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# MEMORANDUM

**DATE:** November 2, 2022

**TO:** Byron Walker, All-Era Properties, LLC

**FROM:** Ronald Brugger, LSA

**SUBJECT:** Air Quality, Greenhouse Gas Emissions, and Energy Analysis for the Linden Bloomington Condos Project in Bloomington, San Bernardino County, California (LSA Project No. APO2201)

## INTRODUCTION

This Air Quality and Greenhouse Gas Emissions Analysis has been prepared to evaluate the air quality and greenhouse gas (GHG) impacts associated with the proposed Linden Bloomington Condos Project (project). The analysis includes modeling of air pollutant and GHG emissions using the latest version of the California Emissions Estimator Model (CalEEMod version 2020.4.0) and follows the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook* guidelines. The results of the modeling have been compared to SCAQMD emissions thresholds. (References cited are included as Attachment A.)

### Project Location

The project site spans four undeveloped parcels, Assessor's Parcel Numbers 0257-021-28, 0257-031-35, 0257-012-12, and 0257-021-02 encompassing 14.25 acres in the unincorporated community of Bloomington, San Bernardino County, and is at 10719 Linden Avenue, as shown in Figure 1 (all figures are provided in Attachment B of this document).

### Project Description

The project includes development of 180 condominiums, as shown in Figure 2, Site Plan. Construction of the project would not require any import or export of soil. Project construction is expected to start in May 2023 and finish by April 2027.

Sensitive receptors include residences, schools, hospitals, and similar uses sensitive to air quality. The project site is bounded on the north, south, and west by single-family residential uses. Single-family residential uses and vacant property are located along the project's eastern boundary.

## REGULATORY SETTING

### Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the United States Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants: ozone ($O_3$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), particulate matter (PM) (both PM less than 10 microns in size [$PM_{10}$] and PM less than 2.5 microns in size [$PM_{2.5}$]), and lead. 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 to protect public health.

On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six GHGs—carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride ($SF_6$)—constitute a threat to public health and welfare and that the combined emissions from motor vehicles cause and contribute to global climate change.

On September 15, 2011, the EPA and the USDOT issued final rule for the first national standards to improve fuel efficiency of medium- and heavy-duty trucks and buses, model years 2014 to 2018. For combination tractors, the agencies proposed engine and vehicle standards that would achieve up to a 20 percent reduction from the model year 2014 in fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which would achieve up to a 10 percent reduction from the model year 2014 for gasoline vehicles and a 15 percent reduction for diesel vehicles (12 and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction from model year 2014 in fuel consumption. On October 25, 2016, the EPA and USDOT issued Phase 2 of the national standards to improve fuel efficiency standards for medium- and heavy-duty trucks and buses for model years 2021 to 2027 to achieve vehicle fuel savings as high as 25 percent, depending on the vehicle category.

On August 2, 2018, the previous Administration released a notice of proposed rulemaking, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule) to amend the CAFE and greenhouse gas emission standards established in 2012 for model years 2021 through 2026. The SAFE Vehicle Rule would decrease fuel economy and would withdraw the California Waiver for the California Advanced Clean Car program, Zero Emissions Vehicle mandate, and greenhouse gas emission standards for model years 2021 through 2026.

The current administration withdrew portions of the SAFE Rule, concluding that the SAFE Rule overstepped the agency's legal authority and finalized updated CAFE Standards for model years 2024 through 2026. The final rule establishes standards that 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 and 2025, and 10 percent annually for model years 2026. The agency projects the final standards will save consumers nearly $1,400 in total fuel expenses over the lifetimes of vehicles produced in these model years and avoid

the consumption of about 234 billion gallons of gas between model years 2030 to 2050. The NHTSA also projects that the standards will cut greenhouse gases from the atmosphere, reduce air pollution, and reduce the country's dependence on oil.

### State Agencies, Regulations, and Standards

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the California Air Resources Board (CARB). Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems. California adopted the California Clean Air Act (CCAA) in 1988. CARB administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the CAA as well as four others: visibility-reducing particulates, hydrogen sulfide ($H_2S$), sulfates, and vinyl chloride.

The California Global Warming Solutions Act of 2006, widely known as Assembly Bill (AB) 32, requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB was directed to set a statewide GHG emissions limit and set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

In 2016, the Legislature passed and Governor Jerry Brown signed Senate Bill (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 Executive Order (EO) B-30-15. SB 32 builds on AB 32 and keeps California 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 analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million (ppm) of carbon dioxide equivalent ($CO_2e$) 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.

In December 2017, CARB adopted "California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target" (CARB 2017) that describes the actions the State will take to achieve the SB 32 climate goal of reducing GHG emissions at least 40 percent below 1990 levels by 2030. The 2017 Scoping Plan includes input from a range of State agencies and is the result of a 2-year development process, including extensive public and stakeholder outreach, designed to ensure that California's climate and air quality efforts continue to improve public health and drive development of a more sustainable economy. It outlines an approach that cuts across economic sectors to combine GHG reductions with reductions of smog-causing pollutants, while also safeguarding public health and economic goals. The 2017 Scoping Plan reflects the direction from the Legislature on the Cap-and-Trade Program, as described in AB 398, the need to extend key

existing emissions reductions programs, and acknowledges the parallel actions required under AB 617 to strengthen monitoring and reduce air pollution at the community level.

The actions identified in the 2017 Scoping Plan can reduce overall GHG emissions in California and deliver strong policy signals that will continue to drive investment and certainty in a low-carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the original Scoping Plan and the 2014 Scoping Plan, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

Although the 2017 Scoping Plan does not impose any specific mandates or policies that specifically apply to individual development projects such as the proposed project, the Scoping Plan encourages local municipalities to update building codes and establish sustainable development practices for accommodating future growth. Key policies that involve the residential and commercial building sectors that are indirectly applicable to the proposed project include the implementation of SB 275 (promoting infill development and high density housing in high quality transit areas), implementing green building practices (i.e., the California Green Building Standards Code), energy efficiency and water conservation policies, and waste diversion efforts.

### *Senate Bill 97 and State CEQA Guidelines*

In August 2007, the Legislature adopted SB 97, requiring the Office of Planning and Research (OPR) to prepare and transmit new California Environmental Quality Act (CEQA) guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the California Natural Resources Agency. OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009, and the *State CEQA Guidelines* amendments were adopted on December 30, 2009, and became effective on March 18, 2010.

The *State CEQA Guidelines* amendments do not specify a threshold of significance for GHG emissions or prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis but rely on the lead agencies in making their own significance determinations based upon substantial evidence. The *State CEQA Guidelines* amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

The *State CEQA Guidelines* amendments require a lead agency to make a good-faith effort based on the extent possible on scientific and factual data to describe, calculate or estimate the amount of GHG emissions resulting from a project. The *State CEQA Guidelines* amendments give discretion to the lead agency whether to (1) use a model or methodology to quantify GHG emissions resulting from a project and which model or methodology to use and/or (2) rely on a qualitative analysis or performance-based standards. The California Natural Resources Agency is required to periodically update the guidelines to incorporate new information or criteria established by CARB pursuant to AB 32.

### *California Green Building Standards Code*

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The first edition of the CALGreen Code was released in 2008 and contained only voluntary standards. The 2019 CALGreen Code was updated in 2019, became effective on January 1, 2020, and applies to non-residential and residential developments. The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, function at their maximum efficiency.

## Regional Air Quality Planning Framework

The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA for the South Coast Air Basin (Basin). SCAG is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is a regional planning agency and a forum for regional issues relating to transportation, the economy and community development, and the environment. 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.

On September 3, 2020, the Regional Council of SCAG adopted *Connect SoCal*, also known as the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability, and High Quality of Life* (2020–2045 RTP/SCS). The 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

### *South Coast Air Quality Management District*

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with State and federal government agencies. The SCAQMD develops air quality-related rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary.

### *Regional Air Quality Management Plan*

SCAQMD and SCAG are responsible for formulating and implementing the regional air quality management plan (AQMP) for the Basin. The main purpose of an AQMP is to bring the area into

compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and a 20-year horizon.

The latest plan is the 2016 AQMP (SCAQMD 2017), which incorporates the 2016 RTP/SCS and emission inventory methodologies for various source categories. The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS, implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour $O_3$ NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards. Key elements of the 2016 AQMP include:

- Calculation and 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
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero 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)

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires implementation of the best-available fugitive dust control measure during active construction periods capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the proposed project. Instead, SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in Environmental Impact Reports and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* (1993) with the *Air Quality Analysis Guidance Handbook* (SCAQMD 2022).

To assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/ information is provided on the SCAQMD website and includes (1) on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds (LSTs), (4) mitigation

measures and control efficiencies, (5) mobile-source toxics analysis, (6) off-road mobile-source emission factors, (7) $PM_{2.5}$ significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as CalEEMod. These recommendations were followed in the preparation of this analysis.

The following SCAQMD rules and regulations would apply to the proposed project:

- SCAQMD Rule 403 (SCAQMD 2005) requires projects to incorporate fugitive dust control measures; and
- SCAQMD Rule 1113 (SCAQMD 2016) limits the VOC content of architectural coatings.

### Local Regulations

#### *County of San Bernardino Regional Greenhouse Gas Reduction Plan*

As a response to the 2006 AB 32 law, a project partnership led by the San Bernardino Associated Governments, the predecessor agency to the San Bernardino County Transportation Authority (SBCTA), has compiled an inventory of GHG emissions and developed reduction measures that was adopted by the 21 Partnership Cities of San Bernardino County. The regional GHG reduction plan will serve as the basis for cities in San Bernardino County to develop more detailed community level climate action plans. The unincorporated community of Bloomington is included as part of Unincorporated San Bernardino County participating in this study, which was last updated in March 2021.

The partnership cities committed to undertake the following actions that would reduce GHG emissions associated with regional (or countywide) activities as a whole (SBCOG 2021):

- Prepare a baseline (2016) GHG emissions inventory for each of the 25 Partnership jurisdictions in San Bernardino County
- Prepare future year (2020, 2030, and 2045) GHG emissions forecasts for each of the jurisdictions
- Develop general GHG reduction measures and jurisdiction-specific measures appropriate for each jurisdiction
- Develop consistent baseline information for jurisdictions to use for their development of community Climate Action Plans meeting jurisdiction-identified reduction goals

## THRESHOLDS OF SIGNIFICANCE

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analyses. The SCAQMD's current guidelines, the *CEQA Air Quality Handbook* (1993) with associated updates, were followed in this assessment of air quality impacts for the proposed project.

Based on the *State CEQA Guidelines*, Appendix G (Public Resources Code Sections 15000–15387), a project would normally be considered to have a significant effect on air quality if it would violate any CAAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to

substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

### Pollutants with Regional Effects

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the 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 (SCAQMD 2017), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

### Regional Emissions Thresholds

Table A lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

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

| Emissions Source | Pollutant Emissions Thresholds (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: South Coast AQMD Air Quality Significance Thresholds (SCAQMD 2019)

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
VOC = volatile organic compound

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 which 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.

### Localized Impacts Analysis

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, $NO_2$, $PM_{10}$ and $PM_{2.5}$. LSTs are based on the ambient concentrations of that pollutant within the project's Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the Central San Bernardino Valley area (SRA 34). Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. The closest sensitive receptors are single-family residential uses surrounding the project site with the closest approximately 5 feet from the boundary of construction. As specified in the SCAQMD LST methodology, even in circumstances like this where a

sensitive receptor is very close to the project boundary, the minimum distance to be analyzed in the LST analysis is 25 meters or approximately 80 feet.

If the total acreage disturbed is less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables can be used to determine if a project has the potential to result in a significant impact. The project site is 12.87 acres. Per the SCAQMD LST surveys, the typical maximum daily disturbed area for a site of this size would be 4 acres. Therefore, the 4-acre LSTs at an 80-foot distance (derived by interpolation) were used for construction emissions.

On-site operational emissions would occur from stationary and mobile sources. On-site vehicle emissions are the largest source of emissions, and the on-site travel for the proposed project would be restricted to the onsite roadways. Therefore, the 5-acre LSTs at 80-foot distance were used for operational emissions. Table B lists the emissions thresholds that apply during project construction and operation.

### Table B: SCAQMD Localized Significance Thresholds

| Emissions Source Category | Pollutant Emissions (pounds per day) | | | |
|---|---|---|---|---|
| | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Construction (4 acres, 80-foot distance) | 237 | 1,488 | 12 | 7 |
| Operations (5 acres, 80-foot distance) | 270 | 1,746 | 4 | 2 |

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
CO = carbon monoxide
$NO_X$ = 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

## Global Climate Change

*State CEQA Guidelines* Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data", and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Appendix G of the *State CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would do either of the following:

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

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in California.

The County of San Bernardino released an updated development review process document for the evaluation of GHG emissions in March 2021. This document includes screening tables for implementation of GHG reduction measures for a residential development. The proposed project is required to garner 100 points using the screening tables to be considered consistent with the San Bernardino County Regional GHG Reduction Plan (County of San Bernardino 2021). Projects that are consistent with the San Bernardino County Regional GHG Reduction Plan would be considered to have a less than significant impact related to the emission of GHGs. The proposed project's consistency with the County of San Bernardino Regional GHG Reduction Plan has been used in this analysis as the measure of significance for GHG emissions.

## CONSTRUCTION IMPACT ANALYSIS

CalEEMod is designed to model construction emissions for land development projects and allows for the input of project-specific information, such as the number of equipment, hours of operations, duration of construction activities, and selection of emission control measures. Construction would require heavy equipment during mass grading, utility installations, building construction, and paving. Construction is planned to start in May 2023 and finish by April 2027. However, to be conservative and consistent with CalEEMod modeling parameters, the starting date was specified in CalEEMod and the rest of the schedule left at CalEEMod defaults, which resulted in a compressed schedule ending in October 2024. Other than the construction start date, CalEEMod defaults were used in the analysis.

