 | 4.19 | 2.24 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,554 | 3,554 | 0.16 | 0.51 | 3,713 |
| 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 |

## 3.25. Building Construction (2035) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.6 | 10.3 | 197 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 66,098 | 66,098 | 0.71 | 0.53 | 66,358 |
| Vendor | 0.94 | 29.8 | 16.4 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 28,964 | 28,964 | 1.38 | 4.32 | 30,314 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.2 | 10.6 | 173 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 62,948 | 62,948 | 0.89 | 0.53 | 63,132 |
| Vendor | 0.87 | 31.3 | 16.8 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 28,996 | 28,996 | 1.38 | 4.32 | 30,318 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6 | 7.58 | 128 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 45,569 | 45,569 | 0.64 | 0.38 | 45,724 |
| Vendor | 0.64 | 22.3 | 11.9 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 20,698 | 20,698 | 0.98 | 3.08 | 21,651 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.12 | 1.38 | 23.3 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,545 | 7,545 | 0.11 | 0.06 | 7,570 |
| Vendor | 0.12 | 4.07 | 2.16 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,427 | 3,427 | 0.16 | 0.51 | 3,585 |
| 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 |

## 3.27. Building Construction (2036) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.1 | 10.3 | 188 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 65,419 | 65,419 | 0.71 | 0.53 | 65,667 |
| Vendor | 0.90 | 28.8 | 16.1 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 27,923 | 27,923 | 1.38 | 4.05 | 29,187 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.1 | 10.6 | 166 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 62,302 | 62,302 | 0.71 | 0.53 | 62,481 |
| Vendor | 0.87 | 30.3 | 16.5 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 27,955 | 27,955 | 1.38 | 4.05 | 29,196 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.5 | 7.47 | 123 | 0.00 | 0.00 | 53.3 | 53.3 | 0.00 | 12.5 | 12.5 | — | 45,226 | 45,226 | 0.51 | 0.38 | 45,375 |
| Vendor | 0.65 | 21.6 | 11.7 | 0.19 | 0.19 | 7.32 | 7.52 | 0.19 | 2.03 | 2.22 | — | 20,009 | 20,009 | 0.99 | 2.90 | 20,905 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.10 | 1.36 | 22.5 | 0.00 | 0.00 | 9.72 | 9.72 | 0.00 | 2.28 | 2.28 | — | 7,488 | 7,488 | 0.08 | 0.06 | 7,512 |
| Vendor | 0.12 | 3.95 | 2.13 | 0.04 | 0.04 | 1.34 | 1.37 | 0.04 | 0.37 | 0.41 | — | 3,313 | 3,313 | 0.16 | 0.48 | 3,461 |
| 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 |

## 3.29. Building Construction (2037) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.7 | 7.73 | 183 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 64,890 | 64,890 | 0.71 | 0.53 | 65,127 |
| Vendor | 0.90 | 28.1 | 15.8 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 27,012 | 27,012 | 1.38 | 4.05 | 28,273 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.7 | 10.4 | 160 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 61,798 | 61,798 | 0.71 | 0.53 | 61,977 |
| Vendor | 0.83 | 29.4 | 16.2 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 27,045 | 27,045 | 1.34 | 4.05 | 28,285 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.1 | 7.45 | 119 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 44,736 | 44,736 | 0.51 | 0.38 | 44,881 |
| Vendor | 0.62 | 20.9 | 11.4 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 19,304 | 19,304 | 0.96 | 2.89 | 20,196 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.03 | 1.36 | 21.7 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,407 | 7,407 | 0.08 | 0.06 | 7,431 |
| Vendor | 0.11 | 3.81 | 2.09 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,196 | 3,196 | 0.16 | 0.48 | 3,344 |
| 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 |

## 3.31. Building Construction (2038) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.0 | 7.73 | 177 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 64,235 | 64,235 | 0.71 | 0.53 | 64,464 |
| Vendor | 0.90 | 27.2 | 15.2 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 26,113 | 26,113 | 1.07 | 3.78 | 27,281 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.7 | 10.4 | 154 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 61,178 | 61,178 | 0.71 | 0.53 | 61,356 |
| Vendor | 0.83 | 28.4 | 15.6 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 26,146 | 26,146 | 1.07 | 3.78 | 27,298 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.04 | 7.33 | 116 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 44,286 | 44,286 | 0.51 | 0.38 | 44,429 |
| Vendor | 0.62 | 20.2 | 11.0 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 18,662 | 18,662 | 0.76 | 2.70 | 19,490 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.65 | 1.34 | 21.2 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,332 | 7,332 | 0.08 | 0.06 | 7,356 |
| Vendor | 0.11 | 3.69 | 2.01 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,090 | 3,090 | 0.13 | 0.45 | 3,227 |
| 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 |

## 3.33. Building Construction (2039) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9 | 7.73 | 174 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 63,833 | 63,833 | 0.71 | 0.53 | 64,054 |
| Vendor | 0.90 | 26.5 | 14.9 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 25,377 | 25,377 | 1.07 | 3.78 | 26,543 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9 | 7.91 | 151 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 60,794 | 60,794 | 0.71 | 0.53 | 60,972 |
| Vendor | 0.83 | 27.8 | 15.3 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 25,411 | 25,411 | 1.07 | 3.78 | 26,563 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.65 | 5.65 | 112 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 44,009 | 44,009 | 0.51 | 0.38 | 44,149 |
| Vendor | 0.62 | 19.7 | 10.8 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 18,137 | 18,137 | 0.76 | 2.70 | 18,964 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.58 | 1.03 | 20.4 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,286 | 7,286 | 0.08 | 0.06 | 7,309 |
| Vendor | 0.11 | 3.60 | 1.97 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 3,003 | 3,003 | 0.13 | 0.45 | 3,140 |
| 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 |

## 3.35. Building Construction (2040) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.8 | 7.55 | 168 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 63,481 | 63,481 | 0.53 | 0.53 | 63,691 |
| Vendor | 0.90 | 26.1 | 14.6 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 24,713 | 24,713 | 1.07 | 3.78 | 25,876 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6 | 7.91 | 147 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 60,458 | 60,458 | 0.71 | 0.53 | 60,637 |
| Vendor | 0.83 | 27.4 | 15.0 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 24,747 | 24,747 | 1.07 | 3.78 | 25,899 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.17 | 5.66 | 110 | 0.00 | 0.00 | 53.3 | 53.3 | 0.00 | 12.5 | 12.5 | — | 43,888 | 43,888 | 0.51 | 0.38 | 44,026 |
| Vendor | 0.62 | 19.5 | 10.6 | 0.19 | 0.19 | 7.32 | 7.52 | 0.19 | 2.03 | 2.22 | — | 17,711 | 17,711 | 0.77 | 2.70 | 18,539 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.49 | 1.03 | 20.1 | 0.00 | 0.00 | 9.72 | 9.72 | 0.00 | 2.28 | 2.28 | — | 7,266 | 7,266 | 0.08 | 0.06 | 7,289 |
| Vendor | 0.11 | 3.56 | 1.94 | 0.04 | 0.04 | 1.34 | 1.37 | 0.04 | 0.37 | 0.41 | — | 2,932 | 2,932 | 0.13 | 0.45 | 3,069 |
| 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 |

## 3.37. Building Construction (2041) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.9 | 7.55 | 165 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 63,177 | 63,177 | 0.53 | 0.36 | 63,329 |
| Vendor | 0.90 | 25.4 | 14.6 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 24,120 | 24,120 | 1.03 | 3.78 | 25,279 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0 | 7.91 | 144 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 60,171 | 60,171 | 0.71 | 0.53 | 60,349 |
| Vendor | 0.83 | 26.8 | 15.0 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 24,154 | 24,154 | 1.03 | 3.78 | 25,305 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.89 | 5.52 | 107 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 43,559 | 43,559 | 0.51 | 0.38 | 43,695 |
| Vendor | 0.62 | 19.0 | 10.6 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 17,239 | 17,239 | 0.74 | 2.70 | 18,063 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.44 | 1.01 | 19.6 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,212 | 7,212 | 0.08 | 0.06 | 7,234 |
| Vendor | 0.11 | 3.47 | 1.93 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 2,854 | 2,854 | 0.12 | 0.45 | 2,991 |
| 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 |

## 3.39. Building Construction (2042) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.7 | 7.55 | 162 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 62,910 | 62,910 | 0.53 | 0.36 | 63,057 |
| Vendor | 0.90 | 25.1 | 14.3 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 23,591 | 23,591 | 1.03 | 3.50 | 24,668 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.7 | 7.73 | 141 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 59,917 | 59,917 | 0.71 | 0.53 | 60,095 |
| Vendor | 0.83 | 26.4 | 14.7 | 0.27 | 0.27 | 10.3 | 10.6 | 0.27 | 2.85 | 3.13 | — | 23,626 | 23,626 | 1.03 | 3.50 | 24,696 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.64 | 5.52 | 105 | 0.00 | 0.00 | 53.1 | 53.1 | 0.00 | 12.4 | 12.4 | — | 43,374 | 43,374 | 0.51 | 0.38 | 43,509 |
| Vendor | 0.62 | 18.7 | 10.4 | 0.19 | 0.19 | 7.30 | 7.50 | 0.19 | 2.02 | 2.21 | — | 16,861 | 16,861 | 0.74 | 2.50 | 17,628 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.39 | 1.01 | 19.2 | 0.00 | 0.00 | 9.69 | 9.69 | 0.00 | 2.27 | 2.27 | — | 7,181 | 7,181 | 0.08 | 0.06 | 7,203 |
| Vendor | 0.11 | 3.42 | 1.89 | 0.04 | 0.04 | 1.33 | 1.37 | 0.04 | 0.37 | 0.40 | — | 2,792 | 2,792 | 0.12 | 0.41 | 2,918 |
| 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 |

## 3.41. Building Construction (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 2.07 | 3.39 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 568 | 568 | 0.02 | < 0.005 | 569 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.01 | 0.38 | 0.62 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 94.0 | 94.0 | < 0.005 | < 0.005 | 94.3 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.3 | 7.55 | 159 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 62,676 | 62,676 | 0.53 | 0.36 | 62,818 |
| Vendor | 0.90 | 24.7 | 14.0 | 0.27 | 0.27 | 10.1 | 10.3 | 0.27 | 2.85 | 3.13 | — | 23,127 | 23,127 | 1.03 | 3.50 | 24,203 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.3 | 7.73 | 138 | 0.00 | 0.00 | 75.3 | 75.3 | 0.00 | 17.7 | 17.7 | — | 59,692 | 59,692 | 0.53 | 0.53 | 59,866 |
| Vendor | 0.83 | 26.0 | 14.4 | 0.27 | 0.27 | 10.1 | 10.3 | 0.27 | 2.85 | 3.13 | — | 23,162 | 23,162 | 1.03 | 3.50 | 24,233 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.45 | 1.83 | 34.1 | 0.00 | 0.00 | 17.6 | 17.6 | 0.00 | 4.12 | 4.12 | — | 14,325 | 14,325 | 0.13 | 0.13 | 14,368 |
| Vendor | 0.21 | 6.12 | 3.36 | 0.06 | 0.06 | 2.36 | 2.42 | 0.06 | 0.67 | 0.73 | — | 5,480 | 5,480 | 0.24 | 0.83 | 5,734 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.45 | 0.33 | 6.23 | 0.00 | 0.00 | 3.21 | 3.21 | 0.00 | 0.75 | 0.75 | — | 2,372 | 2,372 | 0.02 | 0.02 | 2,379 |
| Vendor | 0.04 | 1.12 | 0.61 | 0.01 | 0.01 | 0.43 | 0.44 | 0.01 | 0.12 | 0.13 | — | 907 | 907 | 0.04 | 0.14 | 949 |
| 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 |

## 3.43. Paving (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 3.41 | 5.02 | 0.01 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 715 | 715 | 0.03 | 0.01 | 718 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.62 | 0.92 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 118 | 118 | < 0.005 | < 0.005 | 119 |
| Paving | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.30 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 116 | 116 | < 0.005 | < 0.005 | 117 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.26 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 111 | 111 | < 0.005 | < 0.005 | 111 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.13 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 53.2 | 53.2 | < 0.005 | < 0.005 | 53.3 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.80 | 8.80 | < 0.005 | < 0.005 | 8.83 |
| 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 |
| 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 |

## 3.45. Paving (2044) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 2.48 | 3.65 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 520 | 520 | 0.02 | < 0.005 | 522 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.45 | 0.67 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 86.1 | 86.1 | < 0.005 | < 0.005 | 86.4 |
| Paving | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.29 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 116 | 116 | < 0.005 | < 0.005 | 116 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.26 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 110 | 110 | < 0.005 | < 0.005 | 111 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.09 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 38.5 | 38.5 | < 0.005 | < 0.005 | 38.7 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 6.38 | 6.38 | < 0.005 | < 0.005 | 6.40 |
| 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 |
| 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 |

## 3.47. Architectural Coating (2036) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.61 | 2.61 | < 0.005 | < 0.005 | 2.62 |
| Architectural Coatings | 0.86 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.43 | 0.43 | < 0.005 | < 0.005 | 0.43 |
| Architectural Coatings | 0.16 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.21 | 2.12 | 33.3 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,460 | 12,460 | 0.14 | 0.11 | 12,496 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.06 | 0.04 | 0.67 | 0.00 | 0.00 | 0.29 | 0.29 | 0.00 | 0.07 | 0.07 | — | 247 | 247 | < 0.005 | < 0.005 | 248 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.12 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 40.9 | 40.9 | < 0.005 | < 0.005 | 41.1 |
| 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 |
| 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 |

## 3.49. Architectural Coating (2037) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.14 | 1.55 | 36.5 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,978 | 12,978 | 0.14 | 0.11 | 13,025 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.14 | 2.09 | 32.0 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,360 | 12,360 | 0.14 | 0.11 | 12,395 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.22 | 1.49 | 23.7 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,947 | 8,947 | 0.10 | 0.08 | 8,976 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.41 | 0.27 | 4.33 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,481 | 1,481 | 0.02 | 0.01 | 1,486 |
| 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 |
| 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 |

## 3.51. Architectural Coating (2038) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.00 | 1.55 | 35.3 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,847 | 12,847 | 0.14 | 0.11 | 12,893 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.53 | 2.09 | 30.8 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,236 | 12,236 | 0.14 | 0.11 | 12,271 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.81 | 1.47 | 23.2 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,857 | 8,857 | 0.10 | 0.08 | 8,886 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.33 | 0.27 | 4.24 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,466 | 1,466 | 0.02 | 0.01 | 1,471 |
| 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 |
| 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 |

## 3.53. Architectural Coating (2039) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39 | 1.55 | 34.7 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,767 | 12,767 | 0.14 | 0.11 | 12,811 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39 | 1.58 | 30.1 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,159 | 12,159 | 0.14 | 0.11 | 12,194 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.73 | 1.13 | 22.4 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,802 | 8,802 | 0.10 | 0.08 | 8,830 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.32 | 0.21 | 4.08 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,457 | 1,457 | 0.02 | 0.01 | 1,462 |
| 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 |
| 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 |

## 3.55. Architectural Coating (2040) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.77 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.6 | 95.6 | < 0.005 | < 0.005 | 96.0 |
| Architectural Coatings | 31.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.9 |
| Architectural Coatings | 5.77 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.35 | 1.51 | 33.6 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,696 | 12,696 | 0.11 | 0.11 | 12,738 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.32 | 1.58 | 29.4 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,092 | 12,092 | 0.14 | 0.11 | 12,127 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.63 | 1.13 | 22.0 | 0.00 | 0.00 | 10.7 | 10.7 | 0.00 | 2.50 | 2.50 | — | 8,778 | 8,778 | 0.10 | 0.08 | 8,805 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.30 | 0.21 | 4.01 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.46 | 0.46 | — | 1,453 | 1,453 | 0.02 | 0.01 | 1,458 |
| 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 |
| 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 |

## 3.57. Architectural Coating (2041) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.17 | 1.51 | 33.0 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,635 | 12,635 | 0.11 | 0.07 | 12,666 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.21 | 1.58 | 28.8 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,034 | 12,034 | 0.14 | 0.11 | 12,070 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.58 | 1.10 | 21.5 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,712 | 8,712 | 0.10 | 0.08 | 8,739 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.29 | 0.20 | 3.91 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,442 | 1,442 | 0.02 | 0.01 | 1,447 |
| 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 |
| 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 |

## 3.59. Architectural Coating (2042) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.14 | 1.51 | 32.4 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,582 | 12,582 | 0.11 | 0.07 | 12,611 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.14 | 1.55 | 28.2 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 11,983 | 11,983 | 0.14 | 0.11 | 12,019 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.53 | 1.10 | 21.0 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,675 | 8,675 | 0.10 | 0.08 | 8,702 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.28 | 0.20 | 3.83 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,436 | 1,436 | 0.02 | 0.01 | 1,441 |
| 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 |
| 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 |

## 3.61. Architectural Coating (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |
| Architectural Coatings | 31.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 5.76 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.07 | 1.51 | 31.8 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,535 | 12,535 | 0.11 | 0.07 | 12,564 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.07 | 1.55 | 27.6 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 11,938 | 11,938 | 0.11 | 0.11 | 11,973 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.48 | 1.10 | 20.6 | 0.00 | 0.00 | 10.6 | 10.6 | 0.00 | 2.49 | 2.49 | — | 8,642 | 8,642 | 0.08 | 0.08 | 8,669 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.27 | 0.20 | 3.76 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.45 | 0.45 | — | 1,431 | 1,431 | 0.01 | 0.01 | 1,435 |
| 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 |
| 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 |

## 3.63. Architectural Coating (2044) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.77 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.6 | 95.6 | < 0.005 | < 0.005 | 96.0 |
| Architectural Coatings | 31.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.9 |
| Architectural Coatings | 5.77 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.03 | 1.47 | 31.7 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 12,496 | 12,496 | 0.11 | 0.07 | 12,523 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.03 | 1.55 | 27.5 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 11,901 | 11,901 | 0.11 | 0.11 | 11,935 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.45 | 1.08 | 20.6 | 0.00 | 0.00 | 10.7 | 10.7 | 0.00 | 2.50 | 2.50 | — | 8,639 | 8,639 | 0.08 | 0.08 | 8,665 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.27 | 0.20 | 3.76 | 0.00 | 0.00 | 1.94 | 1.94 | 0.00 | 0.46 | 0.46 | — | 1,430 | 1,430 | 0.01 | 0.01 | 1,435 |
| 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 |
| 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 |

## 3.65. Architectural Coating (2045) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 44.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.57 | 1.57 | < 0.005 | < 0.005 | 1.57 |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | 0.26 |
| Architectural Coatings | 0.09 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.96 | 1.51 | 27.4 | 0.00 | 0.00 | 15.1 | 15.1 | 0.00 | 3.53 | 3.53 | — | 11,867 | 11,867 | 0.11 | 0.11 | 11,902 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.34 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 141 | 141 | < 0.005 | < 0.005 | 142 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.06 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 23.4 | 23.4 | < 0.005 | < 0.005 | 23.5 |
| 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 |
| 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 |

