

APPENDIX A – AIR QUALITY, GREENHOUSE GAS, AND ENERGY IMPACT ANALYSIS

CALIFORNIA WAREHOUSE DEVELOPMENT 2601 SOUTH CALIFORNIA AVENUE MONROVIA, CALIFORNIA 91016



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ATTACHMENTS

Attachment A – CalEEMod Report

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1. INTRODUCTION AND SUMMARY

This Air Quality Study analyzes the air quality impacts associated with the construction and subsequent operation of a 27,078 square foot warehouse building. This Air Quality Report is intended for use by the City of Monrovia, in its capacity as Lead Agency for the proposed project, to assess the potential air quality impacts of the proposed project in compliance with the California Environmental Quality Act (CEQA; PRC §21000 et seq.) and the State CEQA Guidelines (14 CCR §15000 et seq.). This report consists of the following elements:

- *Section 1 Introduction* describes the scope and format of this Report and its intended use.
- *Section 2 Project Location* describes the proposed project's location and its environmental setting.
- *Section 3 Project Description* provides an overview of the construction and operational characteristics of the proposed project.
- *Section 4, Characteristics of Air Quality* describes the background of air quality in the planning area along with the regulatory framework.
- *Section 5, Air Quality Impact Analysis* indicates the potential construction (short-term) and operational (long-term) air quality impacts of the proposed project and evaluates these effects in accordance with Appendix G of the State CEQA Guidelines.
- *Section 6, Greenhouse Gas Significance Thresholds and Methodology* describes the regulatory framework, significance thresholds, and methodology used to evaluate greenhouse gas (GHG) emissions in accordance with Appendix G of the State CEQA Guidelines.
- *Section 7, Greenhouse Gas Emissions* includes an analysis of the proposed project's greenhouse gas (GHG) emissions associated with construction and operation activities in accordance with Appendix G of the State CEQA Guidelines.
- *Section 8, Mitigation Measures* identifies mitigation measures to reduce potential significant impacts to less than significant levels.
- *Section 9, Sources* lists the references used in the preparation of this report.

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on air quality if it results in any of the following:

- The proposed project would be in conflict with or obstruct the implementation of the applicable air quality plan.
- The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- The proposed project would expose sensitive receptors to substantial pollutant concentrations.
- The proposed project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The report analyzes the air quality impacts associated with the construction and subsequent operation of a 27,078 square foot warehouse building (2,146 square feet of office and 24,932 square feet of warehousing) with related parking and site improvements on a 61,508 square foot property. The key findings of the air

quality analysis are summarized below:

- There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. The Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and lead (Pb). Automobiles sold in California must meet the stricter emission requirements of California Air Resources Board (CARB). The project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).
- The South Coast Air Quality Management District (SCAQMD) is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. Currently, the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plan (AQMP) to meet the state and federal ambient air quality standards. AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.
- The project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD. The SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the project site is located within the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.
- The CARB is responsible for regulating mobile sources (e.g. vehicles) in the SCAB. The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: ozone (O₃), particulate matter (PM), which consists of “inhalable coarse” PM (particles with a size of between 2.5 and 10 microns in diameter, or PM₁₀) and “fine” PM (particles with a diameter smaller than 2.5 microns, or PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB.
- The California Emissions Estimator Model® (CalEEMod) was used to calculate air quality impacts. This model is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.
- Consistency Criteria 1 refers to a proposed project’s potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation. Consistency Criteria 2 refers to a proposed project’s potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP’s implementation. The proposed project would conform to Consistency Criteria 1 since the short (construction) and long-term (operational) airborne emissions associated

with the construction and operation of the proposed project would be below levels that the SCAQMD considers to be a significant impact. The proposed project would also conform to Consistency Criteria 2 since it would not affect any regional population, housing, and employment projections prepared for the City because the proposed project would not directly result in an increase in population or a need for housing. The proposed project would not prohibit or preclude the policies outlined above relating to air quality and greenhouse gas emissions. Based on the findings made above, no violation of an air quality plan would occur.

- The construction for the proposed project would take approximately nine months to complete. The analysis of construction and operational emissions was prepared utilizing the California Emissions Estimator Model (CalEEMod V.2022.1.1.39). As shown in the analysis (refer to Table 6), daily construction emissions are not anticipated to exceed the SCAQMD significance thresholds.
- Long-term emissions refer to those air quality impacts that would occur once the development is operational and that would continue over the operational life of the proposed project. The analysis of long-term operational impacts also used the CalEEMod V.2022.1.1.39 computer model. As indicated in the analysis, the projected long-term emissions are below thresholds considered to represent a significant adverse impact.
- To address the issue of localized significance, the SCAQMD adopted Local Significance Thresholds (LSTs) that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *Localized Significance Thresholds (LST) Methodology*¹ since the nearest residences or sensitive receptors are located less than 25 meters (0 feet) to the north and west. While the nearest sensitive receptors are less than 25 meters away, it should be noted that the LST Methodology explicitly states that “Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” As shown in the analysis (refer to Table 8), the proposed project would not result in an exceedance in LSTs.
- The SCAQMD identified those land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants, composting activities, refineries, landfills, and businesses involved in fiberglass molding. Mitigation Measure Air-1 and Standard Condition AIR-3 would prevent any land uses that causes odors. As a result, the impacts would be less than significant with mitigation incorporated.
- The areas surrounding the most congested intersections are often found to contain high levels of CO that exceed applicable standards. These areas of high CO concentration are referred to as *hot-spots*. Two variables influence the creation of a hot-spot and these variables include traffic volumes and traffic congestion. Typically, a hot-spot may occur near an intersection that is experiencing severe congestion (a LOS E or LOS F). The SCAQMD stated in its CEQA Handbook that a CO hot-spot would not likely develop at an intersection operating at LOS C or better. Since the Handbook was written, there have been new CO emissions controls added to vehicles and reformulated fuels are now sold in the Basin. The projected peak hour traffic would not significantly degrade any local intersection’s level of service to LOS E or F. Project-generated traffic would not result in the creation of a carbon monoxide hot-spot.
- The SCAQMD has established a single quantified threshold of 10,000 metric tons of CO₂e

¹ South Coast Air Quality Management District. Final Localized Significance Threshold Methodology. As revised July 2008. Chapter 3.