Table C shows the anticipated peak daily construction emissions. These results are from the CalEEMod output tables listed as "Mitigated Construction," even though the only measures that have been applied to the analysis are the SCAQMD required construction emissions control measures, or standard conditions. CalEEMod outputs are included as Attachment C.

### Table C: Estimated Construction Emissions

| Construction Phase | Total Regional Pollutant Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Site Preparation | 3 | 28 | 19 | <1 | 9 | 5 |
| Grading | 3 | 35 | 29 | <1 | 5 | 2 |
| Building Construction | 2 | 16 | 23 | <1 | 2 | <1 |
| Paving | 1 | 10 | 15 | <1 | <1 | <1 |
| Architectural Coating | 58 | 1 | 3 | <1 | <1 | <1 |
| **Peak Daily Emissions** | **58** | **35** | **29** | **<1** | **9** | **5** |
| **SCAQMD Thresholds** | **75** | **100** | **550** | **150** | **150** | **55** |
| **Significant Emissions?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA (November 2022).
CO = carbon monoxide
$NO_X$ = 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
VOC = volatile organic compound

Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. Even

with the compressed schedule described above, the anticipated peak daily construction emissions shown in Table C indicate the construction emissions from the proposed project would not exceed the corresponding SCAQMD daily emission thresholds for criteria pollutants. Therefore, construction air quality impacts would be less than significant.

### Fugitive Dust

Fugitive dust emissions are generally associated with land clearing, exposure of soils to the air and wind, and cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction.

The construction calculations prepared for this project assumed that dust control measures (watering a minimum of two times daily) would be employed to reduce emissions of fugitive dust during site grading. Furthermore, all construction would need to comply with SCAQMD Rule 403 regarding the emission of fugitive dust. Table C lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts) that have incorporated the following Rule 403 measures that would be implemented to significantly reduce $PM_{10}$ emissions from construction:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

These Rule 403 measures were incorporated in the CalEEMod analysis.

### Architectural Coatings

Architectural coatings contain VOCs that are part of the $O_3$ precursors. Based on the proposed project, it is estimated that application of the architectural coatings for the proposed peak construction day would result in a peak of 58 pounds per day (lbs/day) of VOCs. Therefore, VOC emissions from architectural-coating application would not exceed the SCAQMD VOC threshold of 75 lbs/day.

### Localized Impacts Analysis

The SCAQMD has issued guidance on applying CalEEMod results to localized impacts analyses. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, $NO_2$, $PM_{10}$, and $PM_{2.5}$. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. The closest sensitive receptors are single-family residential uses surrounding the project site with the closest approximately 5 feet from the boundary of construction. As specified in the SCAQMD LST methodology, even in circumstances like this where a sensitive receptor is very close to the project

boundary, the minimum distance to be analyzed in the LST analysis is 25 meters, or approximately 80 feet.

Table D shows that the on-site emissions of the pollutants on the peak day of construction will result in concentrations of pollutants at these nearest residences that are all below the SCAQMD thresholds of significance.

### Table D: Construction Localized Impacts Analysis

| Emissions Sources | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| On-Site Emissions (pounds per day) | 35 | 28 | 9 | 5 |
| **LSTs (pounds per day)** | **237** | **1,488** | **12** | **7** |
| **Significant Emissions?** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA. (November 2022).
Note: LSTs based on SRA – Central San Bernardino Valley, 4 acres, 80-foot distance
CO = carbon monoxide
LST = localized significance threshold
$NO_X$ = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
$PM_{10}$ = particulate matter less than 10 microns in size
SRA = Source Receptor Area

## Odors from Construction Activities

Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, the construction-produced odors would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402, regarding nuisances, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of the proposed project.

## Naturally Occurring Asbestos

The proposed project site is in San Bernardino County, which is among the counties found to have serpentine and ultramafic rock in their soils (California Department of Conservation 2021). However, according to the California Geological Survey, no such rock has been identified in the project vicinity. Therefore, the potential risk for naturally occurring asbestos during project construction is small and less than significant.

### Construction Emissions Conclusions

Tables C and D show that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by SCAQMD; thus, during construction, there would be no regional or localized impacts.

## OPERATIONAL IMPACT ANALYSIS

Operational emissions from area sources include the combustion of natural gas for food preparation, heating, hot water, and engine emissions from landscape maintenance equipment. Mobile source emissions are associated with project-related vehicle trip generation. Based on the Traffic Impact Analysis prepared for the project (LSA 2022), at full buildout the project would generate 1,213 average daily trips. The CalEEMod default vehicle fleet mix was used for the purpose of this analysis. Table E presents the estimated operational emissions for the proposed project.

### Table E: Operational Emissions

| Source | Pollutant Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Area Sources | 4 | <1 | 15 | <1 | <1 | <1 |
| Energy Sources | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile Sources | 4 | 5 | 38 | <1 | 10 | 3 |
| **Total Project Emissions** | **8** | **6** | **53** | **<1** | **10** | **3** |
| **SCAQMD Thresholds** | **55** | **55** | **550** | **150** | **150** | **55** |
| **Significant?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA (November 2022).
CO = carbon monoxide
$NO_X$ = 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
VOC = volatile organic compounds

As shown in Table E, criteria pollutant emissions from operational activities associated with the proposed project would be below the SCAQMD thresholds. Therefore, project-related regional operational emissions would be less than significant.

### Localized Impacts Analysis

Table F shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table F include all on-site project-related stationary sources and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that will occur on site. All off-site emissions are subtracted from the total emissions.

## Table F: Long-Term Operational Localized Impacts Analysis

| Emissions Sources | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| On-Site Emissions | <1 | 17 | <1 | <1 |
| **LSTs** | **270** | **1,746** | **4** | **2** |
| **Significant Emissions?** | **No** | **No** | **No** | **No** |

Source: Compiled by LSA (November 2022).
Note: LSTs based on SRA – Central San Bernardino Valley, 5 acres, 80-foot distance, on-site traffic would be 5 percent of total mobile source trips.
CO = carbon monoxide
LST = Localized Significance Thresholds
$NO_x$ = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size $PM_{10}$ = particulate matter less than 10 microns in size
SRA = Source Receptor Area

A total of 5 percent is considered conservative because the average round-trip lengths assumed are 14.7 miles for home-work trips, 5.9 miles for home-shopping trips, and 8.7 miles for other types of trips. It is unlikely that the average on-site distance driven will be even 1,000 feet, which is approximately 2 percent of the total miles traveled. Considering the total trip length included in the CalEEMod, the 5 percent assumption is conservative.

Table F shows that the operational emission rates would not exceed the LSTs for receptors at 80 feet. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

### Odors from Operational Activities

Land uses that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project would be residential use and no sources of objectionable odors have been identified for the proposed project; therefore, the impacts associated with odors would be less than significant and no mitigation measures are required.

### 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 closest CARB station, the San Bernardino Station, show a highest recorded 1-hour concentration of 2.0 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the State standard is 9 ppm) during the past 3 years (EPA n.d.). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

The project is expected to add approximately 92 vehicle trips per hour (LSA 2022) during the peak hour to local roads. This low level of traffic would not substantially alter the existing traffic flow. Therefore, the project can be implemented in an existing setting with no significant peak-hour intersection impacts. Because no CO hot spots would occur, there would be no project-related impacts on CO concentrations.

## AIR QUALITY MANAGEMENT PLAN CONSISTENCY

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.

The AQMP is based on regional growth projections developed by SCAG. The proposed project is a residential development that would not house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 square feet of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA; therefore, it does not meet SCAG's Intergovernmental Review criteria.

The project includes a General Plan Amendment to change the land use designation from RS-20M to Medium Density Residential (MDR) (up to 20 units per acre). The two project parcels are currently designated MDR land use category with the adoption of the Countywide Plan/Policy Plan. This amendment would also change the zoning from single family residential to Multi Residential (RM) Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the Basin 2016 AQMP is affirmed when a project would not increase the frequency or severity of an air quality standards violation or cause a new violation and is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated above. Therefore, the project would not result in an increase in the frequency or severity of an air quality standard violation or cause a new air quality standard violation.
2. The *CEQA Air Quality Handbook* (SCAQMD 1993) 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, electricity-generating facilities, petroleum and gas refineries, designation of oil-drilling districts, water ports, solid-waste disposal sites, and offshore-drilling facilities; therefore, the proposed project is not defined as significant. Although the project would increase the density of the residential use on the project site, the change in designation would support the population growth projections used for San Bernardino County in the AQMP.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

## GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

Construction and operation of the project would result in the emission of GHG emissions as described below.

### Construction Greenhouse Gas Emissions

Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from these construction activities would vary daily as construction activity levels change.

The construction emissions, calculated in CalEEMod using the same methodology as described above for the criteria pollutant emissions, are shown in Table G. Results indicate that project construction would generate approximately 767 MT of $CO_2e$. Based on SCAQMD guidance, construction emissions were amortized over 30 years (a typical project lifetime) to be added to the total project operational emissions. Thus, annual construction emissions would be approximately 26 MT of $CO_2e$ per year. (See the CalEEMod output in Attachment C for details.)

### Table G: Construction GHG Emissions

| Construction Phase | Total Emissions per Phase (MT) | | | Total Emissions per Phase (MT $CO_2e$) |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | |
| Site Preparation | 17 | <1 | <1 | 18 |
| Grading | 84 | <1 | <1 | 85 |
| Building Construction | 630 | <1 | <1 | 637 |
| Paving | 21 | <1 | <1 | 21 |
| Architectural Coating | 5 | <1 | <1 | 5 |
| **Total Emissions for the Entire Construction Process** | | | | **767 MT $CO_2e$** |
| **Total Construction Emissions Amortized over 30 Years** | | | | **26 MT $CO_2e$** |

Source: Compiled by LSA (November 2022).
$CH_4$ = methane
$CO_2$ = carbon dioxide
MT = metric tons
MT $CO_2e$ = metric tons of carbon dioxide equivalent
$N_2O$ = nitrous oxide

### Operational Greenhouse Gas Emissions

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-

source emissions of GHGs would include project-generated vehicle trips. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other minor sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

Table H shows the GHG emissions associated with the level of development envisioned by the proposed project at opening. The planned solar panels on every residence and the recreation building were included. Area sources include architectural coatings, consumer products, and landscaping. Energy sources include natural gas consumption for space heating.

## Table H: Estimated Operational Greenhouse Gas Emissions

| Source | Pollutant Emissions (metric tons per year) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| Construction emissions amortized over 30 years | | | | 26 |
| **Operational Emissions** | | | | |
| Area Sources | 3 | <1 | 0 | 3 |
| Energy Sources | 361 | <1 | <1 | 363 |
| Mobile Sources | 1,297 | <1 | <1 | 1,317 |
| Waste Sources | 17 | <1 | 0 | 42 |
| Water Usage | 45 | <1 | <1 | 58 |
| | | | **Total Project Emissions** | **1,809** |

Source: Compiled by LSA (November 2022).
$CH_4$ = methane
$N_2O$ = nitrous oxide
$CO_2e$ = carbon dioxide equivalent
$CO_2$ = carbon dioxide

As shown in Table H, the project will result in an estimated emissions rate of 1,809 MT of $CO_2e$ per year. The project would be consistent with the County of San Bernardino Regional Greenhouse Gas Reduction Plan.

As previously described in the Thresholds of Significance section, projects that are consistent with the San Bernardino County Regional GHG Reduction Plan would be considered to have a less than significant impact related to the emission of GHGs. The San Bernardino County development review process provides commercial development screening tables to determine that projects implement sufficient GHG reduction measures to achieve this compliance.

Based on the Screening Table in Table I, the proposed project would generate more than the 100 points required to demonstrate compliance. The project would include GHG reduction measures such as enhanced insulation, improved efficiency water heaters, improved appliances, high efficiency lighting, solar panels, limiting landscaping, widened parking spaces, insulation with design, and use of water-efficient showerheads, toilets, and faucets.

Projects that are consistent with the San Bernardino Regional GHG Reduction Plan are considered to have a less than significant impact related to the emission of GHGs. Hence, the proposed project's operational GHG emissions would be less than significant.