# 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 14.3 | 7.35 | 104 | 0.29 | 0.10 | 33.6 | 33.7 | 0.10 | 8.52 | 8.62 | — | 29,273 | 29,273 | 1.13 | 1.12 | 29,641 |
| Apartments Mid Rise | 73.8 | 37.8 | 537 | 1.48 | 0.53 | 173 | 173 | 0.49 | 43.8 | 44.3 | — | 150,635 | 150,635 | 5.79 | 5.75 | 152,529 |
| Hotel | 3.84 | 2.21 | 33.4 | 0.10 | 0.03 | 11.5 | 11.5 | 0.03 | 2.91 | 2.95 | — | 9,919 | 9,919 | 0.34 | 0.35 | 10,033 |
| Regional Shopping Center | 71.4 | 32.1 | 416 | 1.05 | 0.39 | 120 | 121 | 0.37 | 30.6 | 30.9 | — | 106,795 | 106,795 | 4.96 | 4.66 | 108,334 |
| General Office Building | 35.1 | 20.1 | 305 | 0.89 | 0.31 | 105 | 105 | 0.29 | 26.6 | 26.9 | — | 90,497 | 90,497 | 3.06 | 3.17 | 91,539 |
| Retirement Community | 6.41 | 3.28 | 46.6 | 0.13 | 0.05 | 15.0 | 15.1 | 0.04 | 3.81 | 3.85 | — | 13,082 | 13,082 | 0.50 | 0.50 | 13,246 |
| High School | 6.91 | 3.96 | 60.1 | 0.18 | 0.06 | 20.7 | 20.7 | 0.06 | 5.24 | 5.30 | — | 17,828 | 17,828 | 0.60 | 0.62 | 18,033 |
| City Park | 5.74 | 3.29 | 49.9 | 0.15 | 0.05 | 17.2 | 17.2 | 0.05 | 4.35 | 4.40 | — | 14,817 | 14,817 | 0.50 | 0.52 | 14,987 |
| Total | 217 | 110 | 1,552 | 4.25 | 1.52 | 496 | 498 | 1.42 | 126 | 127 | — | 432,845 | 432,845 | 16.9 | 16.7 | 438,343 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 14.4 | 8.01 | 98.2 | 0.28 | 0.10 | 33.6 | 33.7 | 0.10 | 8.52 | 8.62 | — | 28,132 | 28,132 | 1.17 | 1.17 | 28,510 |
| Apartments Mid Rise | 74.0 | 41.2 | 505 | 1.42 | 0.53 | 173 | 173 | 0.49 | 43.8 | 44.3 | — | 144,763 | 144,763 | 6.03 | 6.02 | 146,708 |
| Hotel | 3.85 | 2.40 | 31.0 | 0.09 | 0.03 | 11.5 | 11.5 | 0.03 | 2.91 | 2.95 | — | 9,528 | 9,528 | 0.35 | 0.36 | 9,644 |
| Regional Shopping Center | 71.6 | 35.0 | 402 | 1.01 | 0.39 | 120 | 121 | 0.37 | 30.6 | 30.9 | — | 102,721 | 102,721 | 5.22 | 4.89 | 104,309 |
| General Office Building | 35.1 | 21.9 | 282 | 0.85 | 0.31 | 105 | 105 | 0.29 | 26.6 | 26.9 | — | 86,926 | 86,926 | 3.16 | 3.31 | 87,993 |
| Retirement Community | 6.43 | 3.58 | 43.9 | 0.12 | 0.05 | 15.0 | 15.1 | 0.04 | 3.81 | 3.85 | — | 12,572 | 12,572 | 0.52 | 0.52 | 12,741 |
| High School | 6.92 | 4.32 | 55.6 | 0.17 | 0.06 | 20.7 | 20.7 | 0.06 | 5.24 | 5.30 | — | 17,124 | 17,124 | 0.62 | 0.65 | 17,335 |
| City Park | 5.75 | 3.59 | 46.2 | 0.14 | 0.05 | 17.2 | 17.2 | 0.05 | 4.35 | 4.40 | — | 14,232 | 14,232 | 0.52 | 0.54 | 14,407 |
| Total | 218 | 120 | 1,465 | 4.08 | 1.53 | 496 | 498 | 1.42 | 126 | 127 | — | 415,998 | 415,998 | 17.6 | 17.5 | 421,646 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 2.60 | 1.46 | 18.3 | 0.05 | 0.02 | 6.05 | 6.07 | 0.02 | 1.54 | 1.55 | — | 4,708 | 4,708 | 0.19 | 0.19 | 4,771 |
| Apartments Mid Rise | 13.4 | 7.53 | 94.1 | 0.26 | 0.10 | 31.1 | 31.2 | 0.09 | 7.90 | 7.99 | — | 24,229 | 24,229 | 0.99 | 1.00 | 24,553 |
| Hotel | 0.70 | 0.44 | 5.79 | 0.02 | 0.01 | 2.07 | 2.08 | 0.01 | 0.53 | 0.53 | — | 1,595 | 1,595 | 0.06 | 0.06 | 1,614 |
| Regional Shopping Center | 12.8 | 6.15 | 70.9 | 0.17 | 0.07 | 20.1 | 20.1 | 0.06 | 5.09 | 5.16 | — | 15,963 | 15,963 | 0.83 | 0.77 | 16,217 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 6.34 | 4.02 | 52.8 | 0.16 | 0.06 | 18.9 | 18.9 | 0.05 | 4.79 | 4.85 | — | 14,551 | 14,551 | 0.52 | 0.55 | 14,729 |
| Retirement Community | 1.16 | 0.65 | 8.17 | 0.02 | 0.01 | 2.71 | 2.71 | 0.01 | 0.69 | 0.69 | — | 2,104 | 2,104 | 0.09 | 0.09 | 2,132 |
| High School | 1.25 | 0.79 | 10.4 | 0.03 | 0.01 | 3.72 | 3.73 | 0.01 | 0.94 | 0.95 | — | 2,866 | 2,866 | 0.10 | 0.11 | 2,902 |
| City Park | 1.04 | 0.66 | 8.64 | 0.03 | 0.01 | 3.09 | 3.10 | 0.01 | 0.78 | 0.79 | — | 2,382 | 2,382 | 0.09 | 0.09 | 2,412 |
| Total | 39.2 | 21.7 | 269 | 0.74 | 0.27 | 87.8 | 88.0 | 0.26 | 22.3 | 22.5 | — | 68,399 | 68,399 | 2.87 | 2.86 | 69,330 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 8,130 | 8,130 | 0.50 | 0.06 | 8,161 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 46,200 | 46,200 | 2.87 | 0.35 | 46,375 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 1,468 | 1,468 | 0.09 | 0.01 | 1,474 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 15,534 | 15,534 | 0.96 | 0.12 | 15,593 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 42,094 | 42,094 | 2.61 | 0.32 | 42,254 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 4,421 | 4,421 | 0.27 | 0.03 | 4,438 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 2,157 | 2,157 | 0.13 | 0.02 | 2,166 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 120,006 | 120,006 | 7.44 | 0.90 | 120,461 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 8,130 | 8,130 | 0.50 | 0.06 | 8,161 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 46,200 | 46,200 | 2.87 | 0.35 | 46,375 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 1,468 | 1,468 | 0.09 | 0.01 | 1,474 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 15,534 | 15,534 | 0.96 | 0.12 | 15,593 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 42,094 | 42,094 | 2.61 | 0.32 | 42,254 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 4,421 | 4,421 | 0.27 | 0.03 | 4,438 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 2,157 | 2,157 | 0.13 | 0.02 | 2,166 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 120,006 | 120,006 | 7.44 | 0.90 | 120,461 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 1,346 | 1,346 | 0.08 | 0.01 | 1,351 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartment Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 7,649 | 7,649 | 0.47 | 0.06 | 7,678 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 243 | 243 | 0.02 | < 0.005 | 244 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 2,572 | 2,572 | 0.16 | 0.02 | 2,582 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 6,969 | 6,969 | 0.43 | 0.05 | 6,996 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 732 | 732 | 0.05 | 0.01 | 735 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 357 | 357 | 0.02 | < 0.005 | 359 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19,868 | 19,868 | 1.23 | 0.15 | 19,944 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.46 | 7.83 | 3.33 | 0.05 | 0.63 | — | 0.63 | 0.63 | — | 0.63 | — | 9,939 | 9,939 | 0.88 | 0.02 | 9,967 |
| Apartments Mid Rise | 1.42 | 24.2 | 10.3 | 0.15 | 1.96 | — | 1.96 | 1.96 | — | 1.96 | — | 30,780 | 30,780 | 2.72 | 0.06 | 30,865 |
| Hotel | 0.03 | 0.56 | 0.47 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 666 | 666 | 0.06 | < 0.005 | 668 |
| Regional Shopping Center | 0.10 | 1.75 | 1.47 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,082 | 2,082 | 0.18 | < 0.005 | 2,088 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 0.61 | 11.0 | 9.27 | 0.07 | 0.84 | — | 0.84 | 0.84 | — | 0.84 | — | 13,165 | 13,165 | 1.17 | 0.02 | 13,202 |
| Retirement Community | 0.19 | 3.26 | 1.39 | 0.02 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 4,134 | 4,134 | 0.37 | 0.01 | 4,145 |
| High School | 0.07 | 1.33 | 1.12 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,591 | 1,591 | 0.14 | < 0.005 | 1,596 |
| City 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 |
| Total | 2.87 | 50.0 | 27.4 | 0.31 | 3.97 | — | 3.97 | 3.97 | — | 3.97 | — | 62,357 | 62,357 | 5.52 | 0.12 | 62,530 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.46 | 7.83 | 3.33 | 0.05 | 0.63 | — | 0.63 | 0.63 | — | 0.63 | — | 9,939 | 9,939 | 0.88 | 0.02 | 9,967 |
| Apartments Mid Rise | 1.42 | 24.2 | 10.3 | 0.15 | 1.96 | — | 1.96 | 1.96 | — | 1.96 | — | 30,780 | 30,780 | 2.72 | 0.06 | 30,865 |
| Hotel | 0.03 | 0.56 | 0.47 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 666 | 666 | 0.06 | < 0.005 | 668 |
| Regional Shopping Center | 0.10 | 1.75 | 1.47 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,082 | 2,082 | 0.18 | < 0.005 | 2,088 |
| General Office Building | 0.61 | 11.0 | 9.27 | 0.07 | 0.84 | — | 0.84 | 0.84 | — | 0.84 | — | 13,165 | 13,165 | 1.17 | 0.02 | 13,202 |
| Retirement Community | 0.19 | 3.26 | 1.39 | 0.02 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 4,134 | 4,134 | 0.37 | 0.01 | 4,145 |
| High School | 0.07 | 1.33 | 1.12 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,591 | 1,591 | 0.14 | < 0.005 | 1,596 |
| City 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 |
| Total | 2.87 | 50.0 | 27.4 | 0.31 | 3.97 | — | 3.97 | 3.97 | — | 3.97 | — | 62,357 | 62,357 | 5.52 | 0.12 | 62,530 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.08 | 1.43 | 0.61 | 0.01 | 0.12 | — | 0.12 | 0.12 | — | 0.12 | — | 1,646 | 1,646 | 0.15 | < 0.005 | 1,650 |
| Apartments Mid Rise | 0.26 | 4.43 | 1.88 | 0.03 | 0.36 | — | 0.36 | 0.36 | — | 0.36 | — | 5,096 | 5,096 | 0.45 | 0.01 | 5,110 |
| Hotel | 0.01 | 0.10 | 0.09 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 110 | 110 | 0.01 | < 0.005 | 111 |
| Regional Shopping Center | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 345 | 345 | 0.03 | < 0.005 | 346 |
| General Office Building | 0.11 | 2.01 | 1.69 | 0.01 | 0.15 | — | 0.15 | 0.15 | — | 0.15 | — | 2,180 | 2,180 | 0.19 | < 0.005 | 2,186 |
| Retirement Community | 0.03 | 0.59 | 0.25 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 684 | 684 | 0.06 | < 0.005 | 686 |
| High School | 0.01 | 0.24 | 0.20 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 263 | 263 | 0.02 | < 0.005 | 264 |
| City 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 |
| Total | 0.52 | 9.13 | 4.99 | 0.06 | 0.72 | — | 0.72 | 0.72 | — | 0.72 | — | 10,324 | 10,324 | 0.91 | 0.02 | 10,353 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 8.45 | 144 | 61.5 | 0.92 | 11.7 | — | 11.7 | 11.7 | — | 11.7 | 0.00 | 186,349 | 186,349 | 3.64 | 0.37 | 186,549 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 286 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 25.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 72.0 | 6.47 | 715 | 0.03 | 0.49 | — | 0.49 | 0.37 | — | 0.37 | — | 2,093 | 2,093 | 0.09 | 0.02 | 2,101 |
| Total | 392 | 151 | 777 | 0.96 | 12.2 | — | 12.2 | 12.1 | — | 12.1 | 0.00 | 188,442 | 188,442 | 3.72 | 0.39 | 188,650 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 8.45 | 144 | 61.5 | 0.92 | 11.7 | — | 11.7 | 11.7 | — | 11.7 | 0.00 | 186,349 | 186,349 | 3.64 | 0.37 | 186,549 |
| Consumer Products | 286 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 25.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 320 | 144 | 61.5 | 0.92 | 11.7 | — | 11.7 | 11.7 | — | 11.7 | 0.00 | 186,349 | 186,349 | 3.64 | 0.37 | 186,549 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.11 | 1.81 | 0.77 | 0.01 | 0.15 | — | 0.15 | 0.15 | — | 0.15 | 0.00 | 2,113 | 2,113 | 0.04 | < 0.005 | 2,115 |
| Consumer Products | 52.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 4.64 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 9.01 | 0.81 | 89.4 | < 0.005 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | — | 237 | 237 | 0.01 | < 0.005 | 238 |
| Total | 65.9 | 2.61 | 90.2 | 0.02 | 0.21 | — | 0.21 | 0.19 | — | 0.19 | 0.00 | 2,351 | 2,351 | 0.05 | 0.01 | 2,354 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 58.2 | 1,462 | 1,520 | 6.06 | 0.15 | 1,717 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 622 | 3,219 | 3,841 | 64.0 | 1.54 | 5,899 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 11.7 | 60.7 | 72.4 | 1.20 | 0.03 | 111 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 154 | 798 | 952 | 15.8 | 0.38 | 1,461 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 552 | 2,858 | 3,410 | 56.8 | 1.37 | 5,236 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 56.9 | 295 | 351 | 5.85 | 0.14 | 540 |
| High School | — | — | — | — | — | — | — | — | — | — | 15.1 | 78.0 | 93.0 | 1.55 | 0.04 | 143 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,470 | 8,770 | 10,240 | 151 | 3.65 | 15,107 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 58.2 | 1,462 | 1,520 | 6.06 | 0.15 | 1,717 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 622 | 3,219 | 3,841 | 64.0 | 1.54 | 5,899 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 11.7 | 60.7 | 72.4 | 1.20 | 0.03 | 111 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 154 | 798 | 952 | 15.8 | 0.38 | 1,461 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 552 | 2,858 | 3,410 | 56.8 | 1.37 | 5,236 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 56.9 | 295 | 351 | 5.85 | 0.14 | 540 |
| High School | — | — | — | — | — | — | — | — | — | — | 15.1 | 78.0 | 93.0 | 1.55 | 0.04 | 143 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,470 | 8,770 | 10,240 | 151 | 3.65 | 15,107 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 9.63 | 242 | 252 | 1.00 | 0.03 | 284 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 103 | 533 | 636 | 10.6 | 0.25 | 977 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 1.94 | 10.0 | 12.0 | 0.20 | < 0.005 | 18.4 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 25.5 | 132 | 158 | 2.62 | 0.06 | 242 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 91.4 | 473 | 565 | 9.40 | 0.23 | 867 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Retiremen Community | — | — | — | — | — | — | — | — | — | — | 9.42 | 48.8 | 58.2 | 0.97 | 0.02 | 89.3 |
| High School | — | — | — | — | — | — | — | — | — | — | 2.49 | 12.9 | 15.4 | 0.26 | 0.01 | 23.7 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 243 | 1,452 | 1,695 | 25.0 | 0.60 | 2,501 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 345 | 0.00 | 345 | 34.5 | 0.00 | 1,206 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 3,446 | 0.00 | 3,446 | 344 | 0.00 | 12,057 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 71.1 | 0.00 | 71.1 | 7.11 | 0.00 | 249 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 614 | 0.00 | 614 | 61.4 | 0.00 | 2,149 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 812 | 0.00 | 812 | 81.2 | 0.00 | 2,842 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 1,160 | 0.00 | 1,160 | 116 | 0.00 | 4,058 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | — | — | — | — | — | — | — | — | — | — | 175 | 0.00 | 175 | 17.5 | 0.00 | 614 |
| City Park | — | — | — | — | — | — | — | — | — | — | 6.30 | 0.00 | 6.30 | 0.63 | 0.00 | 22.1 |
| Total | — | — | — | — | — | — | — | — | — | — | 6,630 | 0.00 | 6,630 | 663 | 0.00 | 23,196 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 345 | 0.00 | 345 | 34.5 | 0.00 | 1,206 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 3,446 | 0.00 | 3,446 | 344 | 0.00 | 12,057 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 71.1 | 0.00 | 71.1 | 7.11 | 0.00 | 249 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 614 | 0.00 | 614 | 61.4 | 0.00 | 2,149 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 812 | 0.00 | 812 | 81.2 | 0.00 | 2,842 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 1,160 | 0.00 | 1,160 | 116 | 0.00 | 4,058 |
| High School | — | — | — | — | — | — | — | — | — | — | 175 | 0.00 | 175 | 17.5 | 0.00 | 614 |
| City Park | — | — | — | — | — | — | — | — | — | — | 6.30 | 0.00 | 6.30 | 0.63 | 0.00 | 22.1 |
| Total | — | — | — | — | — | — | — | — | — | — | 6,630 | 0.00 | 6,630 | 663 | 0.00 | 23,196 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | 57.1 | 0.00 | 57.1 | 5.70 | 0.00 | 200 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 571 | 0.00 | 571 | 57.0 | 0.00 | 1,996 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotel | — | — | — | — | — | — | — | — | — | — | 11.8 | 0.00 | 11.8 | 1.18 | 0.00 | 41.2 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | 356 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 134 | 0.00 | 134 | 13.4 | 0.00 | 471 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 192 | 0.00 | 192 | 19.2 | 0.00 | 672 |
| High School | — | — | — | — | — | — | — | — | — | — | 29.1 | 0.00 | 29.1 | 2.90 | 0.00 | 102 |
| City Park | — | — | — | — | — | — | — | — | — | — | 1.04 | 0.00 | 1.04 | 0.10 | 0.00 | 3.65 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,098 | 0.00 | 1,098 | 110 | 0.00 | 3,840 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11.3 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 59.5 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 113 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.21 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 3.94 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.98 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.91 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 199 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11.3 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 59.5 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 113 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.21 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 3.94 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.98 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.91 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 199 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.87 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 9.84 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 18.6 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.86 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.65 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.99 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.15 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.0 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Site Preparation | Site Preparation | 1/6/2025 | 8/15/2025 | 5.00 | 160 | — |
| Grading | Grading | 8/18/2025 | 3/26/2027 | 5.00 | 420 | — |
| Building Construction | Building Construction | 3/29/2027 | 5/1/2043 | 5.00 | 4,200 | — |

| | | | | | | |
|---|---|---|---|---|---|---|
| Paving | Paving | 5/4/2043 | 6/24/2044 | 5.00 | 300 | — |
| Architectural Coating | Architectural Coating | 12/22/2036 | 1/6/2045 | 5.00 | 2,100 | — |