(MTCO₂e) per year for new industrial development. Carbon dioxide equivalent, or CO₂e, is a term that is used to describe different greenhouse gases in a common and collective unit. The proposed project's implementation would not adversely impact the above environmental justice policies and programs. As indicated in Table 9, the CO₂e total for the proposed project is 182.99 MTCO₂e per year. Of this total figure, 76.8 MTCO₂e per year would come from mobile emissions.

- The following mitigation measures included in the air quality section would prohibit uses that would potentially cause odors:

Mitigation Measure AIR-1. All proposed uses of the site shall be reviewed by the City of Monrovia's Development Review Committee. No land uses that cause odors are allowed.

The following standard conditions are also included in the air quality section:

Standard Condition AIR-1: Prior to issuance of any Grading Permit, the City of Monrovia Public Works Department shall confirm that the project stipulates that, in compliance with SCAQMD Rule 402 and Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. SCAQMD Rule 403 requires that fugitive dust be controlled with 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.

Standard Condition AIR-2: Prior to issuance of any Grading Permit, the City of Monrovia Public Works Department shall confirm that the project complies with Mitigation Measure AIR-B of the 2021-2029 Housing Element Update, Safety Element Update, New Environmental Justice Element, and Zoning Text Amendment State Clearinghouse # 2022080729 Final Initial Study and Mitigated Negative Declaration to reduce diesel engine emissions of ozone precursors ROG and NO_x, particulate matter less than 10 microns in size (PM₁₀), particulate matter less than 2.5 microns in size (PM_{2.5}), and diesel particulate matter (DPM). The following measures shall be incorporated into all project specifications to reduce diesel engine emissions of O₃ precursors including ROG and NO_x, PM₁₀, PM_{2.5}, and diesel PM.

Standard Condition AIR-3: Throughout operation of the project, the Director of the City of Monrovia Community Development Department, or designee, shall ensure that the project complies with applicable provisions of Section 8.10.030 of the City's Municipal Code, which requires that every person in control of the day-to-day operations at any commercial premise provide for the collection and proper disposal of solid waste at least once per week.

2. PROJECT LOCATION

The project is located in the southern portion of the City of Monrovia. The project site's primary legal address is 2601 South California Avenue. Other addresses associated with the project site include 213 and 217 Novice Lane. The project site's location is shown in Exhibit 2. The project site is located within an urbanized area within the City of Monrovia. The site was formerly occupied by an automotive repair business (Don's Automotive) and two single-family residential units that have all been demolished. The site is currently undeveloped and covered in ruderal vegetation and broken hardscape. The site is currently secured by a chain link (construction) fence along the south and east sides. A concrete block wall extends along the site's north and west sides, separating the existing vacant site from the adjacent homes to the north and west. Existing land uses and development found in the vicinity of the project site are summarized

below:²

- *North of the Project site.* A total of six single-family residential units are located adjacent to the Project site and just outside of the City's boundaries in unincorporated Los Angeles County (referred to as the South Monrovia Islands). The addresses of these residential units are 208 Wyland Way, 214 Wyland Way, 220 Wyland Way, 226 Wyland Way, 232 Wyland Way, and 2547 California Avenue. These properties are designated as Residential 9 (H9) in the Los Angeles County General Plan and are zoned for single-family residential development and are zoned for single-family development in Los Angeles County's R-1 (Residential) zoning district.
- *South of the Project site.* To the south of the site at 2640 – 2670 South Myrtle Avenue is a commercial and manufacturing use, Dootson Industrial Park. This property is designated as *Manufacturing* in the Monrovia General Plan and zoned as *M (Manufacturing)*. Approximately 300 feet south of the Project site in Irwindale is the Sawpit Wash, a concrete-lined flood control channel, which extends in a northeast-southwest orientation. The United Plant Quarry is located further southeast of the project site, south of the aforementioned flood control channel.
- *East of the Project site.* To the east of the site is California Avenue and a single-family residential neighborhood within unincorporated Los Angeles County. The properties are within Los Angeles County's R-1 (Residential) zoning district and improved with single-family residences. South of this single-family residential neighborhood at 2600 – 2620 South California Avenue is an industrial use, California Suites. The site is located within the City boundaries and is designated as *Manufacturing* in the Monrovia General Plan and zoned as *M (Manufacturing)*.
- *West of the Project site.* Three single-family residential properties are located directly to the west of the Project site. The addresses of these units are 2568 S. Myrtle Avenue, 203 Novice Lane, and 209 Novice Lane. The two units located on Novice Lane have frontage along the private street Novice Lane. These properties are designated as *Planned Development – Area 19 (Novice Lane Area)* in the Monrovia General Plan and are zoned as *PD-19 (Planned Development – Area 19)*.

3. PROJECT DESCRIPTION

The proposed project would involve the construction of a warehouse development within the City of Monrovia and would consist of a new building with a total floor area of 27,078 square feet. The project site is located at 2601 South California Avenue. The site was formerly occupied by an automotive repair business (Don's Automotive) and two single-family residential units that have all been demolished. The new building would be located in the north central portion of the site while parking and the truck maneuvering area would be located in the southerly and westerly portions of the site. The new building would be setback 20 feet from the northern residential property line, 61 feet from the western residential property line, 56 feet from the southern property line, and 10 feet from the eastern property line fronting on California Avenue. The new building would have a total floor area of 27,078 square feet. The first floor would consist of 24,932 square feet of warehouse space and 1,148 square feet of office space located in the eastern side of the building. The total floor area of the first floor would be 26,080 square feet.³ The mezzanine would consist of a 998 square-foot mezzanine style office space located on the eastern side of the building above the first floor office space. The maximum height of the new building would be approximately 33 feet. The new building would be fully sprinkled and would consist of Type III-B tilt-up concrete construction. The building

² Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on June 13, 2022 and September 15, 2023. Follow-up surveys were completed in February 2026.

³ C.E.G. Construction. *Site Plan Sheet A100 California Industrial 2601 California, Monrovia, California*. May 2025.

exterior elevations would consist of recessed panels with colored accents.

Uncovered parking spaces would be provided on surface areas located on the south and western sides of the project site. The proposed warehouse project, with approval of a Conditional Use Permit to utilize a lower parking requirement, would include a total of 33 parking stalls. The project would provide 25 standard stalls, two (2) ADA stalls, three (3) clean air vehicle stalls, and three (3) electric vehicle stalls. A total of four (4) bicycle spaces would be provided: two (2) long-term bike spaces located inside the building and two (2) short-term bike spaces located outside the building. A total of three truck loading docks would be located on-site. Two, 9' x 10' docks, would be located in a recess in the building along the building's south elevation and a third, 12' x 14' dock, would be located adjacent to parking on the south elevation.⁴ The larger truck and trailers (with trailers up to 53 feet in length) would use the recessed dock-high doors. The larger 12' x 14' dock is a grade level sliding door. Shorter box trucks (16-foot to 24-foot, with a capacity of up to 10,000 pounds) would use the grade level opening (larger tractor trailer trucks would not be permitted to use this grade level loading position).