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Energy : Exceed Energy Efficiency Standards in New Residential Units** | | | |
| **Building Envelope** | | | |
| Insulation | • 2019 Title 24 Requirements (walls R-8, roof/attic R-30)<br>• Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)<br>• Greatly Enhanced Insulation (spray foam wall insulated walls R-18 or higher, roof/attic R-38 or higher) | 4 points<br>9 points<br>11 points | 4 |
| Windows | • 2019 Title 24 Windows (0.3 U-factor, 0.23 solar heat gain coefficient [SHGC])<br>• Enhanced Window (0.28 U-Factor, 0.22 SHGC)<br>• Greatly Enhanced Window (less than 0.28 U-Factor, less than 0.22 SHGC) | 2 points<br>4 points<br>5 points | 2 |
| Cool Roofs | • Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)<br>• Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance) | 6 points<br>7 points | |
| Air Infiltration | Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. | | 6 |
| | • Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)<br>• Blower Door HERS Verified Envelope Leakage or equivalent | 6 points<br>5 points | |
| Thermal Storage of Building | Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls. | | |
| | • Modest Thermal Mass (10% of floor or 10% of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | 1 point | |
| | • Enhanced Thermal Mass (20% of floor or 20% of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | 2 points | |
| **Indoor Space Efficiencies** | | | |
| Heating/ Cooling Distribution System | • Minimum Duct Insulation (R-6 required)<br>• Enhanced Duct Insulation (R-8)<br>• Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent) | 2 points<br>4 points<br>5 points<br>7 points | 2 |
| Space Heating/ Cooling Equipment | • 2019 Title 24 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF)<br>• Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF)<br>• High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF)<br>• Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF) | 1 point<br>2 points<br>4 points<br>5 points | 1 |
| Water Heaters | • 2019 Title 24 Minimum Efficiency (0.57 Energy Factor)<br>• Improved Efficiency Water Heater (0.675 Energy Factor)<br>• High Efficiency Water Heater (0.72 Energy Factor)<br>• Very High Efficiency Water Heater ( 0.92 Energy Factor)<br>• Solar Pre-heat System (0.2 Net Solar Fraction)<br>• Enhanced Solar Pre-heat System (0.35 Net Solar Fraction) | 4 points<br>7 points<br>9 points<br>11 points<br>2 points<br>5 points | 7 |

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| Daylighting | Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.<br>• All peripheral rooms within the living space have at least one window (required)<br>• All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)<br>• All rooms daylighted | 0 points<br>1 point<br>1 point | 1 |
| Artificial Lighting | • Efficient Lights (25% of in-unit fixtures considered high efficiency. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)<br>• High Efficiency Lights (50% of in-unit fixtures are high efficiency)<br>• Very High Efficiency Lights (100% of in-unit fixtures are high efficiency) | 5 points<br>6 points<br>7 points | 7 |
| Appliances | • Energy Star Refrigerator (new)<br>• Energy Star Dishwasher (new)<br>• Energy Star Washing Machine (new) | 1 point<br>1 point<br>1 point | 3 |
| **Miscellaneous Residential Building Efficiencies** | | | |
| Building Placement | North/south alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting. | 3 points | |
| Shading | At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st. | 2 points | |
| Energy Star Homes | EPA Energy Star for Homes (version 3 or above) | 15 points | 15 |
| Independent Energy Efficiency Calculations | Provide point values based upon energy efficiency modeling of the project. Note that engineering data will be required documenting the energy efficiency and point values based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Other | This allows innovation by the applicant to provide design features that increase the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Existing Residential Retrofits | • Having residential developments within walking and biking distances of local retail helps to reduce vehicle trips and/or vehicle miles traveled.<br>• The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT).<br>• The suburban project will have at least three of the following on site and/or off site within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office.<br>• The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for daycare, banking/ATM, restaurants, vehicle refueling, and shopping. | TBD | |
| **Reduction Measure Energy 3: All Electric Homes** | | | |

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| All-Electric Homes | All electric homes reduce GHG emissions, as the grid electricity they use is generated using less carbon over time. Grid electricity in California will be 60 percent renewable energy by 2030 and 100 percent renewable energy by 2040. | 12 points | |
| **Reduction Measure Energy-7: Clean Energy** | | | |
| **Residential Renewable Energy Generation** | | | |
| Photovoltaic | Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments: | | |
| | • 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | 9 points<br>12 points<br>17 points<br>20 points<br>23 points<br>25 points<br>28 points<br>31 points | 23 |
| Wind Turbines | Some areas of the County lend themselves to wind turbine applications. Analysis of the areas' capability to support wind turbines should be evaluated prior to choosing this feature. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments: | | |
| | • 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | 9 points<br>12 points<br>17 points<br>21 points<br>23 points<br>25 points<br>28 points<br>31 points | |
| Off-site Renewable Energy Project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis and shall be accompanied by a detailed plan that documents the quantity of renewable energy the proposal would generate. Point values will be determined based upon the energy generated by the proposal. | TBD | |
| Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity. | TBD | |
| **Reduction Measure Water : Exceed Water Efficiency Standards** | | | |
| **Residential Irrigation and Landscaping** | | | |

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| Water Efficient Landscaping | • Limit conventional turf to < 25% of required landscape area<br>• Limit conventional turf to < 50% of required landscape area<br>• No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed)<br>• Only California Native Plants that require no irrigation or some supplemental irrigation | 0 points<br>2 points<br>4 points<br><br>5 points | 4 |
| Water Efficient Irrigation Systems | • Low precipitation spray heads < 0.75”/hr or drip irrigation<br>• Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use) | 1 point<br>2 points | 2 |
| Storm Water Reuse Systems | Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings. | TBD | |
| Residential Potable Water | | | |
| Showers | Water Efficient Showerheads (2.0 gpm) | 2 points | 2 |
| Toilets | Water Efficient Toilets (1.5 gpm) | 2 points | 2 |
| Faucets | Water Efficient Faucets (1.28 gpm) | 2 points | 2 |
| Dishwasher | Water Efficient Dishwasher (6 gallons per cycle or less) | 1 point | 1 |
| Washing Machine | Water Efficient Washing Machine (Water factor <5.5) | 1 point | 1 |
| WaterSense | EPA WaterSense Certification | 7 points | |
| **Increase Residential Reclaimed Water Use** | | | |
| Recycled Water | 5% of the total project’s water use comes from recycled/reclaimed water | 5 points | |
| **Reduction Measure On Road: Alternative Transportation Options** | | | |
| **Increase Residential Density** | | | |
| Residential Density | Designing the project with increased densities, where allowed by the General Plan and/or Zoning Ordinance, reduces GHG emissions associated with traffic in several ways. Increased densities affect the distance people travel and provide greater options for the modes of travel they choose. This strategy also provides a foundation for implementation of many other strategies, which would benefit from increased densities.<br>1 point is allowed for each 10% increase in density beyond 7 units/acre, up to 500% (50 points) | 1–50 points | 9 |
| **Mixed-Use Development** | | | |
| Mixed-Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges:<br>• Diversity of land uses complementing each other (2–28 points)<br>• Increased destination accessibility other than transit (1–18 points)<br>• Increased Transit Accessibility (1–25 points)<br>• Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data). | TBD | |

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| Residential Near Local Retail (Residential-only Projects) | • Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.<br>• The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT).<br>• The suburban project will have at least three of the following on site and/or off site within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office.<br>• The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping. | 1–16 points | 3 |
| **Traffic Flow Management Improvements** | | | |
| Signal Synchroni-zation | Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.<br>• Signal synchronization<br>• Traffic signals connected to existing ITS | <br><br><br><br><br>1 point/signal<br>3 points/signal | |
| **Increase Public Transit** | | | |
| Public Transit Access | The point value of a project's ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation.<br>Increased transit accessibility (1–15 points) | TBD | |
| **Reduction Measure: Install Electric Chargers** | | | |
| Single-family DU EV Chargers | Installation of Electric Vehicle (EV) chargers in the garage of single-family DUs:<br>• Level 1 110 volt AC Chargers<br>• Level 2 240 volt AC Fast Chargers | 2 points<br>5 points | 2 |
| Multi-family DU EV Chargers | Installation of Electric Vehicle (EV) chargers in the parking areas of Multi-family Residential Development:<br>• Level 1 110 volt AC Chargers<br>• Level 2 240 volt AC Fast Chargers | <br><br>2 points/charger<br>5 points/ charger | 2 |
| Reduction Measure: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County | | | |
| Sidewalks | • Provide sidewalks on both sides of the street (required)<br>• Provide pedestrian linkage between residential and commercial uses within 1 mile | 1 point<br>3 points | 1 |
| Bicycle Paths | • Provide bicycle paths within project boundaries<br>• Provide bicycle path linkages between residential and other land uses<br>• Provide bicycle path linkages between residential and transit | TBD<br>2 points<br>5 points | |
| **Reduction Measure Waste-2 : Reduce Waste to Landfills** | | | |

## Table I: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| Recycling | County-initiated recycling program diverting 100% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal: | | |
| | • Provide green waste composting bins at each residential unit<br>• Multifamily residential projects that provide dedicated recycling bins separated by types of recyclables combined with instructions/education program explaining how to use the bins and the importance of recycling<br>• Construction waste recycling | 4 points<br>3 points<br><br><br>4 points | 3 |
| **Other GHG Reduction Feature Implementation** | | | |
| Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide residential design features for the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols. | TBD | |
| **Total Points Earned by Residential Project:** | | | **105** |

## ENERGY

The proposed project would increase the demand for electricity, natural gas, and gasoline when compared to the existing condition of the site. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included as Attachment C.

### Construction-Period Energy Use

The anticipated construction schedule assumes that the proposed project would be built over approximately 17 months. The proposed project would require site preparation, grading, building construction, paving, and architectural coating during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

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 proposed project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

## Operational Energy Use

Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating, while indirect sources include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kilowatt hours (kWh) per year.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table J shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis (see Attachment D) in conjunction with United States Department of Transportation (DOT) fuel efficiency data.

### Table J: Estimated Annual Energy Use of the Proposed Project

| Land Use | Electricity Use (kWh per year) | Natural Gas Use (kBTU per year) | Gasoline (gallons per year) | Diesel (gallons per year) |
|---|---|---|---|---|
| Condominium | 895,277 | 3,797,990 | 153,782 | 89,269 |

Source: Compiled by LSA (November 2022).
kBTU = thousand British thermal units
kWh = kilowatt hours

As shown in Table J, the estimated potential increased electricity demand associated with the proposed project is 895,277 kWh per year. In 2019, California consumed approximately 277,750 gigawatt hours (GWh) or 277,750,000,000 kWh. Of this total, San Bernardino County consumed 15,969 GWh or 15,969,000,000 kWh (California Energy Commission [CEC] n.d.-a). Therefore, electricity demand associated with the proposed project would be approximately 0.0056 percent of San Bernardino County's total electricity demand.

Also shown in Table J, the estimated potential increased natural gas demand associated with the proposed project is 3,797,990 kBTU per year or 37,980 therms (CEC n.d.-b). In 2019, California consumed approximately 12,571,000,000 therms, while San Bernardino County consumed 527,236,428 therms. Therefore, natural gas demand associated with the proposed project would be 0.0072 percent of San Bernardino County's total natural gas demand.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 14.9 mpg in 1980 to 22.2 mpg in 2019 (DOT 2021). The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021 (CEC 2015).

Using the EPA gasoline fuel economy estimates for 2019, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 153,782 gallons of gasoline and 89,269 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel (CEC 2022). Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in San Bernardino County.

In addition, automobiles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

### *Operational Energy Use Summary*

As described above, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment uses, and transportation. Impacts would be less than significant, and no mitigation measures would be necessary.

## Conflict with or Obstruction of a State or Local Plan for Renewable Energy or Energy Efficiency

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's *2021 Integrated Energy Policy Report*. In addition, the proposed project would comply with Title 24 and CALGreen standards. Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant, and no mitigation measures would be necessary.

## STANDARD CONDITIONS

### Construction

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with the best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source (SCAQMD 2005). In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the $PM_{10}$ component). Compliance with these rules would reduce impacts on nearby sensitive receptors (SCAQMD Rule 403). As shown in Table C, implementation of Rule 403 measures results in dust emissions below SCAQMD thresholds.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Pave construction access roads at least 100 feet (30 meters) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures are:

- Recycle/reuse at least 50 percent of the construction material (including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) (CalRecycle 2019a).
- Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, as specified on the CalRecycle website (CalRecycle 2019b).

### Operations

The proposed project is required to comply with the CALGreen and Title 24 of the California Code of Regulations established by the CEC regarding energy conservation and green building standards.

## CUMULATIVE IMPACTS

The project would temporarily contribute criteria pollutants to the area during project construction. A number of individual projects in the area may be under construction simultaneously with the

proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. However, each project would be required to comply with SCAQMD's standard construction measures. The proposed project's short-term construction emissions would not exceed the significance thresholds. Therefore, it would not have a significant short-term cumulative air quality impact.

Similarly, the project's long-term operational emissions would not exceed SCAQMD's criteria pollutant thresholds. Again, all projects would be required to comply with SCAQMD's operational emissions thresholds, which are designed to accomplish regional emissions goals. Therefore, the proposed project would not have a significant long-term cumulative air quality impact.

Lastly, the project would produce GHG emissions at a level less than significant due to consistency with the San Bernardino Regional GHG Reduction Plan. The proposed project's design would be consistent with the County of San Bernardino's General Plan, thus ensuring project consistency with County and State policies and goals. Therefore, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions. Given this consistency, it is concluded that the proposed project's impact to the climate from GHG emissions would not be cumulatively considerable.