## 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 | Tier 4 Interim | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Tier 4 Interim | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Tier 4 Interim | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Tier 4 Interim | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Scrapers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 423 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 2.00 | 8.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Tier 4 Interim | 1.00 | 7.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Tier 4 Interim | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Tier 4 Interim | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 3.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Tier 4 Interim | 1.00 | 8.00 | 46.0 | 0.45 |
| Paving | Pavers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Interim | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Interim | 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 | 17.5 | 13.2 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 7.75 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 20.0 | 13.2 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 7.75 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 8,082 | 13.2 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 1,589 | 7.75 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 13.2 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 7.75 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 1,616 | 13.2 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 7.75 | 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

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 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 | 20,958,082 | 6,986,027 | 4,521,836 | 1,507,279 | — |

## 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 | — | — | 240 | 0.00 | — |
| Grading | — | — | 1,260 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 8.91 |

### 5.6.2. Construction Earthmoving Control Strategies

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

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Single Family Housing | 8.91 | 0% |
| Apartments Mid Rise | — | 0% |
| Hotel | 0.00 | 0% |
| Regional Shopping Center | 0.00 | 0% |
| General Office Building | 0.00 | 0% |
| Retirement Community | — | 0% |
| High School | 0.00 | 0% |
| City Park | 0.00 | 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 | 532 | 0.03 | < 0.005 |
| 2026 | 0.00 | 532 | 0.03 | < 0.005 |
| 2027 | 0.00 | 532 | 0.03 | < 0.005 |
| 2028 | 0.00 | 532 | 0.03 | < 0.005 |
| 2029 | 0.00 | 532 | 0.03 | < 0.005 |
| 2030 | 0.00 | 532 | 0.03 | < 0.005 |
| 2031 | 0.00 | 532 | 0.03 | < 0.005 |
| 2032 | 0.00 | 532 | 0.03 | < 0.005 |
| 2033 | 0.00 | 532 | 0.03 | < 0.005 |
| 2034 | 0.00 | 532 | 0.03 | < 0.005 |
| 2035 | 0.00 | 532 | 0.03 | < 0.005 |
| 2036 | 0.00 | 532 | 0.03 | < 0.005 |

| | | | | |
|---|---|---|---|---|
| 2037 | 0.00 | 532 | 0.03 | < 0.005 |
| 2038 | 0.00 | 532 | 0.03 | < 0.005 |
| 2039 | 0.00 | 532 | 0.03 | < 0.005 |
| 2040 | 0.00 | 532 | 0.03 | < 0.005 |
| 2041 | 0.00 | 532 | 0.03 | < 0.005 |
| 2042 | 0.00 | 532 | 0.03 | < 0.005 |
| 2043 | 0.00 | 532 | 0.03 | < 0.005 |
| 2044 | 0.00 | 532 | 0.03 | < 0.005 |
| 2045 | 0.00 | 532 | 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 |
|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 7,629 | 7,629 | 7,629 | 2,784,538 | 47,546 | 47,546 | 47,546 | 17,354,177 |
| Apartments Mid Rise | 39,257 | 39,257 | 39,257 | 14,328,944 | 244,665 | 244,665 | 244,665 | 89,302,808 |
| Hotel | 1,926 | 1,926 | 1,926 | 702,840 | 16,266 | 16,266 | 16,266 | 5,936,988 |
| Regional Shopping Center | 40,163 | 40,163 | 40,163 | 14,659,452 | 152,569 | 170,559 | 170,559 | 57,563,736 |
| General Office Building | 17,568 | 17,568 | 17,568 | 6,412,462 | 148,403 | 148,403 | 148,403 | 54,166,933 |
| Retirement Community | 3,409 | 3,409 | 3,409 | 1,244,362 | 21,247 | 21,247 | 21,247 | 7,755,281 |
| High School | 3,461 | 3,461 | 3,461 | 1,263,250 | 29,235 | 29,235 | 29,235 | 10,670,847 |
| City Park | 2,876 | 2,876 | 2,876 | 1,049,886 | 24,297 | 24,297 | 24,297 | 8,868,529 |

# 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Single Family Housing | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 688 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 40 |
| No Fireplaces | 81 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |
| Apartments Mid Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 7350 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 432 |
| No Fireplaces | 865 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |
| Retirement Community | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 672 |

| | |
|---|---|
| Propane Fireplaces | 0 |
| Electric Fireplaces | 40 |
| No Fireplaces | 79 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |

### 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) |
|---|---|---|---|---|
| 20958081.75 | 6,986,027 | 4,521,836 | 1,507,279 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 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) |
|---|---|---|---|---|---|
| Single Family Housing | 5,578,172 | 532 | 0.0330 | 0.0040 | 31,013,295 |
| Apartments Mid Rise | 31,698,467 | 532 | 0.0330 | 0.0040 | 96,040,871 |
| Hotel | 1,007,547 | 532 | 0.0330 | 0.0040 | 2,078,762 |
| Regional Shopping Center | 10,658,049 | 532 | 0.0330 | 0.0040 | 6,496,972 |

| | | | | | |
|---|---|---|---|---|---|
| General Office Building | 28,881,338 | 532 | 0.0330 | 0.0040 | 41,079,020 |
| Retirement Community | 3,033,521 | 532 | 0.0330 | 0.0040 | 12,897,789 |
| High School | 1,480,197 | 532 | 0.0330 | 0.0040 | 4,965,248 |
| City Park | 0.00 | 532 | 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) |
|---|---|---|
| Single Family Housing | 30,358,251 | 150,099,417 |
| Apartments Mid Rise | 324,484,296 | 0.00 |
| Hotel | 6,113,392 | 0.00 |
| Regional Shopping Center | 80,382,760 | 0.00 |
| General Office Building | 288,053,085 | 0.00 |
| Retirement Community | 29,682,789 | 0.00 |
| High School | 7,858,449 | 0.00 |
| City Park | 0.00 | 0.00 |

# 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Single Family Housing | 640 | — |
| Apartments Mid Rise | 6,394 | — |
| Hotel | 132 | — |
| Regional Shopping Center | 1,139 | — |
| General Office Building | 1,507 | — |

| | | |
|---|---|---|
| Retirement Community | 2,152 | — |
| High School | 326 | — |
| City Park | 11.7 | — |

# 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 |
|---|---|---|---|---|---|---|---|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Single Family Housing | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Hotel | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| Hotel | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.80 | 4.00 | 4.00 | 18.0 |
| Hotel | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| General Office Building | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| General Office Building | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Retirement Community | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Retirement Community | Household refrigerators and/or freezers | R-134a | 1,430 | 0.22 | 0.60 | 0.00 | 1.00 |
| High School | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| High School | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| High School | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| High School | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |
| City Park | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| City Park | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

## 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 |
|---|---|---|---|---|---|---|

## 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. Biomass Cover Type

#### 5.18.1.1. Unmitigated

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

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

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

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Off-Road Equipment | Assuming the use of Tier 4 construction equipment consistent with 2017 SEIR MM AQ-5. |
| Operations: Vehicle Data | The Modified Project would generate approximately 116,289 average daily trips. |

| | |
|---|---|
| Operations: Hearths | The proposed project would not include any wood burning fireplaces or wood stoves. |
| Land Use | The Modified Project would include 809 single family residential units, 8,647 multi-family housing units, 241 hotel rooms (72,000 sq ft), 1,085,190 sq ft of community commercial uses, 1,620,700 sq ft of office uses, 791 continuing care/senior housing units (471,000 sq ft), a high school with 1,784 students, 91 acres of passive park space, and 45 acres of active park space. Using default lot acreages. |
| Construction: Construction Phases | The project buildout year is assumed to be 2045. Additionally, this analysis assumes that project construction activities could occur anytime beginning January 2025. The project would not include any demolition activities and architectural coating activities would overlap with building construction. |

# Tustin Legacy Specific Plan - Approved Project Custom Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Tustin Legacy Specific Plan - Approved Project |
| Construction Start Date | 1/6/2025 |
| Operational Year | 2045 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.50 |
| Precipitation (days) | 19.6 |
| Location | 33.71064826138891, -117.82125522627334 |
| County | Orange |
| City | Tustin |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 6824 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.23 |

## 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 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 4,486 | Dwelling Unit | 118 | 4,306,560 | 0.00 | — | 13,368 | — |
| Hotel | 550 | Room | 18.3 | 165,600 | 0.00 | — | — | — |
| Strip Mall | 95.2 | 1000sqft | 2.19 | 95,200 | 0.00 | — | — | — |
| Regional Shopping Center | 1,568 | 1000sqft | 36.0 | 1,568,090 | 0.00 | — | — | — |
| General Office Building | 420 | 1000sqft | 9.64 | 420,000 | 0.00 | — | — | — |
| Retirement Community | 404 | Dwelling Unit | 80.8 | 1,000,000 | 0.00 | — | 1,204 | — |
| High School | 1,784 | Student | 5.43 | 236,667 | 0.00 | 0.00 | — | — |
| City Park | 136 | Acre | 136 | 0.00 | 0.00 | 0.00 | — | — |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

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

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 37.8 | 42.4 | 188 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 64,339 | 64,339 | 1.88 | 4.58 | 65,928 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 38.0 | 43.7 | 168 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 62,437 | 62,437 | 1.95 | 4.58 | 63,855 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 26.9 | 30.5 | 118 | 0.13 | 0.20 | 38.7 | 38.9 | 0.19 | 9.25 | 9.45 | — | 44,230 | 44,230 | 1.40 | 3.28 | 45,291 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.91 | 5.56 | 21.6 | 0.02 | 0.04 | 7.07 | 7.11 | 0.04 | 1.69 | 1.72 | — | 7,323 | 7,323 | 0.23 | 0.54 | 7,499 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.87 | 19.5 | 36.2 | 0.06 | 0.18 | 7.83 | 7.93 | 0.18 | 3.98 | 4.08 | — | 6,789 | 6,789 | 0.27 | 0.06 | 6,815 |
| 2026 | 0.86 | 19.5 | 36.1 | 0.06 | 0.18 | 3.78 | 3.96 | 0.18 | 1.47 | 1.65 | — | 6,785 | 6,785 | 0.27 | 0.06 | 6,811 |
| 2027 | 12.8 | 42.4 | 188 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 64,339 | 64,339 | 1.88 | 4.58 | 65,928 |
| 2028 | 12.4 | 40.1 | 178 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 63,119 | 63,119 | 1.84 | 3.31 | 64,311 |
| 2029 | 12.0 | 39.1 | 169 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 61,890 | 61,890 | 1.84 | 3.31 | 63,065 |
| 2030 | 11.5 | 37.0 | 161 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 60,657 | 60,657 | 1.58 | 3.15 | 61,762 |
| 2031 | 10.9 | 36.1 | 153 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 59,418 | 59,418 | 1.56 | 3.15 | 60,506 |
| 2032 | 10.6 | 34.0 | 146 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 58,193 | 58,193 | 1.56 | 2.99 | 59,220 |
| 2033 | 10.2 | 33.2 | 140 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 57,040 | 57,040 | 1.40 | 2.99 | 58,050 |
| 2034 | 9.79 | 32.5 | 135 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 55,972 | 55,972 | 1.29 | 2.83 | 56,921 |
| 2035 | 9.81 | 31.7 | 130 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 54,974 | 54,974 | 1.29 | 2.83 | 55,912 |
| 2036 | 9.51 | 31.1 | 125 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 53,998 | 53,998 | 1.29 | 2.68 | 54,880 |
| 2037 | 37.8 | 31.3 | 143 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 60,309 | 60,309 | 1.37 | 2.73 | 61,209 |
| 2038 | 37.4 | 30.7 | 138 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 59,359 | 59,359 | 1.19 | 2.58 | 60,200 |
| 2039 | 35.4 | 30.3 | 136 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 58,669 | 58,669 | 1.19 | 2.58 | 59,502 |
| 2040 | 35.3 | 30.0 | 132 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 58,053 | 58,053 | 1.07 | 2.58 | 58,878 |
| 2041 | 34.7 | 29.6 | 130 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 57,509 | 57,509 | 1.05 | 2.46 | 58,294 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2042 | 34.6 | 29.4 | 128 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 57,026 | 57,026 | 1.05 | 2.30 | 57,760 |
| 2043 | 34.3 | 29.2 | 126 | 0.18 | 0.28 | 54.6 | 54.9 | 0.27 | 13.1 | 13.4 | — | 56,604 | 56,604 | 1.05 | 2.30 | 57,334 |
| 2044 | 28.2 | 9.08 | 29.0 | 0.02 | 0.12 | 8.26 | 8.38 | 0.11 | 1.94 | 2.05 | — | 8,495 | 8,495 | 0.13 | 0.05 | 8,516 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.87 | 19.5 | 36.1 | 0.06 | 0.18 | 7.83 | 7.93 | 0.18 | 3.98 | 4.08 | — | 6,780 | 6,780 | 0.27 | 0.06 | 6,805 |
| 2026 | 0.86 | 19.5 | 36.0 | 0.06 | 0.18 | 3.78 | 3.96 | 0.18 | 1.47 | 1.65 | — | 6,776 | 6,776 | 0.27 | 0.06 | 6,801 |
| 2027 | 12.7 | 43.7 | 168 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 62,437 | 62,437 | 1.95 | 4.58 | 63,855 |
| 2028 | 12.3 | 42.6 | 160 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 61,254 | 61,254 | 1.95 | 4.58 | 62,671 |
| 2029 | 11.8 | 40.3 | 151 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 60,059 | 60,059 | 1.84 | 4.58 | 61,473 |
| 2030 | 11.4 | 39.3 | 144 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 58,858 | 58,858 | 1.68 | 3.15 | 59,843 |
| 2031 | 10.8 | 37.2 | 137 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 57,649 | 57,649 | 1.66 | 3.15 | 58,633 |
| 2032 | 10.5 | 36.3 | 132 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 56,451 | 56,451 | 1.56 | 2.99 | 57,385 |
| 2033 | 10.2 | 35.5 | 126 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 55,322 | 55,322 | 1.40 | 2.99 | 56,251 |
| 2034 | 9.87 | 33.5 | 121 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 54,274 | 54,274 | 1.38 | 2.83 | 55,155 |
| 2035 | 9.58 | 32.8 | 117 | 0.18 | 0.25 | 46.6 | 46.9 | 0.24 | 11.2 | 11.4 | — | 53,295 | 53,295 | 1.38 | 2.83 | 54,175 |
| 2036 | 38.0 | 34.4 | 133 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 59,187 | 59,187 | 1.37 | 2.73 | 60,037 |
| 2037 | 37.8 | 33.8 | 128 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 58,328 | 58,328 | 1.35 | 2.73 | 59,178 |
| 2038 | 35.8 | 33.2 | 124 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 57,401 | 57,401 | 1.19 | 2.58 | 58,200 |
| 2039 | 35.3 | 31.2 | 122 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 56,723 | 56,723 | 1.19 | 2.58 | 57,521 |
| 2040 | 35.1 | 31.0 | 119 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 56,117 | 56,117 | 1.19 | 2.58 | 56,916 |
| 2041 | 34.8 | 30.6 | 117 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 55,584 | 55,584 | 1.17 | 2.58 | 56,382 |
| 2042 | 34.5 | 30.2 | 115 | 0.18 | 0.28 | 54.8 | 55.0 | 0.27 | 13.1 | 13.4 | — | 55,111 | 55,111 | 1.17 | 2.42 | 55,861 |
| 2043 | 34.3 | 30.0 | 113 | 0.18 | 0.28 | 54.6 | 54.9 | 0.27 | 13.1 | 13.4 | — | 54,695 | 54,695 | 1.05 | 2.42 | 55,442 |
| 2044 | 28.2 | 9.12 | 26.6 | 0.02 | 0.12 | 8.26 | 8.38 | 0.11 | 1.94 | 2.05 | — | 8,169 | 8,169 | 0.13 | 0.07 | 8,194 |
| 2045 | 27.9 | 1.88 | 15.7 | < 0.005 | 0.03 | 8.12 | 8.15 | 0.03 | 1.90 | 1.93 | — | 6,530 | 6,530 | 0.06 | 0.06 | 6,549 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 0.54 | 11.7 | 22.3 | 0.04 | 0.09 | 4.44 | 4.53 | 0.09 | 2.13 | 2.23 | — | 4,197 | 4,197 | 0.17 | 0.04 | 4,212 |
| 2026 | 0.62 | 13.9 | 25.8 | 0.04 | 0.13 | 2.70 | 2.83 | 0.13 | 1.05 | 1.18 | — | 4,842 | 4,842 | 0.19 | 0.04 | 4,860 |
| 2027 | 7.05 | 27.7 | 100 | 0.11 | 0.16 | 25.7 | 25.9 | 0.16 | 6.25 | 6.41 | — | 35,371 | 35,371 | 1.11 | 2.50 | 36,186 |
| 2028 | 8.89 | 30.5 | 118 | 0.13 | 0.18 | 33.0 | 33.2 | 0.17 | 7.91 | 8.08 | — | 44,230 | 44,230 | 1.40 | 3.28 | 45,291 |
| 2029 | 8.37 | 28.8 | 112 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 43,249 | 43,249 | 1.31 | 3.27 | 44,300 |
| 2030 | 8.16 | 28.1 | 107 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 42,385 | 42,385 | 1.20 | 2.25 | 43,124 |
| 2031 | 7.75 | 26.6 | 101 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 41,515 | 41,515 | 1.18 | 2.25 | 42,249 |
| 2032 | 7.50 | 26.0 | 97.4 | 0.13 | 0.18 | 33.0 | 33.2 | 0.17 | 7.91 | 8.08 | — | 40,765 | 40,765 | 1.12 | 2.14 | 41,462 |
| 2033 | 7.27 | 25.3 | 93.2 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 39,843 | 39,843 | 1.00 | 2.14 | 40,531 |
| 2034 | 7.00 | 23.8 | 89.6 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 39,091 | 39,091 | 0.99 | 2.02 | 39,741 |
| 2035 | 6.86 | 23.4 | 85.9 | 0.13 | 0.18 | 32.9 | 33.1 | 0.17 | 7.89 | 8.06 | — | 38,387 | 38,387 | 0.99 | 2.02 | 39,034 |
| 2036 | 7.37 | 23.0 | 84.0 | 0.13 | 0.18 | 33.2 | 33.3 | 0.17 | 7.95 | 8.12 | — | 37,939 | 37,939 | 0.92 | 1.92 | 38,550 |
| 2037 | 26.9 | 24.1 | 94.4 | 0.13 | 0.20 | 38.6 | 38.8 | 0.19 | 9.23 | 9.42 | — | 42,040 | 42,040 | 0.96 | 1.95 | 42,662 |
| 2038 | 25.6 | 23.6 | 92.5 | 0.13 | 0.20 | 38.6 | 38.8 | 0.19 | 9.23 | 9.42 | — | 41,373 | 41,373 | 0.85 | 1.84 | 41,956 |
| 2039 | 25.3 | 22.2 | 89.6 | 0.13 | 0.20 | 38.6 | 38.8 | 0.19 | 9.23 | 9.42 | — | 40,886 | 40,886 | 0.85 | 1.84 | 41,467 |
| 2040 | 25.1 | 22.1 | 88.2 | 0.13 | 0.20 | 38.7 | 38.9 | 0.19 | 9.25 | 9.45 | — | 40,564 | 40,564 | 0.85 | 1.84 | 41,144 |
| 2041 | 24.8 | 21.7 | 86.5 | 0.13 | 0.20 | 38.6 | 38.8 | 0.19 | 9.23 | 9.42 | — | 40,070 | 40,070 | 0.83 | 1.84 | 40,647 |
| 2042 | 24.7 | 21.5 | 84.9 | 0.13 | 0.20 | 38.6 | 38.8 | 0.19 | 9.23 | 9.42 | — | 39,729 | 39,729 | 0.83 | 1.73 | 40,271 |
| 2043 | 21.6 | 11.4 | 40.7 | 0.05 | 0.12 | 16.7 | 16.8 | 0.12 | 3.97 | 4.09 | — | 17,018 | 17,018 | 0.31 | 0.61 | 17,209 |
| 2044 | 20.1 | 3.84 | 15.5 | 0.01 | 0.05 | 5.79 | 5.84 | 0.05 | 1.36 | 1.40 | — | 5,311 | 5,311 | 0.07 | 0.05 | 5,327 |
| 2045 | 0.33 | 0.02 | 0.19 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.02 | 0.02 | — | 77.7 | 77.7 | < 0.005 | < 0.005 | 77.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.10 | 2.13 | 4.07 | 0.01 | 0.02 | 0.81 | 0.83 | 0.02 | 0.39 | 0.41 | — | 695 | 695 | 0.03 | 0.01 | 697 |
| 2026 | 0.11 | 2.54 | 4.70 | 0.01 | 0.02 | 0.49 | 0.52 | 0.02 | 0.19 | 0.21 | — | 802 | 802 | 0.03 | 0.01 | 805 |
| 2027 | 1.29 | 5.06 | 18.3 | 0.02 | 0.03 | 4.69 | 4.72 | 0.03 | 1.14 | 1.17 | — | 5,856 | 5,856 | 0.18 | 0.41 | 5,991 |
| 2028 | 1.62 | 5.56 | 21.6 | 0.02 | 0.03 | 6.02 | 6.05 | 0.03 | 1.44 | 1.48 | — | 7,323 | 7,323 | 0.23 | 0.54 | 7,499 |
| 2029 | 1.53 | 5.25 | 20.4 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 7,160 | 7,160 | 0.22 | 0.54 | 7,334 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2030 | 1.49 | 5.13 | 19.5 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 7,017 | 7,017 | 0.20 | 0.37 | 7,140 |
| 2031 | 1.41 | 4.86 | 18.4 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 6,873 | 6,873 | 0.20 | 0.37 | 6,995 |
| 2032 | 1.37 | 4.74 | 17.8 | 0.02 | 0.03 | 6.02 | 6.05 | 0.03 | 1.44 | 1.48 | — | 6,749 | 6,749 | 0.19 | 0.36 | 6,865 |
| 2033 | 1.33 | 4.61 | 17.0 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 6,596 | 6,596 | 0.17 | 0.35 | 6,710 |
| 2034 | 1.28 | 4.34 | 16.3 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 6,472 | 6,472 | 0.16 | 0.34 | 6,580 |
| 2035 | 1.25 | 4.26 | 15.7 | 0.02 | 0.03 | 6.01 | 6.04 | 0.03 | 1.44 | 1.47 | — | 6,355 | 6,355 | 0.16 | 0.34 | 6,462 |
| 2036 | 1.34 | 4.20 | 15.3 | 0.02 | 0.03 | 6.05 | 6.08 | 0.03 | 1.45 | 1.48 | — | 6,281 | 6,281 | 0.15 | 0.32 | 6,382 |
| 2037 | 4.91 | 4.39 | 17.2 | 0.02 | 0.04 | 7.05 | 7.09 | 0.04 | 1.68 | 1.72 | — | 6,960 | 6,960 | 0.16 | 0.32 | 7,063 |
| 2038 | 4.67 | 4.30 | 16.9 | 0.02 | 0.04 | 7.05 | 7.09 | 0.04 | 1.68 | 1.72 | — | 6,850 | 6,850 | 0.14 | 0.30 | 6,946 |
| 2039 | 4.62 | 4.05 | 16.4 | 0.02 | 0.04 | 7.05 | 7.09 | 0.04 | 1.68 | 1.72 | — | 6,769 | 6,769 | 0.14 | 0.30 | 6,865 |
| 2040 | 4.58 | 4.03 | 16.1 | 0.02 | 0.04 | 7.07 | 7.11 | 0.04 | 1.69 | 1.72 | — | 6,716 | 6,716 | 0.14 | 0.31 | 6,812 |
| 2041 | 4.53 | 3.96 | 15.8 | 0.02 | 0.04 | 7.05 | 7.09 | 0.04 | 1.68 | 1.72 | — | 6,634 | 6,634 | 0.14 | 0.30 | 6,730 |
| 2042 | 4.50 | 3.93 | 15.5 | 0.02 | 0.04 | 7.05 | 7.09 | 0.04 | 1.68 | 1.72 | — | 6,578 | 6,578 | 0.14 | 0.29 | 6,667 |
| 2043 | 3.94 | 2.08 | 7.43 | 0.01 | 0.02 | 3.04 | 3.06 | 0.02 | 0.72 | 0.75 | — | 2,818 | 2,818 | 0.05 | 0.10 | 2,849 |
| 2044 | 3.66 | 0.70 | 2.83 | < 0.005 | 0.01 | 1.06 | 1.07 | 0.01 | 0.25 | 0.26 | — | 879 | 879 | 0.01 | 0.01 | 882 |
| 2045 | 0.06 | < 0.005 | 0.04 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 12.9 | 12.9 | < 0.005 | < 0.005 | 12.9 |