The dimensions of the parking area in front of the sliding door would be approximately 20 feet by 10 feet. Two wrought-iron sliding gates would be installed to prevent through traffic between Myrtle Avenue and the site: one across Novice Lane at the west property line and another across the driveway on the east. A "Knox-box" would be provided at the gates to allow the Fire Department and other emergency services to access the site from Myrtle Avenue across Novice Lane. Additionally, a fire turnaround would be located on a 35-foot section of Novice Lane on the abutting parcel (APN 8534-016-048), where the subject property has a recorded ingress and egress easement.⁵ Vehicle access to the project site would be provided from California Avenue through a new, single 29-foot wide two-way driveway utilizing the existing ingress egress easement (Novice Lane) along the southern portion of the project site. In addition, the driveway utilizing Novice Lane would serve as a fire lane, truck access, and vehicular access to the parking areas. A 35-foot fire turnaround extension of this fire lane would be located on the ingress/egress easement on the abutting property (APN 8534-016-048) to the west. All warehouse use related truck maneuvering would occur on-site in an area located to the south of the loading docks. The main pedestrian access to the building would be provided on the eastern side of the building. Additional access doors are provided on the north, south, and west of the building. The site plan for the proposed project is shown in Exhibit 1.

The proposed project's tenant is not known at this time though the project applicant is limiting the use of the property and future improvements to warehouse uses only; no industrial uses, light or heavy, would be permitted. The Applicant is envisioning a smaller warehouse development that would be local serving. No heavy manufacturing, intensive distribution, or processing activities are envisioned given the building's small floor area (27,078 square feet) and the limited number of truck loading docks (three loading docks). There would be no retailing and commercial functions, including customer related actions. As a result, any future use would be required to conform to these physical limitations. The project is anticipated to be primarily open for business during normal business hours (8:00 am to 5:00 pm). No operations would occur between 12:00 AM to 6:00 AM. In the event night-time work activities might take place (after 5:00 pm), all work would occur inside the new building and all activities would be required to adhere to all pertinent Municipal Code requirements. These restrictions would reduce the potential for increased traffic,

⁴ Ibid.

⁵ Deed to the City of Los Angeles. Exhibit A of Document Number 20210578349. October 4, 1949. Recorded in Los Angeles County. Exhibit A identifies Parcel 3a as "an easement for ingress and egress in common with others, over the South 20.00 feet of the North 142.22 feet of that portion of Lot 5 of I. H. Polk Tract, in the City of Monrovia, County of Los Angeles, State of California, as per map recorded in Book 15 Page 17 of Maps, lying Easterly of the Easterly line of Myrtle Avenue, 100 feet wide, as described in the Deed to the City of Los Angeles, recorded October 4, 1949 in Book 31153 Page 278, except the east 403.25 of said land."

noise, and after-hour activities. No late night truck deliveries (after 12:00 AM or before 6:00 AM) would be permitted. This facility would employ approximately 20 employees assuming one employee for every 1,366 square feet of floor area.⁶

⁶ The Natelson Company, Inc. Employment Density Summary Report. October 31, 2001. Based on a ratio of 1.0 employee per 1,366 square feet derived from the SCAG Employment Density Report.

CITY OF MONROVIA • AIR QUALITY, GREENHOUSE GAS, AND ENERGY IMPACT ANALYSIS
CALIFORNIA WAREHOUSE DEVELOPMENT • 2601 SOUTH CALIFORNIA AVENUE