## ATTACHMENTS

A: References

B: Figures

C: CalEEMod Output

D: Fuel Usage Worksheet

# ATTACHMENT A

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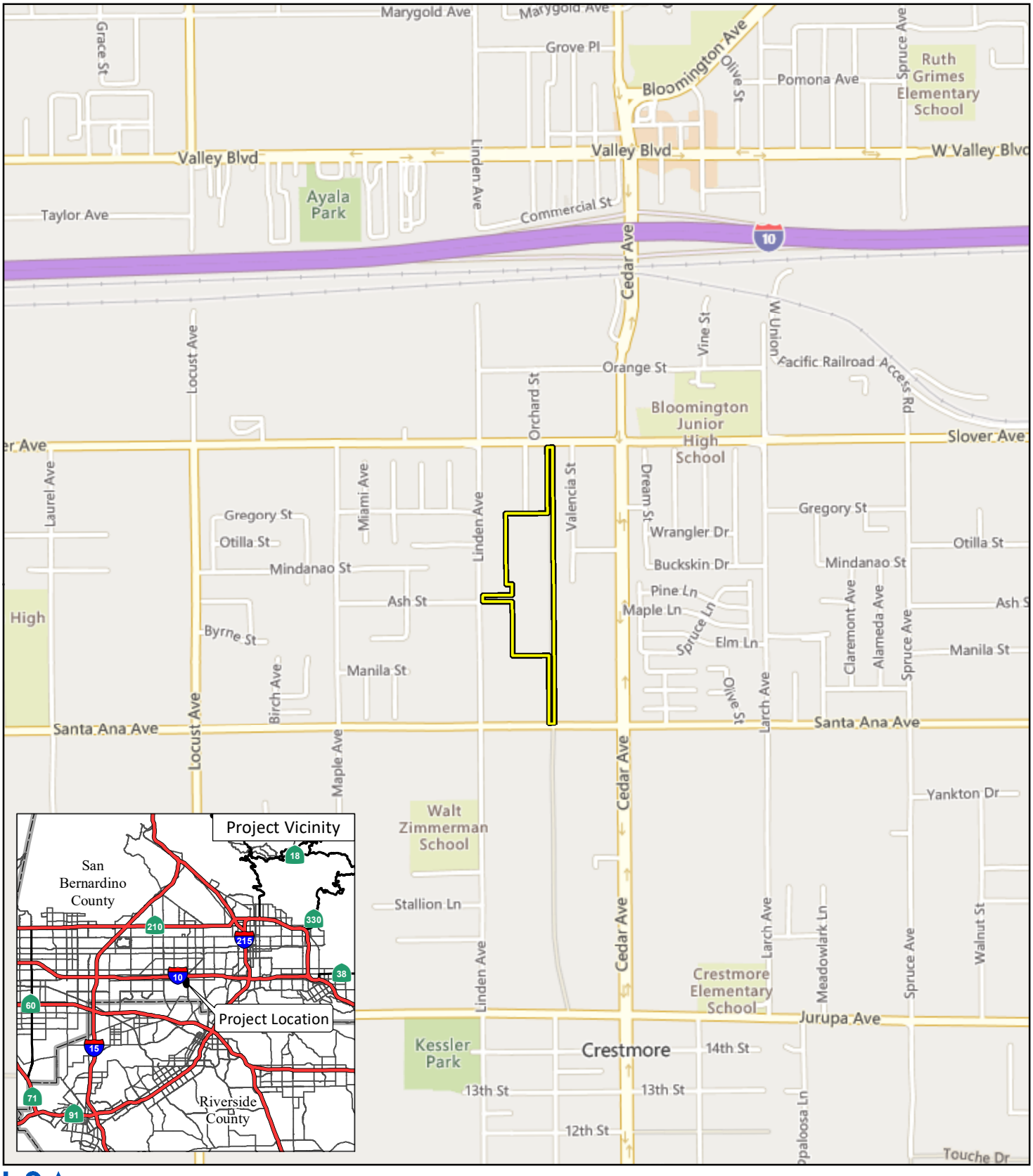
# ATTACHMENT B:

# FIGURES




LSA

LEGEND

Project Location

FIGURE 1

N

0 625 1250

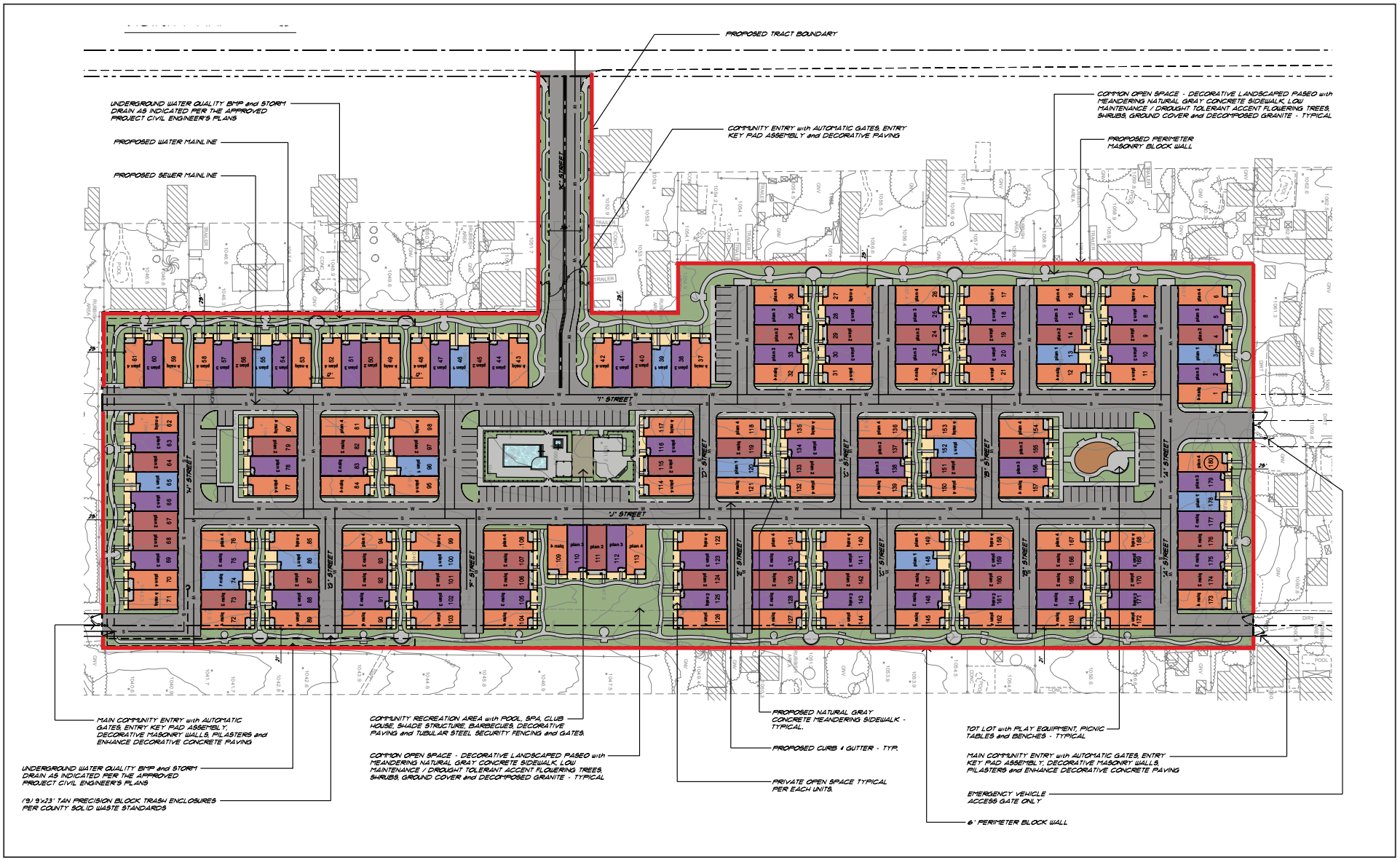
FEET

SOURCE: Bing (2021)

I:\APO2201\GIS\MXD\Noise\ProjLoc_Noise.mxd (10/28/2022)

*Linden Bloomington Condos*

Regional and Project Location




LSA

LEGEND

6 ft High Walls

FIGURE 2

N

0 25 50

FEET

SOURCE: TK Management Services LLC

I:\APO2201\G\Site_Plan.ai (11/2/2022)

*Linden Bloomington Condos*

Conceptual Site Plan

# ATTACHMENT C:

# CALEEMOD PRINTOUTS

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Linden Bloomington Condos (APO2201)

**San Bernardino-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 1.62 | Acre | 1.62 | 70,567.20 | 0 |
| Condo/Townhouse | 180.00 | Dwelling Unit | 11.25 | 180,000.00 | 515 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 32 |
| **Climate Zone** | 10 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - Site is 12.87 acres, "Other Non-Asphalt Surfaces" represents landscaping.

Construction Phase - Left CalEEMod default phase durations even though the project plans to take until April 2027 to complete. This shorter schedule is conservative, producing higher daily emissions.

Grading - Project will balance onsite

Vehicle Trips - Traffic study supplied 6.74 peak daily rate, proportioned the CalEEMod Sat. and Sun. rates to match.

Woodstoves - None of the condos will have either a woodstove or fireplace.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblFireplaces | FireplaceDayYear | 25.00 | 0.00 |
| tblFireplaces | FireplaceHourDay | 3.00 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberGas | 153.00 | 0.00 |
| tblFireplaces | NumberNoFireplace | 18.00 | 180.00 |
| tblFireplaces | NumberWood | 9.00 | 0.00 |
| tblVehicleTrips | ST_TR | 8.14 | 7.50 |
| tblVehicleTrips | SU_TR | 6.28 | 5.78 |
| tblVehicleTrips | WD_TR | 7.32 | 6.74 |
| tblWoodstoves | NumberCatalytic | 9.00 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 9.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.2104 | 1.7325 | 2.0016 | 4.3400e-003 | 0.3715 | 0.0761 | 0.4476 | 0.1415 | 0.0710 | 0.2125 | 0.0000 | 386.7136 | 386.7136 | 0.0725 | 7.9700e-003 | 390.9032 |
| 2024 | 0.7529 | 1.3431 | 1.9478 | 4.1500e-003 | 0.1651 | 0.0573 | 0.2224 | 0.0442 | 0.0538 | 0.0980 | 0.0000 | 371.6949 | 371.6949 | 0.0557 | 9.4200e-003 | 375.8957 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Maximum** | **0.7529** | **1.7325** | **2.0016** | **4.3400e-003** | **0.3715** | **0.0761** | **0.4476** | **0.1415** | **0.0710** | **0.2125** | **0.0000** | **386.7136** | **386.7136** | **0.0725** | **9.4200e-003** | **390.9032** |

## Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.2104 | 1.7325 | 2.0016 | 4.3400e-003 | 0.2273 | 0.0761 | 0.3034 | 0.0773 | 0.0710 | 0.1483 | 0.0000 | 386.7133 | 386.7133 | 0.0725 | 7.9700e-003 | 390.9029 |
| 2024 | 0.7529 | 1.3431 | 1.9478 | 4.1500e-003 | 0.1651 | 0.0573 | 0.2224 | 0.0442 | 0.0538 | 0.0980 | 0.0000 | 371.6946 | 371.6946 | 0.0557 | 9.4200e-003 | 375.8954 |
| **Maximum** | **0.7529** | **1.7325** | **2.0016** | **4.3400e-003** | **0.2273** | **0.0761** | **0.3034** | **0.0773** | **0.0710** | **0.1483** | **0.0000** | **386.7133** | **386.7133** | **0.0725** | **9.4200e-003** | **390.9029** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **26.87** | **0.00** | **21.52** | **34.59** | **0.00** | **20.69** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **5-1-2023** | **7-31-2023** | 0.9446 | 0.9446 |
| **2** | **8-1-2023** | **10-31-2023** | 0.5946 | 0.5946 |
| **3** | **11-1-2023** | **1-31-2024** | 0.5834 | 0.5834 |
| **4** | **2-1-2024** | **4-30-2024** | 0.5463 | 0.5463 |
| **5** | **5-1-2024** | **7-31-2024** | 0.5572 | 0.5572 |
| **6** | **8-1-2024** | **9-30-2024** | 0.5604 | 0.5604 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | |
|---|---|---|---|---|
| | | **Highest** | 0.9446 | 0.9446 |

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.7680 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |
| Energy | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 361.4488 | 361.4488 | 0.0173 | 5.3400e-003 | 363.4723 |
| Mobile | 0.5513 | 0.8503 | 5.7918 | 0.0135 | 1.5563 | 0.0105 | 1.5668 | 0.4157 | 9.8400e-003 | 0.4255 | 0.0000 | 1,297.1125 | 1,297.1125 | 0.0686 | 0.0622 | 1,317.3543 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 16.8077 | 0.0000 | 16.8077 | 0.9933 | 0.0000 | 41.6403 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.7207 | 41.6495 | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |
| **Total** | **1.3398** | **1.0466** | **7.7208** | **0.0147** | **1.5563** | **0.0350** | **1.5912** | **0.4157** | **0.0343** | **0.4499** | **20.5283** | **1,703.2430** | **1,723.7713** | **1.4678** | **0.0770** | **1,783.3993** |

**Mitigated Operational**

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

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | 0.7680 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |
| Energy | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 361.4488 | 361.4488 | 0.0173 | 5.3400e-003 | 363.4723 |
| Mobile | 0.5513 | 0.8503 | 5.7918 | 0.0135 | 1.5563 | 0.0105 | 1.5668 | 0.4157 | 9.8400e-003 | 0.4255 | 0.0000 | 1,297.1125 | 1,297.1125 | 0.0686 | 0.0622 | 1,317.3543 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 16.8077 | 0.0000 | 16.8077 | 0.9933 | 0.0000 | 41.6403 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.7207 | 41.6495 | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |
| **Total** | **1.3398** | **1.0466** | **7.7208** | **0.0147** | **1.5563** | **0.0350** | **1.5912** | **0.4157** | **0.0343** | **0.4499** | **20.5283** | **1,703.2430** | **1,723.7713** | **1.4678** | **0.0770** | **1,783.3993** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 5/1/2023 | 5/12/2023 | 5 | 10 | |
| 2 | Grading | Grading | 5/13/2023 | 6/23/2023 | 5 | 30 | |
| 3 | Building Construction | Building Construction | 6/24/2023 | 8/16/2024 | 5 | 300 | |
| 4 | Paving | Paving | 8/17/2024 | 9/13/2024 | 5 | 20 | |
| 5 | Architectural Coating | Architectural Coating | 9/14/2024 | 10/11/2024 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 15**

**Acres of Grading (Grading Phase): 90**

**Acres of Paving: 1.62**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Residential Indoor: 364,500; Residential Outdoor: 121,500; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,234**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 159.00 | 31.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 32.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0983 | 0.0000 | 0.0983 | 0.0505 | 0.0000 | 0.0505 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0133 | 0.1376 | 0.0912 | 1.9000e-004 | | 6.3300e-003 | 6.3300e-003 | | 5.8200e-003 | 5.8200e-003 | 0.0000 | 16.7254 | 16.7254 | 5.4100e-003 | 0.0000 | 16.8606 |
| **Total** | **0.0133** | **0.1376** | **0.0912** | **1.9000e-004** | **0.0983** | **6.3300e-003** | **0.1046** | **0.0505** | **5.8200e-003** | **0.0563** | **0.0000** | **16.7254** | **16.7254** | **5.4100e-003** | **0.0000** | **16.8606** |