## 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. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 444 | 201 | 1,902 | 4.57 | 9.10 | 463 | 472 | 8.93 | 117 | 126 | 4,649 | 593,114 | 597,762 | 492 | 18.6 | 616,006 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 403 | 207 | 1,438 | 4.40 | 8.78 | 463 | 471 | 8.69 | 117 | 126 | 4,649 | 576,229 | 580,878 | 492 | 19.4 | 599,266 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 400 | 129 | 1,498 | 3.45 | 3.59 | 385 | 389 | 3.46 | 97.8 | 101 | 4,649 | 437,668 | 442,316 | 488 | 16.8 | 459,888 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 72.9 | 23.6 | 273 | 0.63 | 0.66 | 70.3 | 71.0 | 0.63 | 17.8 | 18.5 | 770 | 72,461 | 73,230 | 80.8 | 2.79 | 76,140 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 215 | 106 | 1,473 | 3.97 | 1.44 | 463 | 464 | 1.34 | 117 | 119 | — | 404,714 | 404,714 | 16.3 | 16.0 | 409,975 |
| Area | 228 | 72.4 | 416 | 0.46 | 5.89 | — | 5.89 | 5.81 | — | 5.81 | 0.00 | 90,114 | 90,114 | 1.79 | 0.19 | 90,214 |
| Energy | 1.28 | 22.4 | 12.9 | 0.14 | 1.77 | — | 1.77 | 1.77 | — | 1.77 | — | 94,285 | 94,285 | 6.58 | 0.55 | 94,614 |
| Water | — | — | — | — | — | — | — | — | — | — | 773 | 4,000 | 4,773 | 79.5 | 1.91 | 7,329 |
| Waste | — | — | — | — | — | — | — | — | — | — | 3,876 | 0.00 | 3,876 | 387 | 0.00 | 13,561 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 312 |
| Total | 444 | 201 | 1,902 | 4.57 | 9.10 | 463 | 472 | 8.93 | 117 | 126 | 4,649 | 593,114 | 597,762 | 492 | 18.6 | 616,006 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 216 | 116 | 1,396 | 3.82 | 1.44 | 463 | 464 | 1.34 | 117 | 119 | — | 389,016 | 389,016 | 17.0 | 16.7 | 394,425 |
| Area | 186 | 68.9 | 29.3 | 0.44 | 5.57 | — | 5.57 | 5.57 | — | 5.57 | 0.00 | 88,928 | 88,928 | 1.74 | 0.18 | 89,024 |
| Energy | 1.28 | 22.4 | 12.9 | 0.14 | 1.77 | — | 1.77 | 1.77 | — | 1.77 | — | 94,285 | 94,285 | 6.58 | 0.55 | 94,614 |
| Water | — | — | — | — | — | — | — | — | — | — | 773 | 4,000 | 4,773 | 79.5 | 1.91 | 7,329 |
| Waste | — | — | — | — | — | — | — | — | — | — | 3,876 | 0.00 | 3,876 | 387 | 0.00 | 13,561 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 312 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 403 | 207 | 1,438 | 4.40 | 8.78 | 463 | 471 | 8.69 | 117 | 126 | 4,649 | 576,229 | 580,878 | 492 | 19.4 | 599,266 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 187 | 99.9 | 1,218 | 3.26 | 1.22 | 385 | 387 | 1.14 | 97.8 | 98.9 | — | 332,479 | 332,479 | 14.6 | 14.4 | 337,158 |
| Area | 211 | 7.10 | 267 | 0.04 | 0.60 | — | 0.60 | 0.55 | — | 0.55 | 0.00 | 6,903 | 6,903 | 0.15 | 0.02 | 6,913 |
| Energy | 1.28 | 22.4 | 12.9 | 0.14 | 1.77 | — | 1.77 | 1.77 | — | 1.77 | — | 94,285 | 94,285 | 6.58 | 0.55 | 94,614 |
| Water | — | — | — | — | — | — | — | — | — | — | 773 | 4,000 | 4,773 | 79.5 | 1.91 | 7,329 |
| Waste | — | — | — | — | — | — | — | — | — | — | 3,876 | 0.00 | 3,876 | 387 | 0.00 | 13,561 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 312 |
| Total | 400 | 129 | 1,498 | 3.45 | 3.59 | 385 | 389 | 3.46 | 97.8 | 101 | 4,649 | 437,668 | 442,316 | 488 | 16.8 | 459,888 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 34.2 | 18.2 | 222 | 0.60 | 0.22 | 70.3 | 70.6 | 0.21 | 17.8 | 18.1 | — | 55,046 | 55,046 | 2.42 | 2.38 | 55,820 |
| Area | 38.5 | 1.30 | 48.7 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | 0.00 | 1,143 | 1,143 | 0.03 | < 0.005 | 1,145 |
| Energy | 0.23 | 4.09 | 2.36 | 0.03 | 0.32 | — | 0.32 | 0.32 | — | 0.32 | — | 15,610 | 15,610 | 1.09 | 0.09 | 15,665 |
| Water | — | — | — | — | — | — | — | — | — | — | 128 | 662 | 790 | 13.2 | 0.32 | 1,213 |
| Waste | — | — | — | — | — | — | — | — | — | — | 642 | 0.00 | 642 | 64.1 | 0.00 | 2,245 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 51.7 |
| Total | 72.9 | 23.6 | 273 | 0.63 | 0.66 | 70.3 | 71.0 | 0.63 | 17.8 | 18.5 | 770 | 72,461 | 73,230 | 80.8 | 2.79 | 76,140 |

# 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.64 | 14.7 | 28.3 | 0.05 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 5,295 | 5,295 | 0.21 | 0.04 | 5,314 |
| Dust From Material Movement | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64 | 14.7 | 28.3 | 0.05 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 5,295 | 5,295 | 0.21 | 0.04 | 5,314 |
| Dust From Material Movement | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28 | 6.46 | 12.4 | 0.02 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 2,321 | 2,321 | 0.09 | 0.02 | 2,329 |
| Dust From Material Movement | — | — | — | — | — | 3.36 | 3.36 | — | 1.73 | 1.73 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 1.18 | 2.26 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 384 | 384 | 0.02 | < 0.005 | 386 |
| Dust From Material Movement | — | — | — | — | — | 0.61 | 0.61 | — | 0.32 | 0.32 | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.73 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.04 | 0.04 | — | 166 | 166 | < 0.005 | 0.01 | 169 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.65 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.04 | 0.04 | — | 158 | 158 | < 0.005 | 0.01 | 160 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.29 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 70.4 | 70.4 | < 0.005 | < 0.005 | 71.4 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.05 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 11.7 | 11.7 | < 0.005 | < 0.005 | 11.8 |
| 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 |
| 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 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,622 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,622 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 5.17 | 9.41 | 0.02 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 1,756 | 1,756 | 0.07 | 0.01 | 1,762 |
| Dust From Material Movement | — | — | — | — | — | 0.96 | 0.96 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.94 | 1.72 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 291 | 291 | 0.01 | < 0.005 | 292 |
| Dust From Material Movement | — | — | — | — | — | 0.17 | 0.17 | — | 0.07 | 0.07 | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.05 | 0.84 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 190 | 190 | < 0.005 | 0.01 | 193 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.74 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 181 | 181 | < 0.005 | 0.01 | 183 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.20 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 48.9 | 48.9 | < 0.005 | < 0.005 | 49.5 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.09 | 8.09 | < 0.005 | < 0.005 | 8.20 |
| 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 |
| 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 |

## 3.5. Grading (2026) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,599 | 6,599 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.57 | 13.9 | 25.2 | 0.04 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 4,713 | 4,713 | 0.19 | 0.04 | 4,729 |
| Dust From Material Movement | — | — | — | — | — | 2.56 | 2.56 | — | 1.02 | 1.02 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 2.53 | 4.61 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 780 | 780 | 0.03 | 0.01 | 783 |
| Dust From Material Movement | — | — | — | — | — | 0.47 | 0.47 | — | 0.19 | 0.19 | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.79 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 187 | 187 | < 0.005 | 0.01 | 189 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.69 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 178 | 178 | < 0.005 | 0.01 | 180 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.51 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 129 | 129 | < 0.005 | 0.01 | 130 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | — | 21.3 | 21.3 | < 0.005 | < 0.005 | 21.6 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.7. Grading (2027) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80 | 19.4 | 35.3 | 0.06 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 6,598 | 6,598 | 0.27 | 0.05 | 6,621 |
| Dust From Material Movement | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13 | 3.23 | 5.88 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,098 | 1,098 | 0.04 | 0.01 | 1,101 |
| Dust From Material Movement | — | — | — | — | — | 0.60 | 0.60 | — | 0.24 | 0.24 | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.59 | 1.07 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 182 | 182 | 0.01 | < 0.005 | 182 |
| Dust From Material Movement | — | — | — | — | — | 0.11 | 0.11 | — | 0.04 | 0.04 | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.65 | 0.00 | 0.00 | 0.19 | 0.19 | 0.00 | 0.04 | 0.04 | — | 175 | 175 | < 0.005 | 0.01 | 177 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.11 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29.5 | 29.5 | < 0.005 | < 0.005 | 29.9 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.88 | 4.88 | < 0.005 | < 0.005 | 4.94 |
| 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 |
| 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 |

## 3.9. Building Construction (2027) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 4.75 | 7.78 | 0.01 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 1,304 | 1,304 | 0.05 | 0.01 | 1,309 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03 | 0.87 | 1.42 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 216 | 216 | 0.01 | < 0.005 | 217 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9 | 10.0 | 161 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 39,970 | 39,970 | 0.58 | 1.55 | 40,574 |
| Vendor | 0.55 | 23.7 | 12.3 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 21,972 | 21,972 | 1.20 | 3.00 | 22,949 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.8 | 10.3 | 141 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 38,053 | 38,053 | 0.67 | 1.55 | 38,536 |
| Vendor | 0.53 | 24.7 | 12.6 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 21,987 | 21,987 | 1.18 | 3.00 | 22,913 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.44 | 6.23 | 79.9 | 0.00 | 0.00 | 21.8 | 21.8 | 0.00 | 5.11 | 5.11 | — | 20,983 | 20,983 | 0.37 | 0.85 | 21,274 |
| Vendor | 0.30 | 13.5 | 6.78 | 0.09 | 0.09 | 3.25 | 3.34 | 0.09 | 0.90 | 0.99 | — | 11,957 | 11,957 | 0.64 | 1.63 | 12,472 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.17 | 1.14 | 14.6 | 0.00 | 0.00 | 3.98 | 3.98 | 0.00 | 0.93 | 0.93 | — | 3,474 | 3,474 | 0.06 | 0.14 | 3,522 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.05 | 2.46 | 1.24 | 0.02 | 0.02 | 0.59 | 0.61 | 0.02 | 0.16 | 0.18 | — | 1,980 | 1,980 | 0.11 | 0.27 | 2,065 |
| 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 |

## 3.11. Building Construction (2028) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,406 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,406 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.5 | 8.64 | 152 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 39,257 | 39,257 | 0.58 | 0.29 | 39,470 |
| Vendor | 0.53 | 22.8 | 12.0 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 21,465 | 21,465 | 1.16 | 3.00 | 22,436 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.4 | 10.1 | 133 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 37,376 | 37,376 | 0.67 | 1.55 | 37,859 |
| Vendor | 0.53 | 23.8 | 12.3 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 21,481 | 21,481 | 1.18 | 3.00 | 22,407 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.27 | 7.23 | 99.3 | 0.00 | 0.00 | 28.7 | 28.7 | 0.00 | 6.72 | 6.72 | — | 27,134 | 27,134 | 0.48 | 1.11 | 27,513 |
| Vendor | 0.39 | 17.0 | 8.67 | 0.11 | 0.11 | 4.28 | 4.40 | 0.11 | 1.19 | 1.30 | — | 15,379 | 15,379 | 0.85 | 2.15 | 16,056 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.51 | 1.32 | 18.1 | 0.00 | 0.00 | 5.24 | 5.24 | 0.00 | 1.23 | 1.23 | — | 4,492 | 4,492 | 0.08 | 0.18 | 4,555 |
| Vendor | 0.07 | 3.10 | 1.58 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,546 | 2,546 | 0.14 | 0.36 | 2,658 |
| 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 |

## 3.13. Building Construction (2029) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.2 | 8.54 | 143 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 38,594 | 38,594 | 0.58 | 0.29 | 38,794 |
| Vendor | 0.53 | 21.8 | 11.6 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 20,900 | 20,900 | 1.16 | 3.00 | 21,866 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0 | 8.74 | 125 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 36,746 | 36,746 | 0.58 | 1.55 | 37,227 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.51 | 22.8 | 11.9 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 20,916 | 20,916 | 1.16 | 3.00 | 21,841 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.77 | 6.24 | 93.3 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 26,604 | 26,604 | 0.41 | 1.11 | 26,976 |
| Vendor | 0.38 | 16.3 | 8.37 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 14,933 | 14,933 | 0.83 | 2.15 | 15,606 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.42 | 1.14 | 17.0 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,405 | 4,405 | 0.07 | 0.18 | 4,466 |
| Vendor | 0.07 | 2.97 | 1.53 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,472 | 2,472 | 0.14 | 0.36 | 2,584 |
| 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 |