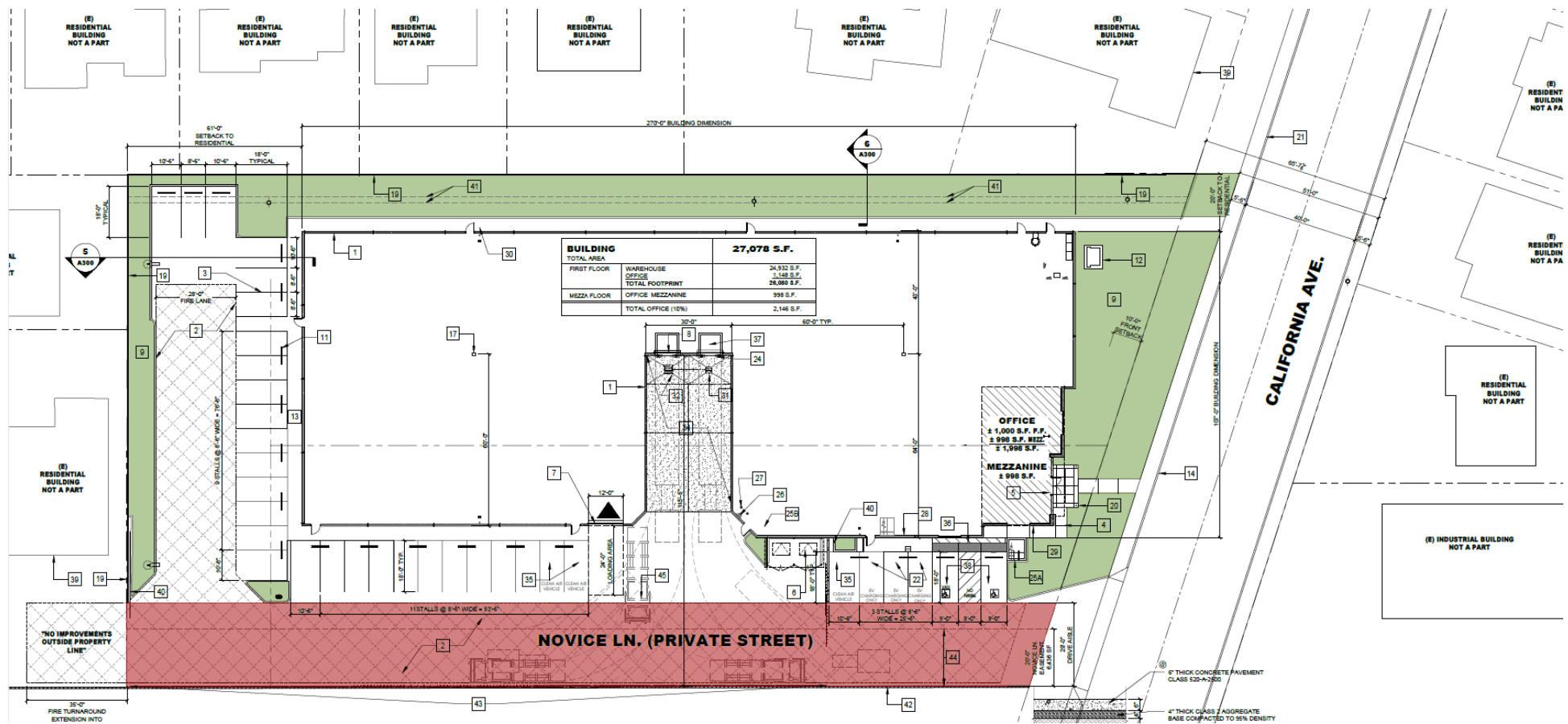


EXHIBIT 1 PROJECT SITE PLAN

SOURCE: C.E.G. CONSTRUCTION



EXHIBIT 2 PROJECT LOCATION MAP

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

4. AIR QUALITY BACKGROUND AND REGULATORY SETTING

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality.

FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and lead (Pb)⁷. The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance⁸. The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions).^{9,10} Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, PM_{2.5}, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}. Table 1 provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of NO_x which are emitted as byproducts of the combustion process.

CALIFORNIA REGULATIONS CARB

The California Air Resources Board (CARB), which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has National Ambient Air Quality Standards (NAAQS) and, in addition, establishes standards for SO₄, visibility, hydrogen sulfide (H₂S), and vinyl chloride (C₂H₃Cl). However, at this time, H₂S and C₂H₃Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.^{11,12}

⁷ United States Environmental Protection Agency. National Ambient Air Quality Standards (NAAQS). [Online] 1990. <https://www.epa.gov/criteria-air-pollutants/naaqs-table>

⁸ —. Clean Air Act Amendments of 1990. [Online] <https://www.epa.gov/clean-air-act-overview/clean-air-act-text>.

⁹ —. 1990 Clean Air Act Amendment Summary: Title I.

¹⁰ —. 1990 Clean Air Act Amendment Summary: Title II.

¹¹ California Air Resources Board. California Ambient Air Quality Standards (CAAQS). [Online] 2009. [Cited: April 16, 2018.] <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>

¹² Environmental Protection Agency. National Ambient Air Quality Standards (NAAQS). [Online] 1990. <https://www.epa.gov/criteria-air-pollutants/naaqs-table>

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS. Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include: 1. Application of Best Available Retrofit Control Technology to existing sources; 2. Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development); and 3. A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide \$1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons.¹³ The project would be required to comply with the applicable standards in place at the time plan check submittals are made.

SCAQMD REQUIREMENTS

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plan (AQMP) to meet the state and federal ambient air quality standards. AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and project consistency with the AQMP is provided in Section 5. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the SCAQMD. SCAQMD Rules that are currently applicable during construction activity for this project are described below (Rules 402 and 403 restrict visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, and start-up or shutdown exemptions and breakdown events. Rules 1113, 1301, and 1401 set emissions standards for specific sources and pollutants).

- *SCAQMD RULE 402*: A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property

¹³ California Energy Commission. Energy Commission Adopts Updated Building Standards to Improve Efficiency, Reduce Emissions from Homes and Businesses. [Online] August 11, 2021. <http://www.energy.ca.gov/news/2021-08/energy-commission-adopts-updated-building-standardsimprove-efficiency-reduce-o>.

line of that use.

- *SCAQMD RULE 403*: This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities. The contractor shall adhere to the following applicable measures of Rule 403 including, but not limited to: 1. Clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions. 2. The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day. 3. All access points to the project site shall have track out devices installed. 4. The contractor shall ensure that traffic speeds on unpaved roads and project site areas are limited to 15 mph or less. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD.
- *SCAQMD RULE 1113*: This rule serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.
- *SCAQMD RULE 1301*: This rule is intended to provide pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).
- *SCAQMD RULE 1401*: This rule (New Source Review of Toxic Air Contaminants) establishes health risk limits for new, relocated, or modified permit units that emit toxic air contaminants. The rule specifies limits for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard indices from permit units requiring new permits pursuant to SCAQMD Rules 201 or 203. Rule 1401 is implemented through SCAQMD's permitting process and is used to determine whether new or modified equipment that emits toxic air contaminants would require additional health risk evaluation or controls.

The two most pertinent regulatory requirements that could be modeled are Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Credit for Rule 403 and Rule 1113 have been taken in the analysis.

AIR QUALITY SETTING

The project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD.¹⁴ The South Coast Air Quality Management District (SCAQMD) is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the project site is located within the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to middle 60s in degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast. Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as

¹⁴ South Coast Air Quality Management District. Southern California Air Basins. [Online]
<https://www.arb.ca.gov/msprog/onroad/porttruck/maps/scabc7map.pdf>.

nitrogen oxides (NOX) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

The distinctive climate of the project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season. The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed “Santa Anas” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

CRITERIA POLLUTANTS

The California Air Resources Board (CARB) is responsible for regulating mobile sources (e.g. vehicles) in the SCAB. The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: ozone (O₃), particulate matter (PM), which consists of “inhalable coarse” PM (particles with a size of between 2.5 and 10 microns in diameter, or PM₁₀) and “fine” PM (particles with a diameter smaller than 2.5 microns, or PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. The U.S. EPA refers to these six common pollutants as “criteria” pollutants because the agency regulates the pollutants on the basis of human health and/or environmentally- based criteria. The established quantitative thresholds for short-term (construction) emissions and long- term (operational) emissions for the criteria pollutants are listed below.

- *Ozone (O₃)* is a nearly colorless gas that irritates the lungs, and damages materials and vegetation. Ozone is formed by a photochemical reaction (when nitrogen dioxide is broken down by sunlight).
- *Carbon Monoxide (CO)* is a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain and is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust. The daily SCAQMD threshold is 550 pounds per day of carbon monoxide (CO).
- *Nitrogen Oxide (NO_x)* is a yellowish-brown gas, which at high levels can cause breathing difficulties. NO_x is formed when nitric oxide (a pollutant from burning processes) combines with oxygen. The daily threshold is 100 pounds per day of nitrogen oxide (NO_x).
- *Sulfur Dioxide (SO_x)* is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms. The daily threshold is 150 pounds per day of sulfur oxides (SO_x).
- *PM₁₀ and PM_{2.5}* refers to particulate matter less than ten microns and two and one-half microns in

diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation. The daily threshold is 150 pounds per day of PM_{10} and 55 pounds per day of $PM_{2.5}$.