**Unmitigated Construction Off-Site**

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

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.1000e-004 | 2.3000e-004 | 2.9300e-003 | 1.0000e-005 | 9.9000e-004 | 0.0000 | 9.9000e-004 | 2.6000e-004 | 0.0000 | 2.7000e-004 | 0.0000 | 0.7707 | 0.7707 | 2.0000e-005 | 2.0000e-005 | 0.7775 |
| **Total** | **3.1000e-004** | **2.3000e-004** | **2.9300e-003** | **1.0000e-005** | **9.9000e-004** | **0.0000** | **9.9000e-004** | **2.6000e-004** | **0.0000** | **2.7000e-004** | **0.0000** | **0.7707** | **0.7707** | **2.0000e-005** | **2.0000e-005** | **0.7775** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0383 | 0.0000 | 0.0383 | 0.0197 | 0.0000 | 0.0197 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0133 | 0.1376 | 0.0912 | 1.9000e-004 | | 6.3300e-003 | 6.3300e-003 | | 5.8200e-003 | 5.8200e-003 | 0.0000 | 16.7253 | 16.7253 | 5.4100e-003 | 0.0000 | 16.8606 |
| **Total** | **0.0133** | **0.1376** | **0.0912** | **1.9000e-004** | **0.0383** | **6.3300e-003** | **0.0447** | **0.0197** | **5.8200e-003** | **0.0255** | **0.0000** | **16.7253** | **16.7253** | **5.4100e-003** | **0.0000** | **16.8606** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.1000e-004 | 2.3000e-004 | 2.9300e-003 | 1.0000e-005 | 9.9000e-004 | 0.0000 | 9.9000e-004 | 2.6000e-004 | 0.0000 | 2.7000e-004 | 0.0000 | 0.7707 | 0.7707 | 2.0000e-005 | 2.0000e-005 | 0.7775 |
| **Total** | **3.1000e-004** | **2.3000e-004** | **2.9300e-003** | **1.0000e-005** | **9.9000e-004** | **0.0000** | **9.9000e-004** | **2.6000e-004** | **0.0000** | **2.7000e-004** | **0.0000** | **0.7707** | **0.7707** | **2.0000e-005** | **2.0000e-005** | **0.7775** |

## 3.3 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1381 | 0.0000 | 0.1381 | 0.0548 | 0.0000 | 0.0548 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0498 | 0.5177 | 0.4208 | 9.3000e-004 | | 0.0214 | 0.0214 | | 0.0197 | 0.0197 | 0.0000 | 81.8028 | 81.8028 | 0.0265 | 0.0000 | 82.4642 |
| **Total** | **0.0498** | **0.5177** | **0.4208** | **9.3000e-004** | **0.1381** | **0.0214** | **0.1594** | **0.0548** | **0.0197** | **0.0745** | **0.0000** | **81.8028** | **81.8028** | **0.0265** | **0.0000** | **82.4642** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0500e-003 | 7.8000e-004 | 9.7600e-003 | 3.0000e-005 | 3.2900e-003 | 2.0000e-005 | 3.3100e-003 | 8.7000e-004 | 2.0000e-005 | 8.9000e-004 | 0.0000 | 2.5691 | 2.5691 | 7.0000e-005 | 7.0000e-005 | 2.5915 |
| **Total** | **1.0500e-003** | **7.8000e-004** | **9.7600e-003** | **3.0000e-005** | **3.2900e-003** | **2.0000e-005** | **3.3100e-003** | **8.7000e-004** | **2.0000e-005** | **8.9000e-004** | **0.0000** | **2.5691** | **2.5691** | **7.0000e-005** | **7.0000e-005** | **2.5915** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0538 | 0.0000 | 0.0538 | 0.0214 | 0.0000 | 0.0214 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0498 | 0.5177 | 0.4208 | 9.3000e-004 | | 0.0214 | 0.0214 | | 0.0197 | 0.0197 | 0.0000 | 81.8027 | 81.8027 | 0.0265 | 0.0000 | 82.4641 |
| **Total** | **0.0498** | **0.5177** | **0.4208** | **9.3000e-004** | **0.0538** | **0.0214** | **0.0752** | **0.0214** | **0.0197** | **0.0410** | **0.0000** | **81.8027** | **81.8027** | **0.0265** | **0.0000** | **82.4641** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0500e-003 | 7.8000e-004 | 9.7600e-003 | 3.0000e-005 | 3.2900e-003 | 2.0000e-005 | 3.3100e-003 | 8.7000e-004 | 2.0000e-005 | 8.9000e-004 | 0.0000 | 2.5691 | 2.5691 | 7.0000e-005 | 7.0000e-005 | 2.5915 |
| **Total** | **1.0500e-003** | **7.8000e-004** | **9.7600e-003** | **3.0000e-005** | **3.2900e-003** | **2.0000e-005** | **3.3100e-003** | **8.7000e-004** | **2.0000e-005** | **8.9000e-004** | **0.0000** | **2.5691** | **2.5691** | **7.0000e-005** | **7.0000e-005** | **2.5915** |

## 3.4 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1062 | 0.9710 | 1.0965 | 1.8200e-003 | | 0.0472 | 0.0472 | | 0.0444 | 0.0444 | 0.0000 | 156.4682 | 156.4682 | 0.0372 | 0.0000 | 157.3987 |
| **Total** | **0.1062** | **0.9710** | **1.0965** | **1.8200e-003** | | **0.0472** | **0.0472** | | **0.0444** | **0.0444** | **0.0000** | **156.4682** | **156.4682** | **0.0372** | **0.0000** | **157.3987** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3600e-003 | 0.0772 | 0.0313 | 3.7000e-004 | 0.0132 | 5.5000e-004 | 0.0138 | 3.8100e-003 | 5.3000e-004 | 4.3400e-003 | 0.0000 | 36.4687 | 36.4687 | 9.5000e-004 | 5.3900e-003 | 38.0985 |
| Worker | 0.0374 | 0.0279 | 0.3492 | 9.9000e-004 | 0.1177 | 5.9000e-004 | 0.1183 | 0.0313 | 5.5000e-004 | 0.0318 | 0.0000 | 91.9087 | 91.9087 | 2.4100e-003 | 2.4900e-003 | 92.7121 |
| **Total** | **0.0398** | **0.1051** | **0.3805** | **1.3600e-003** | **0.1309** | **1.1400e-003** | **0.1320** | **0.0351** | **1.0800e-003** | **0.0361** | **0.0000** | **128.3774** | **128.3774** | **3.3600e-003** | **7.8800e-003** | **130.8106** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1062 | 0.9710 | 1.0965 | 1.8200e-003 | | 0.0472 | 0.0472 | | 0.0444 | 0.0444 | 0.0000 | 156.4680 | 156.4680 | 0.0372 | 0.0000 | 157.3986 |
| **Total** | **0.1062** | **0.9710** | **1.0965** | **1.8200e-003** | | **0.0472** | **0.0472** | | **0.0444** | **0.0444** | **0.0000** | **156.4680** | **156.4680** | **0.0372** | **0.0000** | **157.3986** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3600e-003 | 0.0772 | 0.0313 | 3.7000e-004 | 0.0132 | 5.5000e-004 | 0.0138 | 3.8100e-003 | 5.3000e-004 | 4.3400e-003 | 0.0000 | 36.4687 | 36.4687 | 9.5000e-004 | 5.3900e-003 | 38.0985 |
| Worker | 0.0374 | 0.0279 | 0.3492 | 9.9000e-004 | 0.1177 | 5.9000e-004 | 0.1183 | 0.0313 | 5.5000e-004 | 0.0318 | 0.0000 | 91.9087 | 91.9087 | 2.4100e-003 | 2.4900e-003 | 92.7121 |
| **Total** | **0.0398** | **0.1051** | **0.3805** | **1.3600e-003** | **0.1309** | **1.1400e-003** | **0.1320** | **0.0351** | **1.0800e-003** | **0.0361** | **0.0000** | **128.3774** | **128.3774** | **3.3600e-003** | **7.8800e-003** | **130.8106** |

## 3.4 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1214 | 1.1091 | 1.3338 | 2.2200e-003 | | 0.0506 | 0.0506 | | 0.0476 | 0.0476 | 0.0000 | 191.2755 | 191.2755 | 0.0452 | 0.0000 | 192.4063 |
| **Total** | **0.1214** | **1.1091** | **1.3338** | **2.2200e-003** | | **0.0506** | **0.0506** | | **0.0476** | **0.0476** | **0.0000** | **191.2755** | **191.2755** | **0.0452** | **0.0000** | **192.4063** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.8200e-003 | 0.0952 | 0.0376 | 4.5000e-004 | 0.0161 | 6.6000e-004 | 0.0168 | 4.6600e-003 | 6.4000e-004 | 5.2900e-003 | 0.0000 | 43.9592 | 43.9592 | 1.1200e-003 | 6.5000e-003 | 45.9229 |
| Worker | 0.0425 | 0.0303 | 0.3979 | 1.1700e-003 | 0.1438 | 7.0000e-004 | 0.1445 | 0.0382 | 6.4000e-004 | 0.0388 | 0.0000 | 109.9412 | 109.9412 | 2.6700e-003 | 2.8200e-003 | 110.8495 |
| **Total** | **0.0453** | **0.1255** | **0.4354** | **1.6200e-003** | **0.1600** | **1.3600e-003** | **0.1613** | **0.0429** | **1.2800e-003** | **0.0441** | **0.0000** | **153.9004** | **153.9004** | **3.7900e-003** | **9.3200e-003** | **156.7723** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1214 | 1.1091 | 1.3338 | 2.2200e-003 | | 0.0506 | 0.0506 | | 0.0476 | 0.0476 | 0.0000 | 191.2753 | 191.2753 | 0.0452 | 0.0000 | 192.4061 |
| **Total** | **0.1214** | **1.1091** | **1.3338** | **2.2200e-003** | | **0.0506** | **0.0506** | | **0.0476** | **0.0476** | **0.0000** | **191.2753** | **191.2753** | **0.0452** | **0.0000** | **192.4061** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.8200e-003 | 0.0952 | 0.0376 | 4.5000e-004 | 0.0161 | 6.6000e-004 | 0.0168 | 4.6600e-003 | 6.4000e-004 | 5.2900e-003 | 0.0000 | 43.9592 | 43.9592 | 1.1200e-003 | 6.5000e-003 | 45.9229 |
| Worker | 0.0425 | 0.0303 | 0.3979 | 1.1700e-003 | 0.1438 | 7.0000e-004 | 0.1445 | 0.0382 | 6.4000e-004 | 0.0388 | 0.0000 | 109.9412 | 109.9412 | 2.6700e-003 | 2.8200e-003 | 110.8495 |
| **Total** | **0.0453** | **0.1255** | **0.4354** | **1.6200e-003** | **0.1600** | **1.3600e-003** | **0.1613** | **0.0429** | **1.2800e-003** | **0.0441** | **0.0000** | **153.9004** | **153.9004** | **3.7900e-003** | **9.3200e-003** | **156.7723** |

## 3.5 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 9.8800e-003 | 0.0953 | 0.1463 | 2.3000e-004 | | 4.6900e-003 | 4.6900e-003 | | 4.3100e-003 | 4.3100e-003 | 0.0000 | 20.0265 | 20.0265 | 6.4800e-003 | 0.0000 | 20.1885 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.8800e-003** | **0.0953** | **0.1463** | **2.3000e-004** | | **4.6900e-003** | **4.6900e-003** | | **4.3100e-003** | **4.3100e-003** | **0.0000** | **20.0265** | **20.0265** | **6.4800e-003** | **0.0000** | **20.1885** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 3.5000e-004 | 4.5500e-003 | 1.0000e-005 | 1.6400e-003 | 1.0000e-005 | 1.6500e-003 | 4.4000e-004 | 1.0000e-005 | 4.4000e-004 | 0.0000 | 1.2572 | 1.2572 | 3.0000e-005 | 3.0000e-005 | 1.2676 |
| **Total** | **4.9000e-004** | **3.5000e-004** | **4.5500e-003** | **1.0000e-005** | **1.6400e-003** | **1.0000e-005** | **1.6500e-003** | **4.4000e-004** | **1.0000e-005** | **4.4000e-004** | **0.0000** | **1.2572** | **1.2572** | **3.0000e-005** | **3.0000e-005** | **1.2676** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 9.8800e-003 | 0.0953 | 0.1463 | 2.3000e-004 | | 4.6900e-003 | 4.6900e-003 | | 4.3100e-003 | 4.3100e-003 | 0.0000 | 20.0265 | 20.0265 | 6.4800e-003 | 0.0000 | 20.1884 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.8800e-003** | **0.0953** | **0.1463** | **2.3000e-004** | | **4.6900e-003** | **4.6900e-003** | | **4.3100e-003** | **4.3100e-003** | **0.0000** | **20.0265** | **20.0265** | **6.4800e-003** | **0.0000** | **20.1884** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.9000e-004 | 3.5000e-004 | 4.5500e-003 | 1.0000e-005 | 1.6400e-003 | 1.0000e-005 | 1.6500e-003 | 4.4000e-004 | 1.0000e-005 | 4.4000e-004 | 0.0000 | 1.2572 | 1.2572 | 3.0000e-005 | 3.0000e-005 | 1.2676 |
| **Total** | **4.9000e-004** | **3.5000e-004** | **4.5500e-003** | **1.0000e-005** | **1.6400e-003** | **1.0000e-005** | **1.6500e-003** | **4.4000e-004** | **1.0000e-005** | **4.4000e-004** | **0.0000** | **1.2572** | **1.2572** | **3.0000e-005** | **3.0000e-005** | **1.2676** |