## 3.15. Building Construction (2030) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.7 | 7.18 | 136 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 37,975 | 37,975 | 0.48 | 0.29 | 38,162 |
| Vendor | 0.53 | 21.0 | 11.2 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 20,285 | 20,285 | 1.00 | 2.85 | 21,195 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.6 | 8.64 | 118 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 36,159 | 36,159 | 0.58 | 0.29 | 36,262 |
| Vendor | 0.51 | 21.9 | 11.5 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 20,302 | 20,302 | 1.00 | 2.85 | 21,176 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.56 | 6.17 | 88.5 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 26,178 | 26,178 | 0.41 | 0.21 | 26,277 |
| Vendor | 0.38 | 15.7 | 8.10 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 14,494 | 14,494 | 0.72 | 2.03 | 15,129 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.38 | 1.13 | 16.2 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,334 | 4,334 | 0.07 | 0.03 | 4,350 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.07 | 2.87 | 1.48 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,400 | 2,400 | 0.12 | 0.34 | 2,505 |
| 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 |

## 3.17. Building Construction (2031) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.1 | 7.08 | 128 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 37,410 | 37,410 | 0.48 | 0.29 | 37,586 |
| Vendor | 0.53 | 20.3 | 10.8 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 19,611 | 19,611 | 0.98 | 2.85 | 20,516 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.0 | 7.28 | 112 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 35,624 | 35,624 | 0.58 | 0.29 | 35,726 |
| Vendor | 0.51 | 21.2 | 11.1 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 19,628 | 19,628 | 0.98 | 2.85 | 20,501 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.15 | 5.20 | 83.0 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 25,790 | 25,790 | 0.41 | 0.21 | 25,885 |
| Vendor | 0.38 | 15.2 | 7.85 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 14,013 | 14,013 | 0.70 | 2.03 | 14,646 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.30 | 0.95 | 15.1 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,270 | 4,270 | 0.07 | 0.03 | 4,286 |
| Vendor | 0.07 | 2.77 | 1.43 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,320 | 2,320 | 0.12 | 0.34 | 2,425 |
| 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 |

## 3.19. Building Construction (2032) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.72 | 5.72 | 122 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 36,869 | 36,869 | 0.48 | 0.29 | 37,035 |
| Vendor | 0.53 | 19.5 | 10.5 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 18,928 | 18,928 | 0.98 | 2.69 | 19,781 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.72 | 7.18 | 107 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 35,109 | 35,109 | 0.48 | 0.29 | 35,208 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.51 | 20.4 | 10.8 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 18,945 | 18,945 | 0.98 | 2.69 | 19,771 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.89 | 5.14 | 79.5 | 0.00 | 0.00 | 28.7 | 28.7 | 0.00 | 6.72 | 6.72 | — | 25,487 | 25,487 | 0.34 | 0.21 | 25,578 |
| Vendor | 0.38 | 14.6 | 7.61 | 0.11 | 0.11 | 4.28 | 4.40 | 0.11 | 1.19 | 1.30 | — | 13,562 | 13,562 | 0.70 | 1.92 | 14,162 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.26 | 0.94 | 14.5 | 0.00 | 0.00 | 5.24 | 5.24 | 0.00 | 1.23 | 1.23 | — | 4,220 | 4,220 | 0.06 | 0.03 | 4,235 |
| Vendor | 0.07 | 2.66 | 1.39 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,245 | 2,245 | 0.12 | 0.32 | 2,345 |
| 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 |

## 3.21. Building Construction (2033) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.33 | 5.72 | 116 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 36,408 | 36,408 | 0.48 | 0.29 | 36,565 |
| Vendor | 0.53 | 18.8 | 10.1 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 18,235 | 18,235 | 0.83 | 2.69 | 19,080 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.33 | 7.08 | 102 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,672 | 34,672 | 0.48 | 0.29 | 34,771 |
| Vendor | 0.51 | 19.7 | 10.4 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 18,253 | 18,253 | 0.83 | 2.69 | 19,075 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.67 | 5.06 | 75.7 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 25,100 | 25,100 | 0.34 | 0.21 | 25,189 |
| Vendor | 0.38 | 14.0 | 7.32 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 13,031 | 13,031 | 0.59 | 1.92 | 13,624 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.22 | 0.92 | 13.8 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,156 | 4,156 | 0.06 | 0.03 | 4,170 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.07 | 2.55 | 1.34 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,157 | 2,157 | 0.10 | 0.32 | 2,256 |
| 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 |

## 3.23. Building Construction (2034) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.95 | 5.63 | 111 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 35,995 | 35,995 | 0.38 | 0.29 | 36,142 |
| Vendor | 0.53 | 18.2 | 9.95 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 17,581 | 17,581 | 0.80 | 2.53 | 18,374 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.05 | 5.82 | 96.6 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,278 | 34,278 | 0.48 | 0.29 | 34,377 |
| Vendor | 0.51 | 18.9 | 10.2 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 17,599 | 17,599 | 0.80 | 2.53 | 18,373 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.39 | 4.09 | 72.2 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 24,816 | 24,816 | 0.34 | 0.21 | 24,902 |
| Vendor | 0.38 | 13.4 | 7.19 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 12,563 | 12,563 | 0.57 | 1.81 | 13,122 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.17 | 0.75 | 13.2 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,109 | 4,109 | 0.06 | 0.03 | 4,123 |
| Vendor | 0.07 | 2.45 | 1.31 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,080 | 2,080 | 0.10 | 0.30 | 2,172 |
| 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 |

## 3.25. Building Construction (2035) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.95 | 5.53 | 106 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 35,628 | 35,628 | 0.38 | 0.29 | 35,768 |
| Vendor | 0.55 | 17.4 | 9.61 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 16,949 | 16,949 | 0.80 | 2.53 | 17,739 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.76 | 5.72 | 93.0 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 33,930 | 33,930 | 0.48 | 0.29 | 34,029 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.51 | 18.3 | 9.85 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 16,967 | 16,967 | 0.80 | 2.53 | 17,741 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.26 | 4.09 | 68.8 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 24,563 | 24,563 | 0.34 | 0.21 | 24,646 |
| Vendor | 0.38 | 13.0 | 6.94 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 12,112 | 12,112 | 0.57 | 1.81 | 12,669 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.14 | 0.75 | 12.5 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 4,067 | 4,067 | 0.06 | 0.03 | 4,080 |
| Vendor | 0.07 | 2.38 | 1.27 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 2,005 | 2,005 | 0.10 | 0.30 | 2,098 |
| 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 |

## 3.27. Building Construction (2036) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.66 | 5.53 | 102 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 35,262 | 35,262 | 0.38 | 0.29 | 35,396 |
| Vendor | 0.53 | 16.9 | 9.41 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 16,339 | 16,339 | 0.80 | 2.37 | 17,080 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.66 | 5.72 | 89.7 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 33,582 | 33,582 | 0.38 | 0.29 | 33,678 |
| Vendor | 0.51 | 17.8 | 9.67 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 16,358 | 16,358 | 0.80 | 2.37 | 17,085 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.20 | 4.03 | 66.5 | 0.00 | 0.00 | 28.7 | 28.7 | 0.00 | 6.72 | 6.72 | — | 24,378 | 24,378 | 0.28 | 0.21 | 24,458 |
| Vendor | 0.38 | 12.7 | 6.84 | 0.11 | 0.11 | 4.28 | 4.40 | 0.11 | 1.19 | 1.30 | — | 11,709 | 11,709 | 0.58 | 1.70 | 12,233 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.13 | 0.74 | 12.1 | 0.00 | 0.00 | 5.24 | 5.24 | 0.00 | 1.23 | 1.23 | — | 4,036 | 4,036 | 0.05 | 0.03 | 4,049 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.07 | 2.31 | 1.25 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,939 | 1,939 | 0.10 | 0.28 | 2,025 |
| 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 |

## 3.29. Building Construction (2037) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.47 | 4.17 | 98.4 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,977 | 34,977 | 0.38 | 0.29 | 35,105 |
| Vendor | 0.53 | 16.5 | 9.23 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 15,807 | 15,807 | 0.80 | 2.37 | 16,544 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.47 | 5.63 | 86.3 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 33,310 | 33,310 | 0.38 | 0.29 | 33,406 |
| Vendor | 0.49 | 17.2 | 9.49 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 15,826 | 15,826 | 0.78 | 2.37 | 16,551 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.98 | 4.02 | 64.0 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 24,114 | 24,114 | 0.27 | 0.21 | 24,192 |
| Vendor | 0.36 | 12.2 | 6.69 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 11,296 | 11,296 | 0.56 | 1.69 | 11,818 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.09 | 0.73 | 11.7 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 3,992 | 3,992 | 0.05 | 0.03 | 4,005 |
| Vendor | 0.07 | 2.23 | 1.22 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,870 | 1,870 | 0.09 | 0.28 | 1,957 |
| 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 |

## 3.31. Building Construction (2038) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.09 | 4.17 | 95.3 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,624 | 34,624 | 0.38 | 0.29 | 34,747 |
| Vendor | 0.53 | 15.9 | 8.89 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 15,280 | 15,280 | 0.63 | 2.21 | 15,964 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.82 | 5.63 | 83.0 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,976 | 32,976 | 0.38 | 0.29 | 33,072 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.49 | 16.6 | 9.16 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 15,300 | 15,300 | 0.63 | 2.21 | 15,974 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.87 | 3.95 | 62.6 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 23,871 | 23,871 | 0.27 | 0.21 | 23,948 |
| Vendor | 0.36 | 11.8 | 6.44 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 10,920 | 10,920 | 0.45 | 1.58 | 11,405 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.89 | 0.72 | 11.4 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 3,952 | 3,952 | 0.05 | 0.03 | 3,965 |
| Vendor | 0.07 | 2.16 | 1.17 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,808 | 1,808 | 0.07 | 0.26 | 1,888 |
| 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 |

## 3.33. Building Construction (2039) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.43 | 4.17 | 93.5 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,407 | 34,407 | 0.38 | 0.29 | 34,526 |
| Vendor | 0.53 | 15.5 | 8.73 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,850 | 14,850 | 0.63 | 2.21 | 15,532 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.43 | 4.26 | 81.2 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,769 | 32,769 | 0.38 | 0.29 | 32,865 |
| Vendor | 0.49 | 16.3 | 8.96 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,870 | 14,870 | 0.63 | 2.21 | 15,544 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.66 | 3.04 | 60.3 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 23,722 | 23,722 | 0.27 | 0.21 | 23,797 |
| Vendor | 0.36 | 11.5 | 6.32 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 10,613 | 10,613 | 0.45 | 1.58 | 11,097 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.85 | 0.56 | 11.0 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 3,927 | 3,927 | 0.05 | 0.03 | 3,940 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.07 | 2.11 | 1.15 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,757 | 1,757 | 0.07 | 0.26 | 1,837 |
| 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 |

## 3.35. Building Construction (2040) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.26 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,717 | 1,717 | 0.07 | 0.01 | 1,723 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.87 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 284 | 284 | 0.01 | < 0.005 | 285 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.34 | 4.07 | 90.5 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,217 | 34,217 | 0.29 | 0.29 | 34,331 |
| Vendor | 0.53 | 15.3 | 8.55 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,462 | 14,462 | 0.63 | 2.21 | 15,142 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.24 | 4.26 | 79.4 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,588 | 32,588 | 0.38 | 0.29 | 32,684 |
| Vendor | 0.49 | 16.0 | 8.78 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,481 | 14,481 | 0.63 | 2.21 | 15,156 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.40 | 3.05 | 59.2 | 0.00 | 0.00 | 28.7 | 28.7 | 0.00 | 6.72 | 6.72 | — | 23,656 | 23,656 | 0.28 | 0.21 | 23,731 |
| Vendor | 0.36 | 11.4 | 6.21 | 0.11 | 0.11 | 4.28 | 4.40 | 0.11 | 1.19 | 1.30 | — | 10,364 | 10,364 | 0.45 | 1.58 | 10,849 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.80 | 0.56 | 10.8 | 0.00 | 0.00 | 5.24 | 5.24 | 0.00 | 1.23 | 1.23 | — | 3,917 | 3,917 | 0.05 | 0.03 | 3,929 |
| Vendor | 0.07 | 2.08 | 1.13 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,716 | 1,716 | 0.07 | 0.26 | 1,796 |
| 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 |

## 3.37. Building Construction (2041) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.86 | 4.07 | 88.9 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 34,054 | 34,054 | 0.29 | 0.19 | 34,135 |
| Vendor | 0.53 | 14.9 | 8.53 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,114 | 14,114 | 0.60 | 2.21 | 14,793 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.95 | 4.26 | 77.6 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,433 | 32,433 | 0.38 | 0.29 | 32,529 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.49 | 15.7 | 8.78 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 14,134 | 14,134 | 0.60 | 2.21 | 14,808 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.25 | 2.98 | 57.8 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 23,479 | 23,479 | 0.27 | 0.21 | 23,553 |
| Vendor | 0.36 | 11.1 | 6.18 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 10,087 | 10,087 | 0.43 | 1.58 | 10,570 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.78 | 0.54 | 10.6 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 3,887 | 3,887 | 0.05 | 0.03 | 3,899 |
| Vendor | 0.07 | 2.03 | 1.13 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,670 | 1,670 | 0.07 | 0.26 | 1,750 |
| 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 |

## 3.39. Building Construction (2042) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 6.24 | 10.2 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,712 | 1,712 | 0.07 | 0.01 | 1,718 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 1.14 | 1.86 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 283 | 283 | 0.01 | < 0.005 | 284 |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.76 | 4.07 | 87.3 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 33,909 | 33,909 | 0.29 | 0.19 | 33,989 |
| Vendor | 0.53 | 14.7 | 8.37 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 13,805 | 13,805 | 0.60 | 2.05 | 14,435 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.76 | 4.17 | 76.0 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,296 | 32,296 | 0.38 | 0.29 | 32,392 |
| Vendor | 0.49 | 15.4 | 8.60 | 0.16 | 0.16 | 6.05 | 6.21 | 0.16 | 1.67 | 1.83 | — | 13,825 | 13,825 | 0.60 | 2.05 | 14,451 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.12 | 2.98 | 56.6 | 0.00 | 0.00 | 28.6 | 28.6 | 0.00 | 6.71 | 6.71 | — | 23,380 | 23,380 | 0.27 | 0.21 | 23,452 |
| Vendor | 0.36 | 11.0 | 6.07 | 0.11 | 0.11 | 4.27 | 4.39 | 0.11 | 1.18 | 1.30 | — | 9,867 | 9,867 | 0.43 | 1.46 | 10,315 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.75 | 0.54 | 10.3 | 0.00 | 0.00 | 5.23 | 5.23 | 0.00 | 1.22 | 1.22 | — | 3,871 | 3,871 | 0.05 | 0.03 | 3,883 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.07 | 2.00 | 1.11 | 0.02 | 0.02 | 0.78 | 0.80 | 0.02 | 0.22 | 0.24 | — | 1,634 | 1,634 | 0.07 | 0.24 | 1,708 |
| 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 |

## 3.41. Building Construction (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 8.74 | 14.3 | 0.02 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 2,397 | 2,397 | 0.10 | 0.02 | 2,405 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 2.07 | 3.39 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 568 | 568 | 0.02 | < 0.005 | 569 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.38 | 0.62 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 94.0 | 94.0 | < 0.005 | < 0.005 | 94.3 |
| 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.57 | 4.07 | 85.7 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 33,783 | 33,783 | 0.29 | 0.19 | 33,860 |
| Vendor | 0.53 | 14.5 | 8.21 | 0.16 | 0.16 | 5.89 | 6.05 | 0.16 | 1.67 | 1.83 | — | 13,533 | 13,533 | 0.60 | 2.05 | 14,163 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.57 | 4.17 | 74.4 | 0.00 | 0.00 | 40.6 | 40.6 | 0.00 | 9.52 | 9.52 | — | 32,175 | 32,175 | 0.29 | 0.29 | 32,269 |
| Vendor | 0.49 | 15.2 | 8.44 | 0.16 | 0.16 | 5.89 | 6.05 | 0.16 | 1.67 | 1.83 | — | 13,554 | 13,554 | 0.60 | 2.05 | 14,180 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.32 | 0.99 | 18.4 | 0.00 | 0.00 | 9.49 | 9.49 | 0.00 | 2.22 | 2.22 | — | 7,721 | 7,721 | 0.07 | 0.07 | 7,745 |
| Vendor | 0.13 | 3.58 | 1.97 | 0.04 | 0.04 | 1.38 | 1.42 | 0.04 | 0.39 | 0.43 | — | 3,207 | 3,207 | 0.14 | 0.49 | 3,355 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.24 | 0.18 | 3.36 | 0.00 | 0.00 | 1.73 | 1.73 | 0.00 | 0.41 | 0.41 | — | 1,278 | 1,278 | 0.01 | 0.01 | 1,282 |
| Vendor | 0.02 | 0.65 | 0.36 | 0.01 | 0.01 | 0.25 | 0.26 | 0.01 | 0.07 | 0.08 | — | 531 | 531 | 0.02 | 0.08 | 555 |
| 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 |

## 3.43. Paving (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 3.41 | 5.02 | 0.01 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 715 | 715 | 0.03 | 0.01 | 718 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.62 | 0.92 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 118 | 118 | < 0.005 | < 0.005 | 119 |
| Paving | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.30 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 116 | 116 | < 0.005 | < 0.005 | 117 |
| 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 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.26 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 111 | 111 | < 0.005 | < 0.005 | 111 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.13 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 53.2 | 53.2 | < 0.005 | < 0.005 | 53.3 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.80 | 8.80 | < 0.005 | < 0.005 | 8.83 |
| 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 |
| 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 |

## 3.45. Paving (2044) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 7.21 | 10.6 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 1,511 | 1,511 | 0.06 | 0.01 | 1,516 |
| Paving | 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 2.48 | 3.65 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 520 | 520 | 0.02 | < 0.005 | 522 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.45 | 0.67 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 86.1 | 86.1 | < 0.005 | < 0.005 | 86.4 |
| Paving | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.29 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 116 | 116 | < 0.005 | < 0.005 | 116 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.26 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 110 | 110 | < 0.005 | < 0.005 | 111 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.09 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 38.5 | 38.5 | < 0.005 | < 0.005 | 38.7 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 6.38 | 6.38 | < 0.005 | < 0.005 | 6.40 |
| 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 |
| 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 |

## 3.47. Architectural Coating (2036) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.61 | 2.61 | < 0.005 | < 0.005 | 2.62 |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.43 | 0.43 | < 0.005 | < 0.005 | 0.43 |
| Architectural Coatings | 0.10 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.73 | 1.14 | 17.9 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,716 | 6,716 | 0.08 | 0.06 | 6,736 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.02 | 0.36 | 0.00 | 0.00 | 0.16 | 0.16 | 0.00 | 0.04 | 0.04 | — | 133 | 133 | < 0.005 | < 0.005 | 134 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.07 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 22.1 | 22.1 | < 0.005 | < 0.005 | 22.1 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |

## 3.49. Architectural Coating (2037) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.69 | 0.83 | 19.7 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,995 | 6,995 | 0.08 | 0.06 | 7,021 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.69 | 1.13 | 17.3 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,662 | 6,662 | 0.08 | 0.06 | 6,681 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.20 | 0.80 | 12.8 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,823 | 4,823 | 0.05 | 0.04 | 4,838 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.22 | 0.15 | 2.34 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 798 | 798 | 0.01 | 0.01 | 801 |
| 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 |
| 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 |

## 3.51. Architectural Coating (2038) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectu Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectu ral Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.62 | 0.83 | 19.1 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,925 | 6,925 | 0.08 | 0.06 | 6,949 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.36 | 1.13 | 16.6 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,595 | 6,595 | 0.08 | 0.06 | 6,614 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.97 | 0.79 | 12.5 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,774 | 4,774 | 0.05 | 0.04 | 4,790 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.18 | 0.14 | 2.28 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 790 | 790 | 0.01 | 0.01 | 793 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |

## 3.53. Architectural Coating (2039) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.29 | 0.83 | 18.7 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,881 | 6,881 | 0.08 | 0.06 | 6,905 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.29 | 0.85 | 16.2 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,554 | 6,554 | 0.08 | 0.06 | 6,573 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.93 | 0.61 | 12.1 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,744 | 4,744 | 0.05 | 0.04 | 4,759 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.17 | 0.11 | 2.20 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 785 | 785 | 0.01 | 0.01 | 788 |
| 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 |
| 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 |

## 3.55. Architectural Coating (2040) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.77 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.6 | 95.6 | < 0.005 | < 0.005 | 96.0 |

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| Architectu Coatings | 19.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.9 |
| Architectu ral Coatings | 3.50 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.27 | 0.81 | 18.1 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,843 | 6,843 | 0.06 | 0.06 | 6,866 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.25 | 0.85 | 15.9 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,518 | 6,518 | 0.08 | 0.06 | 6,537 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.88 | 0.61 | 11.8 | 0.00 | 0.00 | 5.74 | 5.74 | 0.00 | 1.34 | 1.34 | — | 4,731 | 4,731 | 0.06 | 0.04 | 4,746 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.16 | 0.11 | 2.16 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.25 | 0.25 | — | 783 | 783 | 0.01 | 0.01 | 786 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |

## 3.57. Architectural Coating (2041) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.17 | 0.81 | 17.8 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,811 | 6,811 | 0.06 | 0.04 | 6,827 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.19 | 0.85 | 15.5 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,487 | 6,487 | 0.08 | 0.06 | 6,506 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.85 | 0.60 | 11.6 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,696 | 4,696 | 0.05 | 0.04 | 4,711 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.16 | 0.11 | 2.11 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 777 | 777 | 0.01 | 0.01 | 780 |
| 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 |
| 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 |

## 3.59. Architectural Coating (2042) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectu Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectu ral Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.15 | 0.81 | 17.5 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,782 | 6,782 | 0.06 | 0.04 | 6,798 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.15 | 0.83 | 15.2 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,459 | 6,459 | 0.08 | 0.06 | 6,478 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.82 | 0.60 | 11.3 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,676 | 4,676 | 0.05 | 0.04 | 4,690 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.15 | 0.11 | 2.07 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 774 | 774 | 0.01 | 0.01 | 777 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |

## 3.61. Architectural Coating (2043) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.76 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.4 | 95.4 | < 0.005 | < 0.005 | 95.7 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 19.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.8 |
| Architectural Coatings | 3.49 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.11 | 0.81 | 17.1 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,757 | 6,757 | 0.06 | 0.04 | 6,772 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.11 | 0.83 | 14.9 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,435 | 6,435 | 0.06 | 0.06 | 6,454 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.80 | 0.60 | 11.1 | 0.00 | 0.00 | 5.73 | 5.73 | 0.00 | 1.34 | 1.34 | — | 4,658 | 4,658 | 0.04 | 0.04 | 4,672 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.15 | 0.11 | 2.03 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.24 | 0.24 | — | 771 | 771 | 0.01 | 0.01 | 774 |
| 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 |
| 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 |

## 3.63. Architectural Coating (2044) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.77 | 0.69 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 95.6 | 95.6 | < 0.005 | < 0.005 | 96.0 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectu Coatings | 19.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.14 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 15.9 |
| Architectu ral Coatings | 3.50 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.09 | 0.79 | 17.1 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,735 | 6,735 | 0.06 | 0.04 | 6,750 |
| 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 |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.09 | 0.83 | 14.8 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,415 | 6,415 | 0.06 | 0.06 | 6,433 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.78 | 0.58 | 11.1 | 0.00 | 0.00 | 5.74 | 5.74 | 0.00 | 1.34 | 1.34 | — | 4,656 | 4,656 | 0.04 | 0.04 | 4,670 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.14 | 0.11 | 2.02 | 0.00 | 0.00 | 1.05 | 1.05 | 0.00 | 0.25 | 0.25 | — | 771 | 771 | 0.01 | 0.01 | 773 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |

## 3.65. Architectural Coating (2045) - Unmitigated

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

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 1.07 | 0.96 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | 134 |
| Architectural Coatings | 26.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.57 | 1.57 | < 0.005 | < 0.005 | 1.57 |
| Architectural Coatings | 0.31 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | 0.26 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectu Coatings | 0.06 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.06 | 0.81 | 14.8 | 0.00 | 0.00 | 8.12 | 8.12 | 0.00 | 1.90 | 1.90 | — | 6,397 | 6,397 | 0.06 | 0.06 | 6,415 |
| 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 |
| 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 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.18 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 76.1 | 76.1 | < 0.005 | < 0.005 | 76.3 |
| 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 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | < 0.005 | < 0.005 | — | 12.6 | 12.6 | < 0.005 | < 0.005 | 12.6 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

# 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 38.3 | 19.6 | 278 | 0.77 | 0.27 | 89.7 | 90.0 | 0.26 | 22.7 | 23.0 | — | 78,148 | 78,148 | 3.00 | 2.98 | 79,131 |
| Hotel | 8.77 | 5.03 | 76.3 | 0.22 | 0.08 | 26.2 | 26.3 | 0.07 | 6.65 | 6.72 | — | 22,637 | 22,637 | 0.77 | 0.79 | 22,897 |
| Strip Mall | 10.3 | 5.94 | 89.9 | 0.26 | 0.09 | 30.9 | 31.0 | 0.09 | 7.85 | 7.93 | — | 26,702 | 26,702 | 0.90 | 0.93 | 27,009 |
| Regional Shopping Center | 103 | 46.4 | 601 | 1.51 | 0.57 | 174 | 175 | 0.53 | 44.2 | 44.7 | — | 154,318 | 154,318 | 7.17 | 6.74 | 156,542 |
| General Office Building | 9.09 | 5.21 | 79.0 | 0.23 | 0.08 | 27.2 | 27.3 | 0.07 | 6.89 | 6.97 | — | 23,452 | 23,452 | 0.79 | 0.82 | 23,722 |
| Retirement Community | 32.7 | 16.8 | 238 | 0.66 | 0.23 | 76.7 | 76.9 | 0.22 | 19.4 | 19.7 | — | 66,813 | 66,813 | 2.57 | 2.55 | 67,653 |
| High School | 6.91 | 3.96 | 60.1 | 0.18 | 0.06 | 20.7 | 20.7 | 0.06 | 5.24 | 5.30 | — | 17,828 | 17,828 | 0.60 | 0.62 | 18,033 |
| City Park | 5.74 | 3.29 | 49.9 | 0.15 | 0.05 | 17.2 | 17.2 | 0.05 | 4.35 | 4.40 | — | 14,817 | 14,817 | 0.50 | 0.52 | 14,987 |
| Total | 215 | 106 | 1,473 | 3.97 | 1.44 | 463 | 464 | 1.34 | 117 | 119 | — | 404,714 | 404,714 | 16.3 | 16.0 | 409,975 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 38.4 | 21.4 | 262 | 0.74 | 0.27 | 89.7 | 90.0 | 0.26 | 22.7 | 23.0 | — | 75,102 | 75,102 | 3.13 | 3.12 | 76,111 |
| Hotel | 8.78 | 5.49 | 70.6 | 0.21 | 0.08 | 26.2 | 26.3 | 0.07 | 6.65 | 6.72 | — | 21,743 | 21,743 | 0.79 | 0.83 | 22,010 |
| Strip Mall | 10.4 | 6.47 | 83.3 | 0.25 | 0.09 | 30.9 | 31.0 | 0.09 | 7.85 | 7.93 | — | 25,648 | 25,648 | 0.93 | 0.98 | 25,963 |
| Regional Shopping Center | 103 | 50.5 | 581 | 1.46 | 0.57 | 174 | 175 | 0.53 | 44.2 | 44.7 | — | 148,430 | 148,430 | 7.55 | 7.06 | 150,725 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 9.10 | 5.69 | 73.2 | 0.22 | 0.08 | 27.2 | 27.3 | 0.07 | 6.89 | 6.97 | — | 22,527 | 22,527 | 0.82 | 0.86 | 22,803 |
| Retirement Community | 32.8 | 18.3 | 224 | 0.63 | 0.23 | 76.7 | 76.9 | 0.22 | 19.4 | 19.7 | — | 64,209 | 64,209 | 2.67 | 2.67 | 65,072 |
| High School | 6.92 | 4.32 | 55.6 | 0.17 | 0.06 | 20.7 | 20.7 | 0.06 | 5.24 | 5.30 | — | 17,124 | 17,124 | 0.62 | 0.65 | 17,335 |
| City Park | 5.75 | 3.59 | 46.2 | 0.14 | 0.05 | 17.2 | 17.2 | 0.05 | 4.35 | 4.40 | — | 14,232 | 14,232 | 0.52 | 0.54 | 14,407 |
| Total | 216 | 116 | 1,396 | 3.82 | 1.44 | 463 | 464 | 1.34 | 117 | 119 | — | 389,016 | 389,016 | 17.0 | 16.7 | 394,425 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 6.93 | 3.90 | 48.8 | 0.14 | 0.05 | 16.2 | 16.2 | 0.05 | 4.10 | 4.15 | — | 12,570 | 12,570 | 0.51 | 0.52 | 12,738 |
| Hotel | 1.59 | 1.01 | 13.2 | 0.04 | 0.01 | 4.73 | 4.74 | 0.01 | 1.20 | 1.21 | — | 3,640 | 3,640 | 0.13 | 0.14 | 3,684 |
| Strip Mall | 1.87 | 1.19 | 15.6 | 0.05 | 0.02 | 5.57 | 5.59 | 0.02 | 1.41 | 1.43 | — | 4,293 | 4,293 | 0.15 | 0.16 | 4,346 |
| Regional Shopping Center | 18.5 | 8.88 | 102 | 0.25 | 0.10 | 29.0 | 29.1 | 0.09 | 7.36 | 7.45 | — | 23,067 | 23,067 | 1.20 | 1.12 | 23,433 |
| General Office Building | 1.64 | 1.04 | 13.7 | 0.04 | 0.01 | 4.90 | 4.91 | 0.01 | 1.24 | 1.26 | — | 3,771 | 3,771 | 0.13 | 0.14 | 3,817 |
| Retirement Community | 1.35 | 0.76 | 9.54 | 0.03 | 0.01 | 3.16 | 3.17 | 0.01 | 0.80 | 0.81 | — | 2,456 | 2,456 | 0.10 | 0.10 | 2,489 |
| High School | 1.25 | 0.79 | 10.4 | 0.03 | 0.01 | 3.72 | 3.73 | 0.01 | 0.94 | 0.95 | — | 2,866 | 2,866 | 0.10 | 0.11 | 2,902 |
| City Park | 1.04 | 0.66 | 8.64 | 0.03 | 0.01 | 3.09 | 3.10 | 0.01 | 0.78 | 0.79 | — | 2,382 | 2,382 | 0.09 | 0.09 | 2,412 |
| Total | 34.2 | 18.2 | 222 | 0.60 | 0.22 | 70.3 | 70.6 | 0.21 | 17.8 | 18.1 | — | 55,046 | 55,046 | 2.42 | 2.38 | 55,820 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 23,968 | 23,968 | 1.49 | 0.18 | 24,059 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 3,378 | 3,378 | 0.21 | 0.03 | 3,390 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1,363 | 1,363 | 0.08 | 0.01 | 1,368 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 22,446 | 22,446 | 1.39 | 0.17 | 22,532 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 10,909 | 10,909 | 0.68 | 0.08 | 10,950 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 2,258 | 2,258 | 0.14 | 0.02 | 2,267 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 2,157 | 2,157 | 0.13 | 0.02 | 2,166 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 66,479 | 66,479 | 4.12 | 0.50 | 66,731 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 23,968 | 23,968 | 1.49 | 0.18 | 24,059 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 3,378 | 3,378 | 0.21 | 0.03 | 3,390 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1,363 | 1,363 | 0.08 | 0.01 | 1,368 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 22,446 | 22,446 | 1.39 | 0.17 | 22,532 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 10,909 | 10,909 | 0.68 | 0.08 | 10,950 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 2,258 | 2,258 | 0.14 | 0.02 | 2,267 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 2,157 | 2,157 | 0.13 | 0.02 | 2,166 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 66,479 | 66,479 | 4.12 | 0.50 | 66,731 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 3,968 | 3,968 | 0.25 | 0.03 | 3,983 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 559 | 559 | 0.03 | < 0.005 | 561 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 226 | 226 | 0.01 | < 0.005 | 226 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 3,716 | 3,716 | 0.23 | 0.03 | 3,730 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | 1,806 | 1,806 | 0.11 | 0.01 | 1,813 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | 374 | 374 | 0.02 | < 0.005 | 375 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 357 | 357 | 0.02 | < 0.005 | 359 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 11,006 | 11,006 | 0.68 | 0.08 | 11,048 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.74 | 12.6 | 5.35 | 0.08 | 1.02 | — | 1.02 | 1.02 | — | 1.02 | — | 15,968 | 15,968 | 1.41 | 0.03 | 16,013 |
| Hotel | 0.07 | 1.28 | 1.08 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,532 | 1,532 | 0.14 | < 0.005 | 1,537 |
| Strip Mall | 0.01 | 0.15 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 183 | 183 | 0.02 | < 0.005 | 183 |
| Regional Shopping Center | 0.14 | 2.52 | 2.12 | 0.02 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 3,009 | 3,009 | 0.27 | 0.01 | 3,017 |
| General Office Building | 0.16 | 2.86 | 2.40 | 0.02 | 0.22 | — | 0.22 | 0.22 | — | 0.22 | — | 3,412 | 3,412 | 0.30 | 0.01 | 3,421 |
| Retirement Community | 0.10 | 1.66 | 0.71 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,111 | 2,111 | 0.19 | < 0.005 | 2,117 |
| High School | 0.07 | 1.33 | 1.12 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,591 | 1,591 | 0.14 | < 0.005 | 1,596 |
| City 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 |
| Total | 1.28 | 22.4 | 12.9 | 0.14 | 1.77 | — | 1.77 | 1.77 | — | 1.77 | — | 27,806 | 27,806 | 2.46 | 0.05 | 27,883 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.74 | 12.6 | 5.35 | 0.08 | 1.02 | — | 1.02 | 1.02 | — | 1.02 | — | 15,968 | 15,968 | 1.41 | 0.03 | 16,013 |
| Hotel | 0.07 | 1.28 | 1.08 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,532 | 1,532 | 0.14 | < 0.005 | 1,537 |
| Strip Mall | 0.01 | 0.15 | 0.13 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 183 | 183 | 0.02 | < 0.005 | 183 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | 0.14 | 2.52 | 2.12 | 0.02 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 3,009 | 3,009 | 0.27 | 0.01 | 3,017 |
| General Office Building | 0.16 | 2.86 | 2.40 | 0.02 | 0.22 | — | 0.22 | 0.22 | — | 0.22 | — | 3,412 | 3,412 | 0.30 | 0.01 | 3,421 |
| Retirement Community | 0.10 | 1.66 | 0.71 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,111 | 2,111 | 0.19 | < 0.005 | 2,117 |
| High School | 0.07 | 1.33 | 1.12 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,591 | 1,591 | 0.14 | < 0.005 | 1,596 |
| City 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 |
| Total | 1.28 | 22.4 | 12.9 | 0.14 | 1.77 | — | 1.77 | 1.77 | — | 1.77 | — | 27,806 | 27,806 | 2.46 | 0.05 | 27,883 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.13 | 2.30 | 0.98 | 0.01 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 2,644 | 2,644 | 0.23 | < 0.005 | 2,651 |
| Hotel | 0.01 | 0.23 | 0.20 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 254 | 254 | 0.02 | < 0.005 | 254 |
| Strip Mall | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 30.2 | 30.2 | < 0.005 | < 0.005 | 30.3 |
| Regional Shopping Center | 0.03 | 0.46 | 0.39 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 498 | 498 | 0.04 | < 0.005 | 500 |
| General Office Building | 0.03 | 0.52 | 0.44 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 565 | 565 | 0.05 | < 0.005 | 566 |
| Retirement Community | 0.02 | 0.30 | 0.13 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 350 | 350 | 0.03 | < 0.005 | 351 |
| High School | 0.01 | 0.24 | 0.20 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 263 | 263 | 0.02 | < 0.005 | 264 |
| City 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 |
| Total | 0.23 | 4.09 | 2.36 | 0.03 | 0.32 | — | 0.32 | 0.32 | — | 0.32 | — | 4,604 | 4,604 | 0.41 | 0.01 | 4,616 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 4.03 | 68.9 | 29.3 | 0.44 | 5.57 | — | 5.57 | 5.57 | — | 5.57 | 0.00 | 88,928 | 88,928 | 1.74 | 0.18 | 89,024 |
| Consumer Products | 167 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 15.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 41.9 | 3.47 | 387 | 0.02 | 0.32 | — | 0.32 | 0.24 | — | 0.24 | — | 1,186 | 1,186 | 0.05 | 0.01 | 1,190 |
| Total | 228 | 72.4 | 416 | 0.46 | 5.89 | — | 5.89 | 5.81 | — | 5.81 | 0.00 | 90,114 | 90,114 | 1.79 | 0.19 | 90,214 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 4.03 | 68.9 | 29.3 | 0.44 | 5.57 | — | 5.57 | 5.57 | — | 5.57 | 0.00 | 88,928 | 88,928 | 1.74 | 0.18 | 89,024 |
| Consumer Products | 167 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 15.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 186 | 68.9 | 29.3 | 0.44 | 5.57 | — | 5.57 | 5.57 | — | 5.57 | 0.00 | 88,928 | 88,928 | 1.74 | 0.18 | 89,024 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.05 | 0.86 | 0.37 | 0.01 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | 0.00 | 1,008 | 1,008 | 0.02 | < 0.005 | 1,010 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 30.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 2.81 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 5.23 | 0.43 | 48.4 | < 0.005 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 135 | 135 | 0.01 | < 0.005 | 135 |
| Total | 38.5 | 1.30 | 48.7 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | 0.00 | 1,143 | 1,143 | 0.03 | < 0.005 | 1,145 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 323 | 1,670 | 1,993 | 33.2 | 0.80 | 3,060 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 26.7 | 138 | 165 | 2.75 | 0.07 | 254 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 13.5 | 70.0 | 83.5 | 1.39 | 0.03 | 128 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 223 | 1,152 | 1,375 | 22.9 | 0.55 | 2,112 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 143 | 741 | 884 | 14.7 | 0.35 | 1,357 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 29.1 | 150 | 179 | 2.99 | 0.07 | 276 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | — | — | — | — | — | — | — | — | — | — | 15.1 | 78.0 | 93.0 | 1.55 | 0.04 | 143 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 773 | 4,000 | 4,773 | 79.5 | 1.91 | 7,329 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 323 | 1,670 | 1,993 | 33.2 | 0.80 | 3,060 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 26.7 | 138 | 165 | 2.75 | 0.07 | 254 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 13.5 | 70.0 | 83.5 | 1.39 | 0.03 | 128 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 223 | 1,152 | 1,375 | 22.9 | 0.55 | 2,112 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 143 | 741 | 884 | 14.7 | 0.35 | 1,357 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 29.1 | 150 | 179 | 2.99 | 0.07 | 276 |
| High School | — | — | — | — | — | — | — | — | — | — | 15.1 | 78.0 | 93.0 | 1.55 | 0.04 | 143 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 773 | 4,000 | 4,773 | 79.5 | 1.91 | 7,329 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 53.4 | 277 | 330 | 5.49 | 0.13 | 507 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 4.43 | 22.9 | 27.3 | 0.46 | 0.01 | 42.0 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 2.24 | 11.6 | 13.8 | 0.23 | 0.01 | 21.2 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 36.8 | 191 | 228 | 3.79 | 0.09 | 350 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 23.7 | 123 | 146 | 2.44 | 0.06 | 225 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 4.81 | 24.9 | 29.7 | 0.49 | 0.01 | 45.6 |
| High School | — | — | — | — | — | — | — | — | — | — | 2.49 | 12.9 | 15.4 | 0.26 | 0.01 | 23.7 |
| City Park | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 128 | 662 | 790 | 13.2 | 0.32 | 1,213 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 1,788 | 0.00 | 1,788 | 179 | 0.00 | 6,255 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 162 | 0.00 | 162 | 16.2 | 0.00 | 568 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 53.9 | 0.00 | 53.9 | 5.38 | 0.00 | 188 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 887 | 0.00 | 887 | 88.7 | 0.00 | 3,105 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | — | — | — | — | — | — | — | — | — | — | 211 | 0.00 | 211 | 21.0 | 0.00 | 737 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 593 | 0.00 | 593 | 59.2 | 0.00 | 2,073 |
| High School | — | — | — | — | — | — | — | — | — | — | 175 | 0.00 | 175 | 17.5 | 0.00 | 614 |
| City Park | — | — | — | — | — | — | — | — | — | — | 6.30 | 0.00 | 6.30 | 0.63 | 0.00 | 22.1 |
| Total | — | — | — | — | — | — | — | — | — | — | 3,876 | 0.00 | 3,876 | 387 | 0.00 | 13,561 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 1,788 | 0.00 | 1,788 | 179 | 0.00 | 6,255 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 162 | 0.00 | 162 | 16.2 | 0.00 | 568 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 53.9 | 0.00 | 53.9 | 5.38 | 0.00 | 188 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 887 | 0.00 | 887 | 88.7 | 0.00 | 3,105 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 211 | 0.00 | 211 | 21.0 | 0.00 | 737 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 593 | 0.00 | 593 | 59.2 | 0.00 | 2,073 |
| High School | — | — | — | — | — | — | — | — | — | — | 175 | 0.00 | 175 | 17.5 | 0.00 | 614 |
| City Park | — | — | — | — | — | — | — | — | — | — | 6.30 | 0.00 | 6.30 | 0.63 | 0.00 | 22.1 |
| Total | — | — | — | — | — | — | — | — | — | — | 3,876 | 0.00 | 3,876 | 387 | 0.00 | 13,561 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartment Mid Rise | — | — | — | — | — | — | — | — | — | — | 296 | 0.00 | 296 | 29.6 | 0.00 | 1,036 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 26.9 | 0.00 | 26.9 | 2.69 | 0.00 | 94.0 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | 8.92 | 0.00 | 8.92 | 0.89 | 0.00 | 31.2 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 147 | 0.00 | 147 | 14.7 | 0.00 | 514 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | 34.9 | 0.00 | 34.9 | 3.48 | 0.00 | 122 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | 98.1 | 0.00 | 98.1 | 9.80 | 0.00 | 343 |
| High School | — | — | — | — | — | — | — | — | — | — | 29.1 | 0.00 | 29.1 | 2.90 | 0.00 | 102 |
| City Park | — | — | — | — | — | — | — | — | — | — | 1.04 | 0.00 | 1.04 | 0.10 | 0.00 | 3.65 |
| Total | — | — | — | — | — | — | — | — | — | — | 642 | 0.00 | 642 | 64.1 | 0.00 | 2,245 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 30.8 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 259 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.59 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.53 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.02 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 12.7 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.91 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 312 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 30.8 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 259 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.59 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.53 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.02 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 12.7 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.91 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 312 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.11 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 42.9 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.25 |
| General Office Building | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.17 |
| Retirement Community | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.10 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.15 |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 51.7 |