- *Reactive Organic Gases (ROG)* refers to organic chemicals that, with the interaction of sunlight photochemical reactions may lead to the creation of “smog.” The daily threshold is 75 pounds per day of ROG.

CARB has established California Ambient Air Quality Standards (CAAQS) for the six common air pollutants regulated by the federal Clean Air Act (the CAAQS are more stringent than the NAAQS) plus the following additional air pollutants: hydrogen sulfide (H_2S), sulfates (SO_x), vinyl chloride, and visibility reducing particles. The NAAQS and CAAQS are shown in Table 1.

CITY OF MONROVIA • AIR QUALITY, GREENHOUSE GAS, AND ENERGY IMPACT ANALYSIS
CALIFORNIA WAREHOUSE DEVELOPMENT • 2601 SOUTH CALIFORNIA AVENUE

TABLE 1 – SUMMARY OF AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards (CAAQS) ¹		National Standards (NAAQS) ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ₃)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ₃	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ₃		-		
Fine Particulate Matter (PM _{2.5})	24 Hour	-	-	35 µg/m ₃	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12.0 µg/m ₃	Gravimetric or Beta Attenuation	12.0 µg/m ₃	15 µg/m ₃	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ₃)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ₃)	-	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 µg/m ₃)		9 ppm (10 mg/m ₃)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ₃)		-	-	
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.03 ppm (57 µg/m ₃)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ₃)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m ₃)		100 ppb (188 µg/m ₃)	-	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ₃)	Ultraviolet Fluorescence	75 ppb (196 µg/m ₃)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	-		-	0.5 ppm (1,300 µg/m ₃)	
	24 Hour	0.04 ppm (105 µg/m ₃)		0.14 ppm (for certain areas) ¹¹	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas) ¹¹	-	
Lead ^{12,13}	30 Day Average	1.5 µg/m ₃	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m ₃ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	-		0.15 µg/m ₃		
Visibility Reducing Particles ¹⁴	8 Hour	-	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ₃	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ₃)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ₃)	Gas Chromatography			

See footnotes on next page. Source: CARB, Table of Ambient Air Quality Standards, 2024

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be

equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10} , the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from $12.0 \mu\text{g}/\text{m}^3$ to $9.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15.0 \mu\text{g}/\text{m}^3$. The existing 24-hour PM_{10} standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively. For more information please call ARB-PIO at (916) 322-2990 California Air Resources Board (7/16/24)

ATTAINMENT CHARACTERISTICS AND STATUS

The federal and state governments have established emission standards and limits for air pollutants which may reasonably be anticipated to endanger public health or welfare. Air quality conditions are best described and understood in the context of these standards; areas that meet, or attain, concentration-based ambient air quality standards are considered to have levels of pollutants in the ambient air that, based on the latest scientific knowledge, do not endanger public health or welfare. The U.S. EPA, CARB, and the SCAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- *Attainment.* A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-

designated from nonattainment to attainment is classified as a “maintenance area” for 10 years to ensure that the air quality improvements are sustained.

- *Nonattainment.* If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- *Unclassified.* An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Table 2 below summarizes the Basin’s attainment status for criteria pollutants. The Basin is currently in nonattainment for state and federal ozone, state PM₁₀, and state and federal PM_{2.5} standards.

TABLE 2 – SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	Federal	State
O ₃ (1-hr)	Nonattainment	Nonattainment
O ₃ (8-hr)	Nonattainment	Nonattainment
PM ₁₀ (24-hr and Annual)	Attainment	Nonattainment
PM _{2.5} (24-hr)	Nonattainment	--
PM _{2.5} (Annual)	Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
NO ₂ (1-hr)	Attainment	Attainment
NO ₂ (Annual)	Attainment (Maintenance)	Attainment
SO ₂ (1-hr and Annual)	Attainment	Attainment
Lead	Partial Nonattainment	Attainment
SO ₄	--	Attainment
H ₂ S	--	Unclassified

Source: CARB, 2024 State Area Designations – Appendix C, 2024

<https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2025/areades/appc.pdf>

The project site and the entire City are located in a non-attainment area for ozone and particulates; therefore, the construction of the proposed project would be required to comply with the requirements of SCAQMD Rule 402, Nuisance and SCAQMD Rule 403, Fugitive Dust.

Air pollution levels are measured at monitoring stations located throughout the SCAB. The project site is located in SCAQMD Source Receptor Area (SRA) 9 – East San Gabriel Valley. The station closest to Monrovia is identified as the East San Gabriel Valley 1 Station (Station #060370002) by SCAQMD (CARB refers to this station as Azusa). Since 2023, Station #060370002 has been closed due to site modifications. The next closest station is East San Gabriel Valley (Station #060370016). The station is located less than seven miles to the east of Monrovia’s boundary and monitors CO, O₃, NO₂, PM₁₀ and PM_{2.5}. This monitoring station represents the best approximation of the air quality conditions within the City. Review of Table 3 indicates the following:

- The maximum 1-hour and 8-hour CO concentration generally increased between 2021 to 2024.
- The maximum 1-hour NO₂ concentration generally increased from 2021 to 2024, while the average annual NO₂ concentration generally decreased.
- The maximum 1-hour and 8-hour O₃ concentration, as well as the number of days exceeding O₃ standards, generally increased from 2021 to 2024.

- The maximum 24-hour and average annual PM₁₀ concentration increased during the 2021 to 2024 period but there were no days/years in which the Federal PM₁₀ standards were exceeded.