## 3.6 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.5730 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.8100e-003 | 0.0122 | 0.0181 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 6.1000e-004 | 6.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.4000e-004 | 0.0000 | 2.5569 |
| **Total** | **0.5748** | **0.0122** | **0.0181** | **3.0000e-005** | | **6.1000e-004** | **6.1000e-004** | | **6.1000e-004** | **6.1000e-004** | **0.0000** | **2.5533** | **2.5533** | **1.4000e-004** | **0.0000** | **2.5569** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0400e-003 | 7.4000e-004 | 9.7100e-003 | 3.0000e-005 | 3.5100e-003 | 2.0000e-005 | 3.5300e-003 | 9.3000e-004 | 2.0000e-005 | 9.5000e-004 | 0.0000 | 2.6820 | 2.6820 | 7.0000e-005 | 7.0000e-005 | 2.7042 |
| **Total** | **1.0400e-003** | **7.4000e-004** | **9.7100e-003** | **3.0000e-005** | **3.5100e-003** | **2.0000e-005** | **3.5300e-003** | **9.3000e-004** | **2.0000e-005** | **9.5000e-004** | **0.0000** | **2.6820** | **2.6820** | **7.0000e-005** | **7.0000e-005** | **2.7042** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.5730 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.8100e-003 | 0.0122 | 0.0181 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 6.1000e-004 | 6.1000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.4000e-004 | 0.0000 | 2.5568 |
| **Total** | **0.5748** | **0.0122** | **0.0181** | **3.0000e-005** | | **6.1000e-004** | **6.1000e-004** | | **6.1000e-004** | **6.1000e-004** | **0.0000** | **2.5533** | **2.5533** | **1.4000e-004** | **0.0000** | **2.5568** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0400e-003 | 7.4000e-004 | 9.7100e-003 | 3.0000e-005 | 3.5100e-003 | 2.0000e-005 | 3.5300e-003 | 9.3000e-004 | 2.0000e-005 | 9.5000e-004 | 0.0000 | 2.6820 | 2.6820 | 7.0000e-005 | 7.0000e-005 | 2.7042 |
| **Total** | **1.0400e-003** | **7.4000e-004** | **9.7100e-003** | **3.0000e-005** | **3.5100e-003** | **2.0000e-005** | **3.5300e-003** | **9.3000e-004** | **2.0000e-005** | **9.5000e-004** | **0.0000** | **2.6820** | **2.6820** | **7.0000e-005** | **7.0000e-005** | **2.7042** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 0.5513 | 0.8503 | 5.7918 | 0.0135 | 1.5563 | 0.0105 | 1.5668 | 0.4157 | 9.8400e-003 | 0.4255 | 0.0000 | 1,297.1125 | 1,297.1125 | 0.0686 | 0.0622 | 1,317.3543 |
| Unmitigated | 0.5513 | 0.8503 | 5.7918 | 0.0135 | 1.5563 | 0.0105 | 1.5668 | 0.4157 | 9.8400e-003 | 0.4255 | 0.0000 | 1,297.1125 | 1,297.1125 | 0.0686 | 0.0622 | 1,317.3543 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Condo/Townhouse | 1,213.20 | 1,350.00 | 1040.40 | 4,128,115 | 4,128,115 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 1,213.20 | 1,350.00 | 1,040.40 | 4,128,115 | 4,128,115 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Condo/Townhouse | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |
| Other Non-Asphalt Surfaces | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 158.7734 | 158.7734 | 0.0134 | 1.6200e-003 | 159.5924 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 158.7734 | 158.7734 | 0.0134 | 1.6200e-003 | 159.5924 |
| NaturalGas Mitigated | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 202.6755 | 202.6755 | 3.8800e-003 | 3.7200e-003 | 203.8799 |
| NaturalGas Unmitigated | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 202.6755 | 202.6755 | 3.8800e-003 | 3.7200e-003 | 203.8799 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Condo/Townhouse | 3.79799e+006 | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 202.6755 | 202.6755 | 3.8800e-003 | 3.7200e-003 | 203.8799 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0205** | **0.1750** | **0.0745** | **1.1200e-003** | | **0.0142** | **0.0142** | | **0.0142** | **0.0142** | **0.0000** | **202.6755** | **202.6755** | **3.8800e-003** | **3.7200e-003** | **203.8799** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Condo/Townhouse | 3.79799e+006 | 0.0205 | 0.1750 | 0.0745 | 1.1200e-003 | | 0.0142 | 0.0142 | | 0.0142 | 0.0142 | 0.0000 | 202.6755 | 202.6755 | 3.8800e-003 | 3.7200e-003 | 203.8799 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0205** | **0.1750** | **0.0745** | **1.1200e-003** | | **0.0142** | **0.0142** | | **0.0142** | **0.0142** | **0.0000** | **202.6755** | **202.6755** | **3.8800e-003** | **3.7200e-003** | **203.8799** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Condo/Townhouse | 895277 | 158.7734 | 0.0134 | 1.6200e-003 | 159.5924 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **158.7734** | **0.0134** | **1.6200e-003** | **159.5924** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Condo/Townhouse | 895277 | 158.7734 | 0.0134 | 1.6200e-003 | 159.5924 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **158.7734** | **0.0134** | **1.6200e-003** | **159.5924** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.7680 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |
| Unmitigated | 0.7680 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0573 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.6550 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0557 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |
| **Total** | **0.7680** | **0.0214** | **1.8545** | **1.0000e-004** | | **0.0103** | **0.0103** | | **0.0103** | **0.0103** | **0.0000** | **3.0322** | **3.0322** | **2.9000e-003** | **0.0000** | **3.1048** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0573 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 0.6550 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0557 | 0.0214 | 1.8545 | 1.0000e-004 | | 0.0103 | 0.0103 | | 0.0103 | 0.0103 | 0.0000 | 3.0322 | 3.0322 | 2.9000e-003 | 0.0000 | 3.1048 |
| **Total** | **0.7680** | **0.0214** | **1.8545** | **1.0000e-004** | | **0.0103** | **0.0103** | | **0.0103** | **0.0103** | **0.0000** | **3.0322** | **3.0322** | **2.9000e-003** | **0.0000** | **3.1048** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |
| Unmitigated | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |

### 7.2 Water by Land Use

**Unmitigated**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Condo/Townhouse | 11.7277 / 7.39357 | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **45.3701** | **0.3857** | **9.4500e-003** | **57.8277** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Condo/Townhouse | 11.7277 / 7.39357 | 45.3701 | 0.3857 | 9.4500e-003 | 57.8277 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **45.3701** | **0.3857** | **9.4500e-003** | **57.8277** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 16.8077 | 0.9933 | 0.0000 | 41.6403 |
| Unmitigated | 16.8077 | 0.9933 | 0.0000 | 41.6403 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Condo/Townhouse | 82.8 | 16.8077 | 0.9933 | 0.0000 | 41.6403 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **16.8077** | **0.9933** | **0.0000** | **41.6403** |

**Mitigated**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Condo/Townhouse | 82.8 | 16.8077 | 0.9933 | 0.0000 | 41.6403 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **16.8077** | **0.9933** | **0.0000** | **41.6403** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Linden Bloomington Condos (APO2201)

**San Bernardino-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 1.62 | Acre | 1.62 | 70,567.20 | 0 |
| Condo/Townhouse | 180.00 | Dwelling Unit | 11.25 | 180,000.00 | 515 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 32 |
| **Climate Zone** | 10 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - Site is 12.87 acres, "Other Non-Asphalt Surfaces" represents landscaping.

Construction Phase - Left CalEEMod default phase durations even though the project plans to take until April 2027 to complete. This shorter schedule is conservative, producing higher daily emissions.

Grading - Project will balance onsite

Vehicle Trips - Traffic study supplied 6.74 peak daily rate, proportioned the CalEEMod Sat. and Sun. rates to match.

Woodstoves - None of the condos will have either a woodstove or fireplace.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblFireplaces | FireplaceDayYear | 25.00 | 0.00 |
| tblFireplaces | FireplaceHourDay | 3.00 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberGas | 153.00 | 0.00 |
| tblFireplaces | NumberNoFireplace | 18.00 | 180.00 |
| tblFireplaces | NumberWood | 9.00 | 0.00 |
| tblVehicleTrips | ST_TR | 8.14 | 7.50 |
| tblVehicleTrips | SU_TR | 6.28 | 5.78 |
| tblVehicleTrips | WD_TR | 7.32 | 6.74 |
| tblWoodstoves | NumberCatalytic | 9.00 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 9.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3999 | 34.5628 | 28.8054 | 0.0641 | 19.8582 | 1.4256 | 21.1252 | 10.1558 | 1.3116 | 11.3215 | 0.0000 | 6,215.8114 | 6,215.8114 | 1.9491 | 0.1261 | 6,265.9712 |
| 2024 | 57.5935 | 14.8738 | 22.1993 | 0.0478 | 1.9759 | 0.6298 | 2.6056 | 0.5285 | 0.5924 | 1.1209 | 0.0000 | 4,732.0515 | 4,732.0515 | 0.7173 | 0.1221 | 4,784.7845 |
| **Maximum** | **57.5935** | **34.5628** | **28.8054** | **0.0641** | **19.8582** | **1.4256** | **21.1252** | **10.1558** | **1.3116** | **11.3215** | **0.0000** | **6,215.8114** | **6,215.8114** | **1.9491** | **0.1261** | **6,265.9712** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3999 | 34.5628 | 28.8054 | 0.0641 | 7.8674 | 1.4256 | 9.1344 | 3.9933 | 1.3116 | 5.1590 | 0.0000 | 6,215.8114 | 6,215.8114 | 1.9491 | 0.1261 | 6,265.9711 |
| 2024 | 57.5935 | 14.8738 | 22.1993 | 0.0478 | 1.9759 | 0.6298 | 2.6056 | 0.5285 | 0.5924 | 1.1209 | 0.0000 | 4,732.0515 | 4,732.0515 | 0.7173 | 0.1221 | 4,784.7845 |
| **Maximum** | **57.5935** | **34.5628** | **28.8054** | **0.0641** | **7.8674** | **1.4256** | **9.1344** | **3.9933** | **1.3116** | **5.1590** | **0.0000** | **6,215.8114** | **6,215.8114** | **1.9491** | **0.1261** | **6,265.9711** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **54.92** | **0.00** | **50.53** | **57.68** | **0.00** | **49.53** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Mobile | 3.9214 | 4.8210 | 38.0697 | 0.0882 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 9,332.7618 | 9,332.7618 | 0.4497 | 0.4057 | 9,464.9151 |
| **Total** | **8.3820** | **5.9509** | **53.3141** | **0.0951** | **9.7392** | **0.2244** | **9.9636** | **2.5972** | **0.2203** | **2.8175** | **0.0000** | **10,583.6739** | **10,583.6739** | **0.4988** | **0.4282** | **10,723.7420** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |
| Energy | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Mobile | 3.9214 | 4.8210 | 38.0697 | 0.0882 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 9,332.7618 | 9,332.7618 | 0.4497 | 0.4057 | 9,464.9151 |
| **Total** | **8.3820** | **5.9509** | **53.3141** | **0.0951** | **9.7392** | **0.2244** | **9.9636** | **2.5972** | **0.2203** | **2.8175** | **0.0000** | **10,583.6739** | **10,583.6739** | **0.4988** | **0.4282** | **10,723.7420** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 5/1/2023 | 5/12/2023 | 5 | 10 | |
| 2 | Grading | Grading | 5/13/2023 | 6/23/2023 | 5 | 30 | |
| 3 | Building Construction | Building Construction | 6/24/2023 | 8/16/2024 | 5 | 300 | |
| 4 | Paving | Paving | 8/17/2024 | 9/13/2024 | 5 | 20 | |
| 5 | Architectural Coating | Architectural Coating | 9/14/2024 | 10/11/2024 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 15**

**Acres of Grading (Grading Phase): 90**

**Acres of Paving: 1.62**

**Residential Indoor: 364,500; Residential Outdoor: 121,500; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,234**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 159.00 | 31.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 32.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0704 | 0.0425 | 0.6788 | 1.8000e-003 | 0.2012 | 9.9000e-004 | 0.2022 | 0.0534 | 9.1000e-004 | 0.0543 | | 183.9003 | 183.9003 | 4.3900e-003 | 4.3200e-003 | 185.2988 |
| **Total** | **0.0704** | **0.0425** | **0.6788** | **1.8000e-003** | **0.2012** | **9.9000e-004** | **0.2022** | **0.0534** | **9.1000e-004** | **0.0543** | | **183.9003** | **183.9003** | **4.3900e-003** | **4.3200e-003** | **185.2988** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 7.6662 | 0.0000 | 7.6662 | 3.9400 | 0.0000 | 3.9400 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **7.6662** | **1.2660** | **8.9323** | **3.9400** | **1.1647** | **5.1047** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0704 | 0.0425 | 0.6788 | 1.8000e-003 | 0.2012 | 9.9000e-004 | 0.2022 | 0.0534 | 9.1000e-004 | 0.0543 | | 183.9003 | 183.9003 | 4.3900e-003 | 4.3200e-003 | 185.2988 |
| **Total** | **0.0704** | **0.0425** | **0.6788** | **1.8000e-003** | **0.2012** | **9.9000e-004** | **0.2022** | **0.0534** | **9.1000e-004** | **0.0543** | | **183.9003** | **183.9003** | **4.3900e-003** | **4.3200e-003** | **185.2988** |