## 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 | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Site Preparation | Site Preparation | 1/6/2025 | 8/15/2025 | 5.00 | 160 | — |
| Grading | Grading | 8/18/2025 | 3/26/2027 | 5.00 | 420 | — |
| Building Construction | Building Construction | 3/29/2027 | 5/1/2043 | 5.00 | 4,200 | — |
| Paving | Paving | 5/4/2043 | 6/24/2044 | 5.00 | 300 | — |
| Architectural Coating | Architectural Coating | 12/22/2036 | 1/6/2045 | 5.00 | 2,100 | — |

## 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 | Tier 4 Interim | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Tier 4 Interim | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Tier 4 Interim | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Tier 4 Interim | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Scrapers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 423 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 2.00 | 8.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Tier 4 Interim | 1.00 | 7.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Tier 4 Interim | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Tier 4 Interim | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Interim | 3.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Tier 4 Interim | 1.00 | 8.00 | 46.0 | 0.45 |
| Paving | Pavers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Interim | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Interim | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Interim | 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 | 17.5 | 13.2 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 7.75 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 20.0 | 13.2 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 7.75 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 4,356 | 13.2 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 930 | 7.75 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 13.2 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 7.75 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 871 | 13.2 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 7.75 | 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

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 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 | 10,745,784 | 3,581,928 | 3,728,336 | 1,242,779 | — |

## 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 | — | — | 240 | 0.00 | — |
| Grading | — | — | 1,260 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.6.2. Construction Earthmoving Control Strategies

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

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|

| | | |
|---|---|---|
| Apartments Mid Rise | — | 0% |
| Hotel | 0.00 | 0% |
| Strip Mall | 0.00 | 0% |
| Regional Shopping Center | 0.00 | 0% |
| General Office Building | 0.00 | 0% |
| Retirement Community | — | 0% |
| High School | 0.00 | 0% |
| City Park | 0.00 | 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 | 532 | 0.03 | < 0.005 |
| 2026 | 0.00 | 532 | 0.03 | < 0.005 |
| 2027 | 0.00 | 532 | 0.03 | < 0.005 |
| 2028 | 0.00 | 532 | 0.03 | < 0.005 |
| 2029 | 0.00 | 532 | 0.03 | < 0.005 |
| 2030 | 0.00 | 532 | 0.03 | < 0.005 |
| 2031 | 0.00 | 532 | 0.03 | < 0.005 |
| 2032 | 0.00 | 532 | 0.03 | < 0.005 |
| 2033 | 0.00 | 532 | 0.03 | < 0.005 |
| 2034 | 0.00 | 532 | 0.03 | < 0.005 |
| 2035 | 0.00 | 532 | 0.03 | < 0.005 |
| 2036 | 0.00 | 532 | 0.03 | < 0.005 |
| 2037 | 0.00 | 532 | 0.03 | < 0.005 |
| 2038 | 0.00 | 532 | 0.03 | < 0.005 |
| 2039 | 0.00 | 532 | 0.03 | < 0.005 |

| | | | | |
|---|---|---|---|---|
| 2040 | 0.00 | 532 | 0.03 | < 0.005 |
| 2041 | 0.00 | 532 | 0.03 | < 0.005 |
| 2042 | 0.00 | 532 | 0.03 | < 0.005 |
| 2043 | 0.00 | 532 | 0.03 | < 0.005 |
| 2044 | 0.00 | 532 | 0.03 | < 0.005 |
| 2045 | 0.00 | 532 | 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 |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 20,366 | 20,366 | 20,366 | 7,433,751 | 126,931 | 126,931 | 126,931 | 46,329,640 |
| Hotel | 4,395 | 4,395 | 4,395 | 1,603,993 | 37,121 | 37,121 | 37,121 | 13,549,142 |
| Strip Mall | 5,184 | 5,184 | 5,184 | 1,892,029 | 43,787 | 43,787 | 43,787 | 15,982,222 |
| Regional Shopping Center | 58,035 | 58,035 | 58,035 | 21,182,779 | 220,461 | 246,456 | 246,456 | 83,179,092 |
| General Office Building | 4,553 | 4,553 | 4,553 | 1,661,772 | 38,458 | 38,458 | 38,458 | 14,037,213 |
| Retirement Community | 1,741 | 1,741 | 17,412 | 1,452,692 | 10,852 | 10,852 | 108,520 | 9,053,664 |
| High School | 3,461 | 3,461 | 3,461 | 1,263,250 | 29,235 | 29,235 | 29,235 | 10,670,847 |
| City Park | 2,876 | 2,876 | 2,876 | 1,049,886 | 24,297 | 24,297 | 24,297 | 8,868,529 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|

| | |
|---|---|
| Apartments Mid Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 3813 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 224 |
| No Fireplaces | 449 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |
| Retirement Community | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 343 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 20 |
| No Fireplaces | 40 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |

## 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) |
|---|---|---|---|---|
| 10745784 | 3,581,928 | 3,728,336 | 1,242,779 | — |

## 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and $CO_2$ and $CH_4$ and $N_2O$ and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Apartments Mid Rise | 16,444,932 | 532 | 0.0330 | 0.0040 | 49,825,297 |
| Hotel | 2,317,357 | 532 | 0.0330 | 0.0040 | 4,781,154 |
| Strip Mall | 934,994 | 532 | 0.0330 | 0.0040 | 569,957 |
| Regional Shopping Center | 15,400,786 | 532 | 0.0330 | 0.0040 | 9,388,067 |
| General Office Building | 7,484,520 | 532 | 0.0330 | 0.0040 | 10,645,516 |
| Retirement Community | 1,549,358 | 532 | 0.0330 | 0.0040 | 6,587,493 |
| High School | 1,480,197 | 532 | 0.0330 | 0.0040 | 4,965,248 |
| City Park | 0.00 | 532 | 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) |
|---|---|---|
| Apartments Mid Rise | 168,340,066 | 0.00 |
| Hotel | 13,951,724 | 0.00 |
| Strip Mall | 7,051,704 | 0.00 |
| Regional Shopping Center | 116,152,380 | 0.00 |
| General Office Building | 74,648,174 | 0.00 |

| | | |
|---|---|---|
| Retirement Community | 15,160,363 | 0.00 |
| High School | 7,858,449 | 0.00 |
| City Park | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Apartments Mid Rise | 3,317 | — |
| Hotel | 301 | — |
| Strip Mall | 100.0 | — |
| Regional Shopping Center | 1,646 | — |
| General Office Building | 391 | — |
| Retirement Community | 1,099 | — |
| High School | 326 | — |
| City Park | 11.7 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Hotel | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Hotel | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.80 | 4.00 | 4.00 | 18.0 |
| Hotel | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |
| Strip Mall | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Strip Mall | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Strip Mall | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| General Office Building | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| General Office Building | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Retirement Community | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Retirement Community | Household refrigerators and/or freezers | R-134a | 1,430 | 0.22 | 0.60 | 0.00 | 1.00 |
| High School | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| High School | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| High School | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| High School | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| City Park | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| City Park | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

## 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 |
|---|---|---|---|---|---|---|

## 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. Biomass Cover Type

#### 5.18.1.1. Unmitigated

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

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

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

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Off-Road Equipment | Assuming the use of Tier 4 construction equipment consistent with 2017 SEIR MM AQ-5. |
| Operations: Vehicle Data | The Approved Project would generate approximately 100,611 average daily trips. |
| Operations: Hearths | Assuming that the Approved Uses would not include any wood burning fireplaces or wood stoves. |
| Land Use | The Approved Uses include 4,486 multi-family residential units, 550 hotel rooms (165,600 sq ft), 95,200 sq ft of neighborhood commercial uses, 1,568,090 sq ft of community commercial uses, 420,000 sq ft of office uses, 404 continuing care/senior housing units (1,000,000 sq ft), a high school with 1,784 students, 91 acres of passive park space, and 45 acres of active park space. Using CalEEMod defaults for lot acreages. |
| Construction: Construction Phases | The project buildout year is assumed to be 2045. Additionally, this analysis assumes that project construction activities could occur anytime beginning January 2025. The project would not include any demolition activities and architectural coating activities would overlap with building construction. |

# APPENDIX B

# DETAILED ENERGY CALCULATIONS

**Construction Off-Road Equipment - Modified Project**

| Phase | Off-Road Equipment Type | Amount | Usage Hour/Day | Total Usage Days | Total Usage Hours/Equipment | Horsepower | Load Factor | Total Usage Hours/ Equipment | Horsepower-Hour | Fuel Usage (gallons) |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8 | 160 | 3840 | 367 | 0.4 | 3840 | 563712 | 28862.0544 |
| | Tractors/Loaders/Backhoes | 4 | 8 | 160 | 5120 | 84 | 0.37 | 5120 | 159129.6 | 8147.43552 |
| Grading | Excavators | 2 | 8 | 420 | 6720 | 36 | 0.38 | 6720 | 91929.6 | 4706.79552 |
| | Graders | 1 | 8 | 420 | 3360 | 148 | 0.41 | 3360 | 203884.8 | 10438.90176 |
| | Rubber Tired Dozers | 1 | 8 | 420 | 3360 | 367 | 0.4 | 3360 | 493248 | 25254.2976 |
| | Scrapers | 2 | 8 | 420 | 6720 | 423 | 0.48 | 6720 | 1364428.8 | 69858.75456 |
| | Tractors/Loaders/Backhoes | 2 | 8 | 420 | 6720 | 84 | 0.37 | 6720 | 208857.6 | 10693.50912 |
| Building Construction | Cranes | 1 | 7 | 4200 | 29400 | 367 | 0.29 | 29400 | 3129042 | 160206.9504 |
| | Forklifts | 3 | 8 | 4200 | 100800 | 82 | 0.2 | 100800 | 1653120 | 84639.744 |
| | Generator Sets | 1 | 8 | 4200 | 33600 | 14 | 0.74 | 33600 | 348096 | 17822.5152 |
| | Tractors/Loaders/Backhoes | 3 | 7 | 4200 | 88200 | 84 | 0.37 | 88200 | 2741256 | 140352.3072 |
| | Welders | 1 | 8 | 4200 | 33600 | 46 | 0.45 | 33600 | 695520 | 35610.624 |
| Paving | Pavers | 2 | 8 | 300 | 4800 | 81 | 0.42 | 4800 | 163296 | 8360.7552 |
| | Paving Equipment | 2 | 8 | 300 | 4800 | 89 | 0.36 | 4800 | 153792 | 7874.1504 |
| | Rollers | 2 | 8 | 300 | 4800 | 36 | 0.38 | 4800 | 65664 | 3361.9968 |
| Architectural Coating | Air Compressors | 1 | 6 | 2100 | 12600 | 37 | 0.48 | 12600 | 223776 | 11457.3312 |
| | | | | | | | | | **Total** | **627648.1229** Diesel |

| Construction Truck and Construction Worker Vehicle Fuel Efficiency | | | | |
|---|---|---|---|---|
| | | EMFAC 2021 Outputs | | |
| Vehicle Type | Vehicle Class | Fuel Consumption (1,000 gallons/day) | VMT (miles/ day) | Fuel Efficency (miles/gallon) |
| Construction Truck | MHDT | 129.3 | 1,155,908.7 | 8.9 |
| | HHDT | 202.3 | 1,220,548.3 | 6.0 |
| | HHDT/MHDT | - | - | 7.5 |
| Construction Worker Vehicle | LDA | 1408.4 | 42,285,386.1 | 30.0 |
| | LDT1 | 139.0 | 3,495,530.4 | 25.2 |
| | LDT2 | 872.9 | 21,321,177.5 | 24.4 |
| | Worker Mix | - | - | 27.4 |

Notes:

[1] For construction trucks assumes 50 percent HHDT and 50 percent MHDT vehicles, consistent with assumptions in CalEEMod for hauling trucks. For construction worker vehicles assumes 50 percent LDA, 25 percent LDT1, and 25 percent LDT2 vehicles, consistent with assumptions in CalEEMod for worker vehicles.

[2] EMFAC2021 was run for Orange County for the construction year 2024. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Construction Vehicle Fuel Use - Diesel Vehicles - Modified Project | | | | | | | |
|---|---|---|---|---|---|---|---|
| Phase | Trip Type | Total Trips | Trip Length (miles) | Total VMT | Diesel Fuel Effiency (miles/gallon) | Fuel Usage (gallons/year) | |
| Building Construction | Vendor | 13,347,600.0 | 7.8 | 103,443,900.0 | 7.5 | 13,817,298.7 | |
| | | | | | **Total** | **13,817,298.7** | Diesel |

[1] Assumes 100 percent HHDT vehicles for haul trucks and 50 percent HHDT/50 percent MHDT vehicles for MHDT, consistent with assumptions in CalEEMod.