TABLE 3 – 2021-2024 AIR QUALITY DATA FOR EAST SAN GABRIEL VALLEY

Pollutant	Ambient Air Standard	Year ^(A)			
		2021	2022	2023	2024
Ozone (O ₃)					
Maximum 1-hr Concentration (ppm)		0.125	0.143	0.115	0.145
Maximum 8-hr Concentration(ppm)		0.096	0.101	0.110	0.114
Number of Days Exceeding State 1-hr Standard	>180 µg/m ₃	39	46	57	82
Number of Days Exceeding State 8-hr Standard	>137 µg/m ₃	58	61	72	96
Days Exceeding Federal 1-hr Standard	>0.124 ppm	1	1	9	21
Days Exceeding Federal 8-hr Standard	>0.070 ppm	54	60	70	95
Carbon Monoxide (CO)					
Maximum 1-hr Concentration (ppm)		1.4	0.9	0.8	1.4
Maximum 8-hr Concentration(ppm)		0.9	0.6	0.6	1.1
Days Exceeding State 1-hr Standard	>23,000 µg/m ₃	--	--	--	--
Days Exceeding Federal/State 8-hr Standard	>10,000 µg/m ₃	--	--	--	--
Days Exceeding Federal 1-hr Standard	>40,000 µg/m ₃	--	--	--	--
Nitrogen Dioxide (NO ₂)					
Maximum 1-hr Concentration (ppm)		68.6	54.2	88.2	47.9
Annual Arithmetic Mean Concentration (ppm)		10.3	7.9	7.9	9.1
Days Exceeding State 1-hr Standard	>180 µg/m ₃	--	--	--	--
Coarse Particulate Matter (PM ₁₀)					
Maximum 24-hr Concentration (µg/m ₃)		121	83	126	82
Annual Arithmetic Mean (µg/m ₃)		26.8	24.6	22.4	27.5
Samples Exceeding State 24-hr Standard	>50 µg/m ₃	9 (3%)	6 (2%)	3 (1%)	10 (3%)
Samples Exceeding Federal 24-hr Standard	>150 µg/m ₃	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Fine Particulate Matter (PM _{2.5})					
Maximum 24-hr Concentration (µg/m ₃)		--	--	--	--
Annual Arithmetic Mean (µg/m ₃)		--	--	--	--
Samples Exceeding Federal 24-hr Standard	>35 µg/m ₃	--	--	--	--

(A) Source: SCAQMD. *Air Quality Data Tables for 2021, 2022, 2023, 2024*; “—” indicates data are not available.

ASSUMPTIONS USED IN THE ANALYSIS

The California Emissions Estimator Model® (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. In addition, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. The CalEEMod was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements

and conditions. The model is free of charge and will be periodically updated when modifications are warranted. The model is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc. The following lists sources of information used in developing the emission estimates for the proposed project using CalEEMod (see Attachment A for the full CalEEMod Report). Not all CalEEMod defaults are listed, but some defaults which have a particularly important impact on the project are listed below:

- The Applicant defined project elements including building size, potential use, parking and hardscape area, landscaping, etc. were considered.
- The use of Low VOC paints and cleaning supplies were assumed since they are a general requirements in the SCAB.
- During construction exposed soil will be watered three times daily and paved site access roads will be swept as construction Best Management Practices (BMPs).

CONSTRUCTION ACTIVITIES

The construction for the proposed project would take approximately nine months to complete. Access via Novice Lane would not be impacted during the entirety of the construction phase. Access to the single-family residential units located to the west of the project site would continue to be possible from Myrtle Avenue. The key construction phases are outlined below:

- *Grading and Site Preparation.* This phase would involve limited grading of the site. The building's footings, utility lines, and other underground infrastructure would be placed during this phase. The project site would also be readied for the construction of the proposed project. The proposed project's implementation would require limited grading since the site is level and has already undergone development. Construction would require limited grading, to a depth of up to three (3) feet, and would result in approximately 3,515 cubic yards of cut and 8,200 cubic yards of fill (including the 3,200 cubic yards of over excavation). The total amount imported would be 2,905 cubic yards (cy) of fill and no export would occur. All onsite earth cut will be re-used on site as fill and no export of soil will occur. The 2,905 cy of import will be used to level and fill the site due to compaction of the cut and the over excavated soil on site and bring the site to street level and accommodate on site drainage control. The typical heavy equipment used during this construction phase would include bulldozers, off-road trucks, backhoes, and trenching equipment. This phase would take approximately two months to complete. After earthmoving or excavation operations, fugitive dust emissions shall be controlled by revegetating and watering portions of the construction area that would remain inactive longer than three months. During the Site Preparation phase, eight one-way worker trips are projected with 18.5 miles per trip projected per day. During the Grading phase, 10 one-way-worker trips are projected with 18.5 miles per trip, and 59 one-way hauling trips with 20 miles per trip are projected per day. The anticipated 2,905 cy of import will be transported to the site in 20 cy capacity trucks and will result in 146 trips to the site.

- *Construction.* The new warehouse building would be constructed during this phase. The typical heavy equipment used during this construction phase would include off-road trucks, cranes, and fork-lifts. This phase would take approximately four months to complete. During the Construction phase, 11 one-way worker trips are projected with 18.5 miles per trip and 4 one-way vendor trips with 10.2 miles per trip are projected per day.
- *Paving, Landscaping, and Finishing.* The project site would be paved during this phase. This phase would involve the planting of landscaping, painting of the new buildings, and the completion of other on-site improvements on the 61,508 square-foot (1.41 gross acres) lot. The typical heavy equipment used during this construction phase would include trucks, backhoes, rollers, pavers, and trenching equipment. This phase would last approximately three months to complete. During the Paving phase, 10 one-way worker trips are projected with 18.5 miles per trip projected per day. During the Architectural Coating phase, two one-way worker trips are projected with 18.5 miles per trip projected per day.

For analytical purposes, construction of the project is expected to commence in January 2027 and would last through September 2027. The construction schedule utilized in the analysis, shown in Table 4, represents a “conservative” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent¹⁵. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines*. The construction for the proposed project would take approximately 9 months to complete. Access via Novice Lane from Myrtle Avenue would not be impacted during the entirety of the construction phase. The key construction phases are outlined below and in Table 4:

TABLE 4 – CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	1/1/2027	1/8/2027	6
Grading	1/11/2027	2/12/2027	25
Building Construction	2/15/2027	6/15/2027	87
Paving	6/16/2027	7/28/2027	31
Architectural Coating	7/29/2027	9/9/2027	31

Source: Attachment A, CalEEMod v2022.1.1.39

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 5 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

Additionally, CalEEMod defaults were used for the following:

- The construction equipment count, load factor, and fleet average age;
- The surface areas for the application of architectural coatings;
- The operational vehicle fleet mixes;
- The weekday and weekend daily trip rates once the facility is operational; and
- Average vehicle trip distances.