## 3.3 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0782 | 0.0472 | 0.7542 | 2.0000e-003 | 0.2236 | 1.1000e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 204.3337 | 204.3337 | 4.8800e-003 | 4.8000e-003 | 205.8876 |
| **Total** | **0.0782** | **0.0472** | **0.7542** | **2.0000e-003** | **0.2236** | **1.1000e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **204.3337** | **204.3337** | **4.8800e-003** | **4.8000e-003** | **205.8876** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.5894 | 0.0000 | 3.5894 | 1.4250 | 0.0000 | 1.4250 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **3.5894** | **1.4245** | **5.0139** | **1.4250** | **1.3105** | **2.7355** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0782 | 0.0472 | 0.7542 | 2.0000e-003 | 0.2236 | 1.1000e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 204.3337 | 204.3337 | 4.8800e-003 | 4.8000e-003 | 205.8876 |
| **Total** | **0.0782** | **0.0472** | **0.7542** | **2.0000e-003** | **0.2236** | **1.1000e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **204.3337** | **204.3337** | **4.8800e-003** | **4.8000e-003** | **205.8876** |

## 3.4 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0363 | 1.0873 | 0.4563 | 5.5500e-003 | 0.1986 | 8.1700e-003 | 0.2068 | 0.0572 | 7.8200e-003 | 0.0650 | | 594.9464 | 594.9464 | 0.0156 | 0.0879 | 621.5166 |
| Worker | 0.6217 | 0.3752 | 5.9961 | 0.0159 | 1.7773 | 8.7800e-003 | 1.7860 | 0.4713 | 8.0800e-003 | 0.4794 | | 1,624.4530 | 1,624.4530 | 0.0388 | 0.0382 | 1,636.8063 |
| **Total** | **0.6580** | **1.4625** | **6.4523** | **0.0214** | **1.9759** | **0.0170** | **1.9928** | **0.5285** | **0.0159** | **0.5444** | | **2,219.3993** | **2,219.3993** | **0.0544** | **0.1261** | **2,258.3228** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0363 | 1.0873 | 0.4563 | 5.5500e-003 | 0.1986 | 8.1700e-003 | 0.2068 | 0.0572 | 7.8200e-003 | 0.0650 | | 594.9464 | 594.9464 | 0.0156 | 0.0879 | 621.5166 |
| Worker | 0.6217 | 0.3752 | 5.9961 | 0.0159 | 1.7773 | 8.7800e-003 | 1.7860 | 0.4713 | 8.0800e-003 | 0.4794 | | 1,624.4530 | 1,624.4530 | 0.0388 | 0.0382 | 1,636.8063 |
| **Total** | **0.6580** | **1.4625** | **6.4523** | **0.0214** | **1.9759** | **0.0170** | **1.9928** | **0.5285** | **0.0159** | **0.5444** | | **2,219.3993** | **2,219.3993** | **0.0544** | **0.1261** | **2,258.3228** |

## 3.4 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0355 | 1.0970 | 0.4487 | 5.4700e-003 | 0.1986 | 8.0500e-003 | 0.2067 | 0.0572 | 7.7000e-003 | 0.0649 | | 586.7506 | 586.7506 | 0.0151 | 0.0866 | 612.9449 |
| Worker | 0.5776 | 0.3331 | 5.5838 | 0.0154 | 1.7773 | 8.4400e-003 | 1.7857 | 0.4713 | 7.7700e-003 | 0.4791 | | 1,589.6021 | 1,589.6021 | 0.0351 | 0.0354 | 1,601.0319 |
| **Total** | **0.6130** | **1.4301** | **6.0324** | **0.0209** | **1.9759** | **0.0165** | **1.9923** | **0.5285** | **0.0155** | **0.5440** | | **2,176.3526** | **2,176.3526** | **0.0502** | **0.1221** | **2,213.9768** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0355 | 1.0970 | 0.4487 | 5.4700e-003 | 0.1986 | 8.0500e-003 | 0.2067 | 0.0572 | 7.7000e-003 | 0.0649 | | 586.7506 | 586.7506 | 0.0151 | 0.0866 | 612.9449 |
| Worker | 0.5776 | 0.3331 | 5.5838 | 0.0154 | 1.7773 | 8.4400e-003 | 1.7857 | 0.4713 | 7.7700e-003 | 0.4791 | | 1,589.6021 | 1,589.6021 | 0.0351 | 0.0354 | 1,601.0319 |
| **Total** | **0.6130** | **1.4301** | **6.0324** | **0.0209** | **1.9759** | **0.0165** | **1.9923** | **0.5285** | **0.0155** | **0.5440** | | **2,176.3526** | **2,176.3526** | **0.0502** | **0.1221** | **2,213.9768** |

## 3.5 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0545 | 0.0314 | 0.5268 | 1.4500e-003 | 0.1677 | 8.0000e-004 | 0.1685 | 0.0445 | 7.3000e-004 | 0.0452 | | 149.9625 | 149.9625 | 3.3100e-003 | 3.3400e-003 | 151.0408 |
| **Total** | **0.0545** | **0.0314** | **0.5268** | **1.4500e-003** | **0.1677** | **8.0000e-004** | **0.1685** | **0.0445** | **7.3000e-004** | **0.0452** | | **149.9625** | **149.9625** | **3.3100e-003** | **3.3400e-003** | **151.0408** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0545 | 0.0314 | 0.5268 | 1.4500e-003 | 0.1677 | 8.0000e-004 | 0.1685 | 0.0445 | 7.3000e-004 | 0.0452 | | 149.9625 | 149.9625 | 3.3100e-003 | 3.3400e-003 | 151.0408 |
| **Total** | **0.0545** | **0.0314** | **0.5268** | **1.4500e-003** | **0.1677** | **8.0000e-004** | **0.1685** | **0.0445** | **7.3000e-004** | **0.0452** | | **149.9625** | **149.9625** | **3.3100e-003** | **3.3400e-003** | **151.0408** |

## 3.6 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 57.2965 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **57.4772** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1162 | 0.0670 | 1.1238 | 3.1000e-003 | 0.3577 | 1.7000e-003 | 0.3594 | 0.0949 | 1.5600e-003 | 0.0964 | | 319.9199 | 319.9199 | 7.0600e-003 | 7.1300e-003 | 322.2203 |
| **Total** | **0.1162** | **0.0670** | **1.1238** | **3.1000e-003** | **0.3577** | **1.7000e-003** | **0.3594** | **0.0949** | **1.5600e-003** | **0.0964** | | **319.9199** | **319.9199** | **7.0600e-003** | **7.1300e-003** | **322.2203** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 57.2965 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **57.4772** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1162 | 0.0670 | 1.1238 | 3.1000e-003 | 0.3577 | 1.7000e-003 | 0.3594 | 0.0949 | 1.5600e-003 | 0.0964 | | 319.9199 | 319.9199 | 7.0600e-003 | 7.1300e-003 | 322.2203 |
| **Total** | **0.1162** | **0.0670** | **1.1238** | **3.1000e-003** | **0.3577** | **1.7000e-003** | **0.3594** | **0.0949** | **1.5600e-003** | **0.0964** | | **319.9199** | **319.9199** | **7.0600e-003** | **7.1300e-003** | **322.2203** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.9214 | 4.8210 | 38.0697 | 0.0882 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 9,332.7618 | 9,332.7618 | 0.4497 | 0.4057 | 9,464.9151 |
| Unmitigated | 3.9214 | 4.8210 | 38.0697 | 0.0882 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 9,332.7618 | 9,332.7618 | 0.4497 | 0.4057 | 9,464.9151 |

### 4.2 Trip Summary Information

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Condo/Townhouse | 1,213.20 | 1,350.00 | 1040.40 | 4,128,115 | 4,128,115 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 1,213.20 | 1,350.00 | 1,040.40 | 4,128,115 | 4,128,115 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Condo/Townhouse | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |
| Other Non-Asphalt Surfaces | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NaturalGas Mitigated | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| NaturalGas Unmitigated | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Condo/Townhouse | 10405.5 | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.1122** | **0.9589** | **0.4081** | **6.1200e-003** | | **0.0775** | **0.0775** | | **0.0775** | **0.0775** | | **1,224.1723** | **1,224.1723** | **0.0235** | **0.0224** | **1,231.4470** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Condo/Townhouse | 10.4055 | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **0.1122** | **0.9589** | **0.4081** | **6.1200e-003** | | **0.0775** | **0.0775** | | **0.0775** | **0.0775** | | **1,224.1723** | **1,224.1723** | **0.0235** | **0.0224** | **1,231.4470** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |
| Unmitigated | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |

### 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.3140 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 3.5890 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.4455 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | | 26.7398 | 26.7398 | 0.0256 | | 27.3799 |
| **Total** | **4.3484** | **0.1709** | **14.8363** | **7.8000e-004** | | **0.0823** | **0.0823** | | **0.0823** | **0.0823** | **0.0000** | **26.7398** | **26.7398** | **0.0256** | **0.0000** | **27.3799** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.3140 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.5890 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.4455 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | | 26.7398 | 26.7398 | 0.0256 | | 27.3799 |
| **Total** | **4.3484** | **0.1709** | **14.8363** | **7.8000e-004** | | **0.0823** | **0.0823** | | **0.0823** | **0.0823** | **0.0000** | **26.7398** | **26.7398** | **0.0256** | **0.0000** | **27.3799** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# Linden Bloomington Condos (APO2201)

**San Bernardino-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 1.62 | Acre | 1.62 | 70,567.20 | 0 |
| Condo/Townhouse | 180.00 | Dwelling Unit | 11.25 | 180,000.00 | 515 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 32 |
| **Climate Zone** | 10 | | | **Operational Year** | 2027 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - Site is 12.87 acres, "Other Non-Asphalt Surfaces" represents landscaping.

Construction Phase - Left CalEEMod default phase durations even though the project plans to take until April 2027 to complete. This shorter schedule is conservative, producing higher daily emissions.

Grading - Project will balance onsite

Vehicle Trips - Traffic study supplied 6.74 peak daily rate, proportioned the CalEEMod Sat. and Sun. rates to match.

Woodstoves - None of the condos will have either a woodstove or fireplace.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblFireplaces | FireplaceDayYear | 25.00 | 0.00 |
| tblFireplaces | FireplaceHourDay | 3.00 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberGas | 153.00 | 0.00 |
| tblFireplaces | NumberNoFireplace | 18.00 | 180.00 |
| tblFireplaces | NumberWood | 9.00 | 0.00 |
| tblVehicleTrips | ST_TR | 8.14 | 7.50 |
| tblVehicleTrips | SU_TR | 6.28 | 5.78 |
| tblVehicleTrips | WD_TR | 7.32 | 6.74 |
| tblWoodstoves | NumberCatalytic | 9.00 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 9.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3971 | 34.5652 | 28.6719 | 0.0639 | 19.8582 | 1.4256 | 21.1252 | 10.1558 | 1.3116 | 11.3215 | 0.0000 | 6,196.5989 | 6,196.5989 | 1.9491 | 0.1276 | 6,246.8048 |
| 2024 | 57.5895 | 14.9524 | 21.2303 | 0.0464 | 1.9759 | 0.6298 | 2.6057 | 0.5285 | 0.5924 | 1.1209 | 0.0000 | 4,584.3365 | 4,584.3365 | 0.7173 | 0.1234 | 4,637.4843 |
| **Maximum** | **57.5895** | **34.5652** | **28.6719** | **0.0639** | **19.8582** | **1.4256** | **21.1252** | **10.1558** | **1.3116** | **11.3215** | **0.0000** | **6,196.5989** | **6,196.5989** | **1.9491** | **0.1276** | **6,246.8048** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3971 | 34.5652 | 28.6719 | 0.0639 | 7.8674 | 1.4256 | 9.1344 | 3.9933 | 1.3116 | 5.1590 | 0.0000 | 6,196.5989 | 6,196.5989 | 1.9491 | 0.1276 | 6,246.8048 |
| 2024 | 57.5895 | 14.9524 | 21.2303 | 0.0464 | 1.9759 | 0.6298 | 2.6057 | 0.5285 | 0.5924 | 1.1209 | 0.0000 | 4,584.3365 | 4,584.3365 | 0.7173 | 0.1234 | 4,637.4843 |
| **Maximum** | **57.5895** | **34.5652** | **28.6719** | **0.0639** | **7.8674** | **1.4256** | **9.1344** | **3.9933** | **1.3116** | **5.1590** | **0.0000** | **6,196.5989** | **6,196.5989** | **1.9491** | **0.1276** | **6,246.8048** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **54.92** | **0.00** | **50.53** | **57.68** | **0.00** | **49.53** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Mobile | 3.4092 | 5.1275 | 34.1647 | 0.0819 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 8,661.2279 | 8,661.2279 | 0.4600 | 0.4155 | 8,796.5517 |
| **Total** | **7.8699** | **6.2574** | **49.4090** | **0.0888** | **9.7392** | **0.2245** | **9.9637** | **2.5972** | **0.2204** | **2.8176** | **0.0000** | **9,912.1400** | **9,912.1400** | **0.5090** | **0.4380** | **10,055.3786** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |
| Energy | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Mobile | 3.4092 | 5.1275 | 34.1647 | 0.0819 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 8,661.2279 | 8,661.2279 | 0.4600 | 0.4155 | 8,796.5517 |
| **Total** | **7.8699** | **6.2574** | **49.4090** | **0.0888** | **9.7392** | **0.2245** | **9.9637** | **2.5972** | **0.2204** | **2.8176** | **0.0000** | **9,912.1400** | **9,912.1400** | **0.5090** | **0.4380** | **10,055.3786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 5/1/2023 | 5/12/2023 | 5 | 10 | |
| 2 | Grading | Grading | 5/13/2023 | 6/23/2023 | 5 | 30 | |
| 3 | Building Construction | Building Construction | 6/24/2023 | 8/16/2024 | 5 | 300 | |
| 4 | Paving | Paving | 8/17/2024 | 9/13/2024 | 5 | 20 | |
| 5 | Architectural Coating | Architectural Coating | 9/14/2024 | 10/11/2024 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 15**