[2] EMFAC2021 was run for Orange County for the construction year 2024. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Construction Worker Vehicle Fuel Use - Gasoline Vehicles - Modified Project | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Phase | Total One-Way Trips/Day | Total Days | Total Trips | Trip Length (miles) | Total VMT | Gasoline Fuel Effiency (miles/gallon) | Fuel Usage (gallons/year) | |
| Site Preparation | 18 | 160 | 5,760 | 13.19 | 75,974 | 27.4 | 2,772.2 | |
| Grading | 20 | 420 | 16,800 | 13.19 | 221,592 | 27.4 | 8,085.5 | |
| Building Construction | 8082 | 4,200 | 67,888,800 | 13.19 | 895,453,272 | 27.4 | 32,673,541.4 | |
| Paving | 15 | 300 | 9,000 | 13.19 | 118,710 | 27.4 | 4,331.5 | |
| Architectural Coating | 1616 | 2,100 | 6,787,200 | 13.19 | 89,523,168 | 27.4 | 3,266,545.6 | |
| | | | | | | **Total** | **35,955,276.2** | Gas |

| | |
|---|---|
| **Total Construction Gasoline Usage** | 35,955,276.2 |
| **Total Construction Diesel Usage** | 14,444,946.8 |

| Modified Project Operational Trips | | | |
|---|---|---|---|
| Vehicle Class | CalEEMod | Total Project Trips | Total Trips per Vehicle Class |
| LDA | 47.50% | 116,289 | 55,237.3 |
| LDT1 | 3.32% | 116,289 | 3,860.8 |
| LDT2 | 24.84% | 116,289 | 28,886.2 |
| MDV | 14.91% | 116,289 | 17,338.7 |
| LHD1 | 3.12% | 116,289 | 3,628.2 |
| LHD2 | 0.89% | 116,289 | 1,035.0 |
| MHD | 1.74% | 116,289 | 2,023.4 |
| HHD | 0.77% | 116,289 | 895.4 |
| OBUS | 0.06% | 116,289 | 69.8 |
| UBUS | 0.05% | 116,289 | 58.1 |
| MCY | 2.46% | 116,289 | 2,860.7 |
| SBUS | 0.09% | 116,289 | 104.7 |
| MH | 0.27% | 116,289 | 314.0 |

| Modified Project Operational Trips – Fuel Efficiency | | | | | | |
|---|---|---|---|---|---|---|
| | | EMFAC2021 Outputs1 | | | | |
| Fuel | Vehicle Class | Fleet Mix (%)2 | Fuel Consumption (1,000 gallons/day) | VMT (miles/day) | Fuel Efficiency3 (miles/gallon) | |
| Gas | LDA | 52% | 1408.4 | 42,285,386.1 | 30.0 | 15.5 |
| | LDT1 | 4% | 139.0 | 3,495,530.4 | 25.2 | 1.1 |
| | LDT2 | 26% | 872.9 | 21,321,177.5 | 24.4 | 6.4 |
| | MDV | 15% | 635.4 | 12,620,485.4 | 19.9 | 3.1 |
| | LHD1 | 2% | 118.3 | 1,661,882.0 | 14.0 | 0.3 |
| | MCY | 0% | 7.6 | 321,576.6 | 42.2 | 0.2 |
| | MH | 0% | 12.0 | 58,495.6 | 4.9 | 0.0 |
| | Fleet Mix | – | – | – | 26.5 | 26.5 |
| Diesel | LHD2 | 14% | 22.4 | 391,527.7 | 17.5 | 2.5 |
| | MHDT | 42% | 129.3 | 1,155,908.7 | 8.9 | 3.7 |
| | HHDT | 44% | 202.3 | 1,220,548.3 | 6.0 | 2.7 |
| | Fleet Mix | – | – | – | 8.9 | 8.9 |

Notes:

[1] EMFAC2021 was run for Orange County for the year 2024. Data was aggregated over all vehicle model years and speed bins.

[2] Fleet mix is based on assumptions made in CalEEMod for the proposed project.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Modified Project Operational Trips – Fuel Usage | | | | | | |
|---|---|---|---|---|---|---|
| Land Use | Total Annual VMT2 (miles/year) | Fuel Type | Portion of Fleet3 (%) | VMT by Fuel Type (miles/year) | Fleet Mix Efficiency4 (miles/gallon) | Fuel Usage (gallons/year) |
| Single Family Housing | 17,354,177.00 | Gas | 96.6% | 16,757,193.3 | 26.5 | 632,530.6 |
| | | Diesel | 3.4% | 590,042.0 | 8.9 | 66,577.0 |
| Apartments Mid Rise | 89,302,808.00 | Gas | 96.6% | 86,230,791.4 | 26.5 | 3,254,937.5 |
| | | Diesel | 3.4% | 3,036,295.5 | 8.9 | 342,598.3 |
| Hotel | 5,936,988.00 | Gas | 96.6% | 5,732,755.6 | 26.5 | 216,393.2 |
| | | Diesel | 3.4% | 201,857.6 | 8.9 | 22,776.5 |
| Regional Shopping Center | 57,563,736.00 | Gas | 96.6% | 55,583,543.5 | 26.5 | 2,098,101.6 |
| | | Diesel | 3.4% | 1,957,167.0 | 8.9 | 220,835.6 |
| General Office Building | 54,166,933.00 | Gas | 96.6% | 52,303,590.5 | 26.5 | 1,974,293.8 |
| | | Diesel | 3.4% | 1,841,675.7 | 8.9 | 207,804.2 |
| Retirement Community | 7,755,281.00 | Gas | 96.6% | 7,488,499.3 | 26.5 | 282,667.0 |
| | | Diesel | 3.4% | 263,679.6 | 8.9 | 29,752.1 |
| High School | 10,670,847.00 | Gas | 96.6% | 10,303,769.9 | 26.5 | 388,934.5 |
| | | Diesel | 3.4% | 362,808.8 | 8.9 | 40,937.3 |
| City Park | 8,868,529.00 | Gas | 96.6% | 8,563,451.6 | 26.5 | 323,243.0 |
| | | Diesel | 3.4% | 301,530.0 | 8.9 | 34,022.9 |
| | | | | | **Total Gasoline/year** | **9,171,101.1** |
| | | | | | **Total Diesel/year** | **965,303.8** |

Notes:

[1] Calculated for year 2024 only. Future years will likely use less fuel due to more efficient cars.

[2] Total VMT is based on project's trip generation and trip lengths.

[3] Fleet distribution is based on EMFAC2021 output and CalEEMod assumptions.

[4] Fuel efficiency is based on fuel consumption and VMT data from EMFAC2021 for Orange County and total VMT.

| Modified Project Electricity Usage | |
|---|---|
| **Electricity by Land Use** | **kWh/year** |
| Single Family Housing | 5,578,172 |
| Apartments Mid Rise | 31,698,467 |
| Hotel | 1,007,547 |
| Regional Shopping Center | 10,658,049 |
| General Office Building | 28,881,338 |
| Retirement Community | 3,033,521 |
| Hotel | 1,480,197 |
| City Park | 0 |
| **Total** | **82,337,291** |

| Modified Project Natural Gas Usage | | | |
|---|---|---|---|
| **Natural Gas by Land Use** | **kBTU/year** | **BTU/year** | **therms/year** |
| Single Family Housing | 31,013,295 | 31,013,295,000 | 310,195 |
| Apartments Mid Rise | 96,040,871 | 96,040,871,000 | 960,601 |
| Hotel | 2,078,762 | 2,078,762,000 | 20,792 |
| Regional Shopping Center | 6,496,972 | 6,496,972,000 | 64,983 |
| General Office Building | 41,079,020 | 41,079,020,000 | 410,872 |
| Retirement Community | 12,897,789 | 12,897,789,000 | 129,004 |
| Hotel | 4,965,298 | 4,965,298,000 | 49,663 |
| City Park | - | - | - |
| **Total** | **194,572,007** | **194,572,007,000** | **1,946,109** |

**Construction Off-Road Equipment - Approved Project**

| Phase | Off-Road Equipment Type | Amount | Usage Hour/Day | Total Usage Days | Total Usage Hours/Equipment | Horsepower | Load Factor | Total Usage Hours/ Equipment | Horsepower-Hour | Fuel Usage (gallons) |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8 | 160 | 3840 | 367 | 0.4 | 3840 | 563712 | 28862.0544 |
| | Tractors/Loaders/Backhoes | 4 | 8 | 160 | 5120 | 84 | 0.37 | 5120 | 159129.6 | 8147.43552 |
| Grading | Excavators | 2 | 8 | 420 | 6720 | 36 | 0.38 | 6720 | 91929.6 | 4706.79552 |
| | Graders | 1 | 8 | 420 | 3360 | 148 | 0.41 | 3360 | 203884.8 | 10438.90176 |
| | Rubber Tired Dozers | 1 | 8 | 420 | 3360 | 367 | 0.4 | 3360 | 493248 | 25254.2976 |
| | Scrapers | 2 | 8 | 420 | 6720 | 423 | 0.48 | 6720 | 1364428.8 | 69858.75456 |
| | Tractors/Loaders/Backhoes | 2 | 8 | 420 | 6720 | 84 | 0.37 | 6720 | 208857.6 | 10693.50912 |
| Building Construction | Cranes | 1 | 7 | 4200 | 29400 | 367 | 0.29 | 29400 | 3129042 | 160206.9504 |
| | Forklifts | 3 | 8 | 4200 | 100800 | 82 | 0.2 | 100800 | 1653120 | 84639.744 |
| | Generator Sets | 1 | 8 | 4200 | 33600 | 14 | 0.74 | 33600 | 348096 | 17822.5152 |
| | Tractors/Loaders/Backhoes | 3 | 7 | 4200 | 88200 | 84 | 0.37 | 88200 | 2741256 | 140352.3072 |
| | Welders | 1 | 8 | 4200 | 33600 | 46 | 0.45 | 33600 | 695520 | 35610.624 |
| Paving | Pavers | 2 | 8 | 300 | 4800 | 81 | 0.42 | 4800 | 163296 | 8360.7552 |
| | Paving Equipment | 2 | 8 | 300 | 4800 | 89 | 0.36 | 4800 | 153792 | 7874.1504 |
| | Rollers | 2 | 8 | 300 | 4800 | 36 | 0.38 | 4800 | 65664 | 3361.9968 |
| Architectural Coating | Air Compressors | 1 | 6 | 2100 | 12600 | 37 | 0.48 | 12600 | 223776 | 11457.3312 |
| | | | | | | | | | **Total** | **627648.1229** Diesel |

| Construction Truck and Construction Worker Vehicle Fuel Efficiency | | | | |
|---|---|---|---|---|
| | | EMFAC 2021 Outputs | | |
| Vehicle Type | Vehicle Class | Fuel Consumption (1,000 gallons/day) | VMT (miles/ day) | Fuel Efficency (miles/gallon) |
| Construction Truck | MHDT | 129.3 | 1,155,908.7 | 8.9 |
| | HHDT | 202.3 | 1,220,548.3 | 6.0 |
| | HHDT/MHDT | - | - | 7.5 |
| Construction Worker Vehicle | LDA | 1408.4 | 42,285,386.1 | 30.0 |
| | LDT1 | 139.0 | 3,495,530.4 | 25.2 |
| | LDT2 | 872.9 | 21,321,177.5 | 24.4 |
| | Worker Mix | - | - | 27.4 |

Notes:

[1] For construction trucks assumes 50 percent HHDT and 50 percent MHDT vehicles, consistent with assumptions in CalEEMod for hauling trucks. For construction worker vehicles assumes 50 percent LDA, 25 percent LDT1, and 25 percent LDT2 vehicles, consistent with assumptions in CalEEMod for worker vehicles.

[2] EMFAC2021 was run for Orange County for the construction year 2024. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Construction Vehicle Fuel Use - Diesel Vehicles - Approved Project | | | | | | | |
|---|---|---|---|---|---|---|---|
| Phase | Trip Type | Total Trips | Trip Length (miles) | Total VMT | Diesel Fuel Effiency (miles/gallon) | Fuel Usage (gallons/year) | |
| Building Construction | Vendor | 7,812,000.0 | 10.2 | 79,682,400.0 | 7.5 | 10,643,406.9 | |
| | | | | | **Total** | **10,643,406.9** | Diesel |

[1] Assumes 100 percent HHDT vehicles for haul trucks and 50 percent HHDT/50 percent MHDT vehicles for MHDT, consistent with assumptions in CalEEMod.

[2] EMFAC2021 was run for Orange County for the construction year 2024. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Construction Worker Vehicle Fuel Use - Gasoline Vehicles - Approved Project | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Phase | Total One-Way Trips/Day | Total Days | Total Trips | Trip Length (miles) | Total VMT | Gasoline Fuel Effiency (miles/gallon) | Fuel Usage (gallons/year) | |
| Site Preparation | 18 | 160 | 5,760 | 13.19 | 75,974 | 27.4 | 2,772.2 | |
| Grading | 20 | 420 | 16,800 | 13.19 | 221,592 | 27.4 | 8,085.5 | |
| Building Construction | 4356 | 4,200 | 36,590,400 | 13.19 | 482,627,376 | 27.4 | 17,610,238.4 | |
| Paving | 15 | 300 | 9,000 | 13.19 | 118,710 | 27.4 | 4,331.5 | |
| Architectural Coating | 871 | 2,100 | 3,658,200 | 13.19 | 48,251,658 | 27.4 | 1,760,619.6 | |
| | | | | | | **Total** | **19,386,047.1** | Gas |

| | |
|---|---|
| **Total Construction Gasoline Usage** | 19,386,047.1 |
| **Total Construction Diesel Usage** | 11,271,055.1 |

| Approved Project Operational Trips | | | |
|---|---|---|---|
| Vehicle Class | CalEEMod | Total Project Trips | Total Trips per Vehicle Class |
| LDA | 47.50% | 100,611 | 47,790.2 |
| LDT1 | 3.32% | 100,611 | 3,340.3 |
| LDT2 | 24.84% | 100,611 | 24,991.8 |
| MDV | 14.91% | 100,611 | 15,001.1 |
| LHD1 | 3.12% | 100,611 | 3,139.1 |
| LHD2 | 0.89% | 100,611 | 895.4 |
| MHD | 1.74% | 100,611 | 1,750.6 |
| HHD | 0.77% | 100,611 | 774.7 |
| OBUS | 0.06% | 100,611 | 60.4 |
| UBUS | 0.05% | 100,611 | 50.3 |
| MCY | 2.46% | 100,611 | 2,475.0 |
| SBUS | 0.09% | 100,611 | 90.5 |
| MH | 0.27% | 100,611 | 271.6 |

| Approved Project Operational Trips – Fuel Efficiency | | | | | | |
|---|---|---|---|---|---|---|
| | | EMFAC2021 Outputs1 | | | | |
| Fuel | Vehicle Class | Fleet Mix (%)2 | Fuel Consumption (1,000 gallons/day) | VMT (miles/day) | Fuel Efficiency3 (miles/gallon) | |
| Gas | LDA | 52% | 1408.4 | 42,285,386.1 | 30.0 | 15.5 |
| | LDT1 | 4% | 139.0 | 3,495,530.4 | 25.2 | 1.1 |
| | LDT2 | 26% | 872.9 | 21,321,177.5 | 24.4 | 6.4 |
| | MDV | 15% | 635.4 | 12,620,485.4 | 19.9 | 3.1 |
| | LHD1 | 2% | 118.3 | 1,661,882.0 | 14.0 | 0.3 |
| | MCY | 0% | 7.6 | 321,576.6 | 42.2 | 0.2 |
| | MH | 0% | 12.0 | 58,495.6 | 4.9 | 0.0 |
| | Fleet Mix | – | – | – | 26.5 | 26.5 |
| Diesel | LHD2 | 14% | 22.4 | 391,527.7 | 17.5 | 2.5 |
| | MHDT | 42% | 129.3 | 1,155,908.7 | 8.9 | 3.7 |
| | HHDT | 44% | 202.3 | 1,220,548.3 | 6.0 | 2.7 |
| | Fleet Mix | – | – | – | 8.9 | 8.9 |

Notes:

[1] EMFAC2021 was run for Orange County for the year 2024. Data was aggregated over all vehicle model years and speed bins.

[2] Fleet mix is based on assumptions made in CalEEMod for the proposed project.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Approved Project Operational Trips – Fuel Usage | | | | | | |
|---|---|---|---|---|---|---|
| Land Use | Total Annual VMT2 (miles/year) | Fuel Type | Portion of Fleet3 (%) | VMT by Fuel Type (miles/year) | Fleet Mix Efficiency4 (miles/gallon) | Fuel Usage (gallons/year) |
| Apartments Mid Rise | 46,329,640.00 | Gas | 96.6% | 44,735,900.4 | 26.5 | 1,688,637.6 |
| | | Diesel | 3.4% | 1,575,207.8 | 8.9 | 177,737.5 |
| Hotel | 13,549,142.00 | Gas | 96.6% | 13,083,051.5 | 26.5 | 493,843.5 |
| | | Diesel | 3.4% | 460,670.8 | 8.9 | 51,979.5 |
| Strip Mall | 15,982,222.00 | Gas | 96.6% | 15,432,433.6 | 26.5 | 582,525.2 |
| | | Diesel | 3.4% | 543,395.5 | 8.9 | 61,313.7 |
| Regional Shopping Center | 83,179,092.00 | Gas | 96.6% | 80,317,731.2 | 26.5 | 3,031,738.3 |
| | | Diesel | 3.4% | 2,828,089.1 | 8.9 | 319,105.5 |
| General Office Building | 14,037,213.00 | Gas | 96.6% | 13,554,332.9 | 26.5 | 511,632.9 |
| | | Diesel | 3.4% | 477,265.2 | 8.9 | 53,851.9 |
| Retirement Community | 9,053,664.00 | Gas | 96.6% | 8,742,218.0 | 26.5 | 329,990.9 |
| | | Diesel | 3.4% | 307,824.6 | 8.9 | 34,733.2 |
| High School | 10,670,847.00 | Gas | 96.6% | 10,303,769.9 | 26.5 | 388,934.5 |
| | | Diesel | 3.4% | 362,808.8 | 8.9 | 40,937.3 |
| City Park | 8,868,529.00 | Gas | 96.6% | 8,563,451.6 | 26.5 | 323,243.0 |
| | | Diesel | 3.4% | 301,530.0 | 8.9 | 34,022.9 |
| | | | | | **Total Gasoline/year** | **2,505,724.1** |
| | | | | | **Total Diesel/year** | **263,739.9** |

Notes:

[1] Calculated for year 2024 only. Future years will likely use less fuel due to more efficient cars.

[2] Total VMT is based on project's trip generation and trip lengths.

[3] Fleet distribution is based on EMFAC2021 output and CalEEMod assumptions.

[4] Fuel efficiency is based on fuel consumption and VMT data from EMFAC2021 for Orange County and total VMT.

| Approved Project Electricity Usage | |
|---|---|
| **Electricity by Land Use** | **kWh/year** |
| Apartments Mid Rise | 16,444,932 |
| Hotel | 2,317,357 |
| Strip Mall | 934,994 |
| Regional Shopping Center | 15,400,786 |
| General Office Building | 7,484,520 |
| Retirement Community | 1,549,358 |
| High School | 1,480,197 |
| City Park | 0 |
| **Total** | **45,612,144** |

| Approved Project Natural Gas Usage | | | |
|---|---|---|---|
| **Natural Gas by Land Use** | **kBTU/year** | **BTU/year** | **therms/year** |
| Apartments Mid Rise | 49,825,297 | 49,825,297,000 | 498,353 |
| Hotel | 4,781,154 | 4,781,154,000 | 47,821 |
| Strip Mall | 569,957 | 569,957,000 | 5,701 |
| Regional Shopping Center | 9,388,067 | 9,388,067,000 | 93,899 |
| General Office Building | 10,645,516 | 10,645,516,000 | 106,476 |
| Retirement Community | 6,587,493 | 6,587,493,000 | 65,888 |
| High School | 4,965,248 | 4,965,248,000 | 49,662 |
| City Park | - | - | - |
| **Total** | **86,762,732** | **86,762,732,000** | **867,801** |