¹⁵ CalEEMod User’s Guide Version 2022, Appendix G. As shown in “Table G-11. Statewide Average Annual Offroad Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 5 – CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Amount	Hours per Day
Site Preparation	Graders	1	8
	Bulldozers	1	7
	Tractors/Loaders/Backhoes	1	8
Grading	Graders	1	8
	Bulldozers	1	8
	Tractors/Loaders/Backhoes	2	7
Construction	Tractors/Loaders/Backhoes	1	6
	Cranes	1	6
	Forklifts	1	6
	Generator Sets	1	8
	Welders	3	8
Paving	Pavers	1	6
	Rollers	1	7
	Cement and Mortar Mixers	1	6
	Paving Equipment	1	8
Architectural Coating	Air Compressors	1	6

Source: Attachment A, CalEEMod v2022.1.1.39

5. AIR QUALITY ANALYSIS

CONFORMITY WITH AIR QUALITY MANAGEMENT PLAN

The SCAQMD’s Air Quality Management Plan¹⁶ (AQMP) will help the SCAQMD maintain focus on the air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key areas of growth. The 2022 AQMP was developed to address the requirements for meeting this standard and was adopted December 2, 2022 by the South Coast AQMD Governing Board. The Air Quality Handbook refers to the following criteria as a means to determine a project’s conformity with the AQMP:¹⁷

- *Consistency Criteria 1* refers to a proposed project’s potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation.
- *Consistency Criteria 2* refers to a proposed project’s potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP’s implementation.

In terms of Criteria 1, the short (construction) and long-term (operational) airborne emissions associated with the construction and operation of the proposed project would be below levels that the SCAQMD considers to be a significant impact (refer to the analysis included in the next section where the short and long-term emissions for the proposed project are summarized in Tables 6 and 7).

The proposed project would also conform to Consistency Criteria 2 since it would not affect any regional population, housing, and employment projections prepared for the City because the proposed project would not directly result in an increase in population or a need for housing. The proposed project would not prohibit or preclude the policies outlined above relating to air quality and greenhouse gas emissions. Based on the findings made above, no violation of an air quality plan would occur. The City’s existing General Plan

¹⁶ South Coast Air Quality Management District. *Final 2022 Air Quality Plan*. Adopted December 2, 2022.

¹⁷ South Coast Air Quality Management District. *CEQA Air Quality Handbook*. April 1993.

does not establish specific goals, policies, or standards related to air quality; however, the City's Monrovia General Plan Proposed Land Use and Circulation Elements EIR (City of Monrovia 2008) included the following mitigation measures (General Plan EIR Mitigation Measures) related to air quality as listed below.

- *General Plan EIR Mitigation Measure AIR-A:* The City shall require applicants to analyze the air quality impacts of construction for each project. Construction-related air quality impacts have been analyzed in this Air Quality Study using CalEEMod and evaluated against SCAQMD thresholds. As shown in Table 6, construction emissions would not exceed applicable thresholds. The project would be consistent with this mitigation measure.
- *General Plan EIR Mitigation Measure AIR-B:* If a project-level analysis demonstrates that the NO_x emissions would be significant, the project shall provide a plan, for approval by the City, demonstrating that the heavy duty (> 50 horsepower) offroad vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will utilize all feasible measures to reduce the emissions to a less than significant level. Acceptable options for reducing emissions may include use of late model low emission diesel engines, alternative fuels, engine retrofit technology, and/or other options as they become available. The SCAQMD web site provides specific information on mitigation options for off-road and on-road construction equipment. As shown in Tables 6 and 7, the proposed project would not exceed the NO_x emissions. The project would be consistent with this mitigation measure.
- *General Plan EIR Mitigation Measure AIR-C:* The following measure shall be incorporated into all project specifications to reduce diesel engine emissions of O₃ precursors including ROG and NO_x, PM₁₀, PM_{2.5}, and diesel PM: Idling of diesel-powered vehicles and equipment shall not be permitted during periods of nonactive vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:
 - When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
 - When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
 - To bring the equipment to the manufacturer's recommended operating temperature;
 - When the ambient temperature is below 40 degrees F or above 85 degrees F; or
 - When equipment is being repaired.

The proposed project would comply with this measure through implementation of Standard Condition AIR-2. The project would be consistent with this mitigation measure.

- *General Plan EIR Mitigation Measure AIR-D:* The City shall require that all new residential fireplaces shall be fueled by natural gas. Wood stoves and wood-burning fireplaces shall be prohibited. This mitigation measure is not relevant to the proposed project.
- *General Plan EIR Mitigation Measure AIR-E:* The City shall require applicants to analyze the potential for creating a local CO hot-spot due to traffic congestion that could result from implementation of projects anticipated in the proposed General Plan amendments to the Land Use and Circulation Elements. As discussed in the Hot-Spot Analysis section, the proposed project would not result in the creation of a carbon monoxide hot-spot. The project would be consistent with this mitigation measure.
- *General Plan EIR Mitigation Measure AIR-F:* The City shall require applicants to complete a

Health Risk Assessment (HRA) to determine the cancer risk to sensitive receptors for all residential projects located within 500 feet of Interstate 201 (I-210). *This mitigation measure is not relevant to the proposed project.*

- *General Plan EIR Mitigation Measure AIR-G:* The City shall require applicants to assess the potential impacts to children's respiratory health for all residential projects located within 500 feet of I-210. *This mitigation measure is not relevant to the proposed project.*

Based on the findings made above, no violation of an air quality plan would occur. As a result, no impacts would occur.

CONSTRUCTION (SHORT-TERM) IMPACTS

The project site and the entire City are located in a non-attainment area for ozone and particulates; therefore, the construction of the proposed project would be required to comply with the requirements of SCAQMD Rule 403, Fugitive Dust (see Standard Condition AIR-1), which requires the implementation of Best Available Control Measures (BACM) for all fugitive dust sources, and the 2022 AQMP, which identifies BACMs and Best Available Control Technologies (BACT) for area sources and point sources, respectively. According to SCAQMD Rule 403, Fugitive Dust, all unpaved demolition and construction areas shall be regularly watered down to three times per day during excavation, grading, and construction as required (depending on temperature, soil moisture, wind, etc.). Watering could reduce fugitive dust by as much as 55 percent.