**Acres of Grading (Grading Phase): 90**

**Acres of Paving: 1.62**

**Residential Indoor: 364,500; Residential Outdoor: 121,500; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,234**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 159.00 | 31.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 32.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0678 | 0.0447 | 0.5587 | 1.6300e-003 | 0.2012 | 9.9000e-004 | 0.2022 | 0.0534 | 9.1000e-004 | 0.0543 | | 166.6090 | 166.6090 | 4.4000e-003 | 4.4600e-003 | 168.0491 |
| **Total** | **0.0678** | **0.0447** | **0.5587** | **1.6300e-003** | **0.2012** | **9.9000e-004** | **0.2022** | **0.0534** | **9.1000e-004** | **0.0543** | | **166.6090** | **166.6090** | **4.4000e-003** | **4.4600e-003** | **168.0491** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 7.6662 | 0.0000 | 7.6662 | 3.9400 | 0.0000 | 3.9400 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **7.6662** | **1.2660** | **8.9323** | **3.9400** | **1.1647** | **5.1047** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0678 | 0.0447 | 0.5587 | 1.6300e-003 | 0.2012 | 9.9000e-004 | 0.2022 | 0.0534 | 9.1000e-004 | 0.0543 | | 166.6090 | 166.6090 | 4.4000e-003 | 4.4600e-003 | 168.0491 |
| **Total** | **0.0678** | **0.0447** | **0.5587** | **1.6300e-003** | **0.2012** | **9.9000e-004** | **0.2022** | **0.0534** | **9.1000e-004** | **0.0543** | | **166.6090** | **166.6090** | **4.4000e-003** | **4.4600e-003** | **168.0491** |

## 3.3 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0753 | 0.0496 | 0.6208 | 1.8100e-003 | 0.2236 | 1.1000e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 185.1212 | 185.1212 | 4.8900e-003 | 4.9600e-003 | 186.7212 |
| **Total** | **0.0753** | **0.0496** | **0.6208** | **1.8100e-003** | **0.2236** | **1.1000e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **185.1212** | **185.1212** | **4.8900e-003** | **4.9600e-003** | **186.7212** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.5894 | 0.0000 | 3.5894 | 1.4250 | 0.0000 | 1.4250 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **3.5894** | **1.4245** | **5.0139** | **1.4250** | **1.3105** | **2.7355** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0753 | 0.0496 | 0.6208 | 1.8100e-003 | 0.2236 | 1.1000e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 185.1212 | 185.1212 | 4.8900e-003 | 4.9600e-003 | 186.7212 |
| **Total** | **0.0753** | **0.0496** | **0.6208** | **1.8100e-003** | **0.2236** | **1.1000e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **185.1212** | **185.1212** | **4.8900e-003** | **4.9600e-003** | **186.7212** |

## 3.4 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

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Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0338 | 1.1485 | 0.4703 | 5.5600e-003 | 0.1986 | 8.2000e-003 | 0.2068 | 0.0572 | 7.8500e-003 | 0.0650 | | 596.3892 | 596.3892 | 0.0154 | 0.0881 | 623.0376 |
| Worker | 0.5989 | 0.3945 | 4.9351 | 0.0144 | 1.7773 | 8.7800e-003 | 1.7860 | 0.4713 | 8.0800e-003 | 0.4794 | | 1,471.7131 | 1,471.7131 | 0.0389 | 0.0394 | 1,484.4336 |
| **Total** | **0.6327** | **1.5430** | **5.4054** | **0.0199** | **1.9759** | **0.0170** | **1.9928** | **0.5285** | **0.0159** | **0.5445** | | **2,068.1023** | **2,068.1023** | **0.0543** | **0.1276** | **2,107.4712** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0338 | 1.1485 | 0.4703 | 5.5600e-003 | 0.1986 | 8.2000e-003 | 0.2068 | 0.0572 | 7.8500e-003 | 0.0650 | | 596.3892 | 596.3892 | 0.0154 | 0.0881 | 623.0376 |
| Worker | 0.5989 | 0.3945 | 4.9351 | 0.0144 | 1.7773 | 8.7800e-003 | 1.7860 | 0.4713 | 8.0800e-003 | 0.4794 | | 1,471.7131 | 1,471.7131 | 0.0389 | 0.0394 | 1,484.4336 |
| **Total** | **0.6327** | **1.5430** | **5.4054** | **0.0199** | **1.9759** | **0.0170** | **1.9928** | **0.5285** | **0.0159** | **0.5445** | | **2,068.1023** | **2,068.1023** | **0.0543** | **0.1276** | **2,107.4712** |

## 3.4 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0329 | 1.1586 | 0.4626 | 5.4800e-003 | 0.1986 | 8.0800e-003 | 0.2067 | 0.0572 | 7.7300e-003 | 0.0649 | | 588.1846 | 588.1846 | 0.0150 | 0.0869 | 614.4554 |
| Worker | 0.5577 | 0.3500 | 4.6009 | 0.0140 | 1.7773 | 8.4400e-003 | 1.7857 | 0.4713 | 7.7700e-003 | 0.4791 | | 1,440.4530 | 1,440.4530 | 0.0352 | 0.0365 | 1,452.2212 |
| **Total** | **0.5906** | **1.5086** | **5.0635** | **0.0194** | **1.9759** | **0.0165** | **1.9924** | **0.5285** | **0.0155** | **0.5440** | | **2,028.6376** | **2,028.6376** | **0.0502** | **0.1234** | **2,066.6766** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0329 | 1.1586 | 0.4626 | 5.4800e-003 | 0.1986 | 8.0800e-003 | 0.2067 | 0.0572 | 7.7300e-003 | 0.0649 | | 588.1846 | 588.1846 | 0.0150 | 0.0869 | 614.4554 |
| Worker | 0.5577 | 0.3500 | 4.6009 | 0.0140 | 1.7773 | 8.4400e-003 | 1.7857 | 0.4713 | 7.7700e-003 | 0.4791 | | 1,440.4530 | 1,440.4530 | 0.0352 | 0.0365 | 1,452.2212 |
| **Total** | **0.5906** | **1.5086** | **5.0635** | **0.0194** | **1.9759** | **0.0165** | **1.9924** | **0.5285** | **0.0155** | **0.5440** | | **2,028.6376** | **2,028.6376** | **0.0502** | **0.1234** | **2,066.6766** |

## 3.5 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

**Unmitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0526 | 0.0330 | 0.4340 | 1.3200e-003 | 0.1677 | 8.0000e-004 | 0.1685 | 0.0445 | 7.3000e-004 | 0.0452 | | 135.8918 | 135.8918 | 3.3200e-003 | 3.4500e-003 | 137.0020 |
| **Total** | **0.0526** | **0.0330** | **0.4340** | **1.3200e-003** | **0.1677** | **8.0000e-004** | **0.1685** | **0.0445** | **7.3000e-004** | **0.0452** | | **135.8918** | **135.8918** | **3.3200e-003** | **3.4500e-003** | **137.0020** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0526 | 0.0330 | 0.4340 | 1.3200e-003 | 0.1677 | 8.0000e-004 | 0.1685 | 0.0445 | 7.3000e-004 | 0.0452 | | 135.8918 | 135.8918 | 3.3200e-003 | 3.4500e-003 | 137.0020 |
| **Total** | **0.0526** | **0.0330** | **0.4340** | **1.3200e-003** | **0.1677** | **8.0000e-004** | **0.1685** | **0.0445** | **7.3000e-004** | **0.0452** | | **135.8918** | **135.8918** | **3.3200e-003** | **3.4500e-003** | **137.0020** |

## 3.6 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 57.2965 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **57.4772** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

**Unmitigated Construction Off-Site**

Date: 11/2/2022 9:14 AM

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1123 | 0.0705 | 0.9260 | 2.8100e-003 | 0.3577 | 1.7000e-003 | 0.3594 | 0.0949 | 1.5600e-003 | 0.0964 | | 289.9025 | 289.9025 | 7.0900e-003 | 7.3500e-003 | 292.2709 |
| **Total** | **0.1123** | **0.0705** | **0.9260** | **2.8100e-003** | **0.3577** | **1.7000e-003** | **0.3594** | **0.0949** | **1.5600e-003** | **0.0964** | | **289.9025** | **289.9025** | **7.0900e-003** | **7.3500e-003** | **292.2709** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 57.2965 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **57.4772** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

**Mitigated Construction Off-Site**

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1123 | 0.0705 | 0.9260 | 2.8100e-003 | 0.3577 | 1.7000e-003 | 0.3594 | 0.0949 | 1.5600e-003 | 0.0964 | | 289.9025 | 289.9025 | 7.0900e-003 | 7.3500e-003 | 292.2709 |
| **Total** | **0.1123** | **0.0705** | **0.9260** | **2.8100e-003** | **0.3577** | **1.7000e-003** | **0.3594** | **0.0949** | **1.5600e-003** | **0.0964** | | **289.9025** | **289.9025** | **7.0900e-003** | **7.3500e-003** | **292.2709** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.4092 | 5.1275 | 34.1647 | 0.0819 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 8,661.2279 | 8,661.2279 | 0.4600 | 0.4155 | 8,796.5517 |
| Unmitigated | 3.4092 | 5.1275 | 34.1647 | 0.0819 | 9.7392 | 0.0646 | 9.8038 | 2.5972 | 0.0605 | 2.6577 | | 8,661.2279 | 8,661.2279 | 0.4600 | 0.4155 | 8,796.5517 |

### 4.2 Trip Summary Information

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Condo/Townhouse | 1,213.20 | 1,350.00 | 1040.40 | 4,128,115 | 4,128,115 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 1,213.20 | 1,350.00 | 1,040.40 | 4,128,115 | 4,128,115 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Condo/Townhouse | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |
| Other Non-Asphalt Surfaces | 0.547196 | 0.056762 | 0.174118 | 0.130529 | 0.024505 | 0.006824 | 0.012367 | 0.017399 | 0.000546 | 0.000242 | 0.024357 | 0.000961 | 0.004193 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NaturalGas Mitigated | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| NaturalGas Unmitigated | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Condo/Townhouse | 10405.5 | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.1122** | **0.9589** | **0.4081** | **6.1200e-003** | | **0.0775** | **0.0775** | | **0.0775** | **0.0775** | | **1,224.1723** | **1,224.1723** | **0.0235** | **0.0224** | **1,231.4470** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Condo/Townhouse | 10.4055 | 0.1122 | 0.9589 | 0.4081 | 6.1200e-003 | | 0.0775 | 0.0775 | | 0.0775 | 0.0775 | | 1,224.1723 | 1,224.1723 | 0.0235 | 0.0224 | 1,231.4470 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **0.1122** | **0.9589** | **0.4081** | **6.1200e-003** | | **0.0775** | **0.0775** | | **0.0775** | **0.0775** | | **1,224.1723** | **1,224.1723** | **0.0235** | **0.0224** | **1,231.4470** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |
| Unmitigated | 4.3484 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | 0.0000 | 26.7398 | 26.7398 | 0.0256 | 0.0000 | 27.3799 |

### 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.3140 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 3.5890 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.4455 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | | 26.7398 | 26.7398 | 0.0256 | | 27.3799 |
| **Total** | **4.3484** | **0.1709** | **14.8363** | **7.8000e-004** | | **0.0823** | **0.0823** | | **0.0823** | **0.0823** | **0.0000** | **26.7398** | **26.7398** | **0.0256** | **0.0000** | **27.3799** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.3140 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.5890 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.4455 | 0.1709 | 14.8363 | 7.8000e-004 | | 0.0823 | 0.0823 | | 0.0823 | 0.0823 | | 26.7398 | 26.7398 | 0.0256 | | 27.3799 |
| **Total** | **4.3484** | **0.1709** | **14.8363** | **7.8000e-004** | | **0.0823** | **0.0823** | | **0.0823** | **0.0823** | **0.0000** | **26.7398** | **26.7398** | **0.0256** | **0.0000** | **27.3799** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

Linden Bloomington Condos (APO2201) - San Bernardino-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# ATTACHMENT D:

# FUEL USAGE WORKSHEET

# Fuel Consumption Worksheet

| Annual VMT from CalEEMod modeling | Gasoline-Fueled Percentage | Diesel-Fueled Percentage | Gasoline mpg | Gasoline Consumption (gallons/yr) | Diesel mpg | Diesel Consumption (gallons/yr) |
|---|---|---|---|---|---|---|
| 4,128,115 | 82.7% | 17.3% | 22.2 | 153,782 | 8 | 89,269 |

| | | Fleet Mix from CalEEMod modeling | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | ADT | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
| Residential | 1,213 | 54.7% | 5.7% | 17.4% | 13.1% | 2.5% | 0.68% | 1.2% | 1.7% | 0.055% | 0.024% | 2.4% | 0.10% | 0.42% |
| | | **Vehicle Percentages by fuel type** | | | | | | | | | | | | |
| Gasoline-powered: | | 98% | 95% | 75% | 50% | 50% | 10% | 5% | 5% | 0% | 0% | 100% | 10% | 50% |
| Diesel-powered: | | 2% | 5% | 25% | 50% | 50% | 90% | 95% | 95% | 100% | 100% | 0% | 90% | 50% |

truck % = 42.25%