Rule 403 also requires that temporary dust covers be used on any piles of excavated or imported earth to reduce wind-blown dust. In addition, all clearing, earthmoving, or excavation activities must be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of fugitive dust. Finally, the contractors must comply with other SCAQMD regulations governing equipment idling and emissions controls (see Standard Condition AIR-2). The SCAQMD regulations are standard conditions required for every construction project undertaken in the City as well as in the cities and counties governed by the SCAQMD. The project construction would occur over a 9-month period. The assumptions regarding the length of construction followed the construction characteristics identified in Section 4. The analysis of construction and operational emissions was prepared utilizing the California Emissions Estimator Model (CalEEMod V.2022.1.1.39). As shown in Table 6, daily construction emissions are not anticipated to exceed the SCAQMD significance thresholds when mitigated with Standard Conditions AIR-1 and AIR-2.

TABLE 6 – ESTIMATED DAILY CONSTRUCTION EMISSIONS IN LBS./DAY

Construction Phase	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Total Site Preparation	0.22	1.04	12.3	0.02	6.40	3.07
With Mitigation	0.22	1.04	12.3	0.02	1.77	0.84
Total Grading	0.32	6.07	16.6	0.05	8.40	3.85
With Mitigation	0.32	6.07	16.6	0.05	3.16	1.32
Total Building Construction	0.24	3.74	11.2	0.02	0.22	0.08
With Mitigation	0.24	3.74	11.2	0.02	0.22	0.08
Total Paving	0.17	0.88	5.22	0.01	0.14	0.04
With Mitigation	0.17	0.88	5.22	0.01	0.14	0.04
Total Architectural Coatings	8.43	0.65	1.10	--	0.03	0.01
With Mitigation	4.38	0.65	1.10	--	0.03	0.01
Maximum Daily Emissions	8.43	6.07	16.6	0.05	8.40	3.85
With Mitigation	4.38	6.07	16.6	0.05	3.16	1.32
Daily Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Attachment A, CalEEMod V.2022.1.1.39

The estimated daily construction emissions shown in Table 6 assume compliance with the following applicable SCAQMD rules and regulations for the control of fugitive dust and architectural coating emissions:

- Excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the applicable procedures outlined in the SCAQMD's Rules and Regulations.
- Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune.
- All trucks associated with construction activities shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
- The project shall comply with SCAQMD Rule 402 that limits the generation of airborne pollutants that would cause injury, detriment, or result in a nuisance.

OPERATIONAL (LONG-TERM) AIR QUALITY IMPACTS

Long-term emissions refer to those air quality impacts that would occur once the development is operational and that would continue over the operational life of the proposed project. The analysis of long-term operational impacts also used the CalEEMod V.2022.1.1.39 computer model. Table 7 depicts the estimated unmitigated operational emissions generated by the proposed project.

TABLE 7 – ESTIMATED OPERATIONAL (LONG-TERM) EMISSIONS IN LBS./DAY

Emission Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile (lbs./day)	0.20	0.18	1.95	0.01	0.48	0.13
Area (lbs./day)	0.85	--	1.18	--	--	--
Energy (lbs./day)	0.01	0.14	0.12	--	0.01	0.01
Total (lbs./day)	1.06	0.32	3.25	0.01	0.50	0.14
Daily Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Attachment A, CalEEMod V.2022.1.1.39

As indicated in Table 7, the projected long-term emissions are below thresholds considered to represent a significant adverse impact. Therefore, the proposed project would not contribute to an existing air quality violation. *As a result, the impacts would be less than significant.*

IMPACTS ON SENSITIVE RECEPTORS

The SCAQMD requires that CEQA air quality analyses indicate whether a proposed project would result in an exceedance of *localized emissions thresholds* or LSTs (Localized Significance Thresholds). The SCAQMD established LSTs in response to the SCAQMD Governing Board’s Environmental Justice Initiative I-4.¹⁸ LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology*.¹⁹ LSTs apply to short-term (construction) and long-term (operations) emissions at a fixed location and do not include off-site or area-wide emissions.

For this project, the appropriate SRA for the LST analysis is the SCAQMD East San Gabriel Valley (SRA 9). The pollutants that are the focus of the LST analysis include the conversion of NO_x to NO₂ from construction and operation; carbon monoxide (CO) emissions from construction; PM₁₀ emissions from construction and operation; and PM_{2.5} emissions from construction and operation. For purposes of the LST analysis, the receptor distance used was 25 meters since the nearest residences or sensitive receptors are located less than 25 meters (0 feet) to the north and west. While the nearest sensitive receptors are less than 25 meters away, it should be noted that the LST Methodology explicitly states that “Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.”²⁰ As shown in Table 8, the proposed project would not result in an exceedance in LSTs with mitigation. The location and extent of sensitive receptors are shown in Exhibit 3.

¹⁸ South Coast Air Quality Management District (SCAQMD). *Environmental Justice Initiatives*. Available at: <https://www.aqmd.gov/nav/about/initiatives/environmental-justice/environmental-justice-initiatives>. The purpose of SCAQMD’s Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as “...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.”

¹⁹ Southern California Association of Governments. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. [Online] September 2020. https://scag.ca.gov/sites/main/files/file-attachments/o903fconnectsocial-plan_o.pdf?1606001176

²⁰ South Coast Air Quality Management District. *Final Localized Significance Threshold Methodology*. As revised July 2008. Chapter 3.

TABLE 8 – LOCALIZED MITIGATED CONSTRUCTION AND OPERATION EMISSIONS

Emissions	Construction/ Operational Emissions (lbs./day)	Type	Allowable LST Emissions Threshold (lbs./day) at a Specified Distance from Receptor (in meters)***					Exceeds Thresholds?
			25	50	100	200	500	
NO _x	6.07/0.32	Construction/Operation	89	112	159	251	489	No
CO	16.6/3.25	Construction/ Operation	623	945	1,914	4,803	20,721	No
PM ₁₀	3.16*	Construction	5	14	34	75	199	No (with Mitigation)
PM ₁₀	0.50	Operation	2	4	9	19	48	No
PM _{2.5}	1.32**	Construction	3	5	9	22	94	No (with Mitigation)
PM _{2.5}	0.14	Operation	1	2	3	6	23	No

Source: Attachment A, CalEEMod V.2022.1.1.39; Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology, July 2008

*PM₁₀ unmitigated value: 8.40

**PM_{2.5} unmitigated value: 3.85

***values correspond to thresholds for a 1-acre site for SRA 9 (East San Gabriel Valley)



EXHIBIT 3 SENSITIVE RECEPTORS

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

The nearest sensitive receptors to the project site include single-family homes adjacent to the north and west of the project site (refer to Exhibit 3). Truck drivers must adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel-powered vehicles to less than five minutes (see Standard Condition AIR-2).²¹ Adherence to the aforementioned regulations would minimize odor impacts from diesel trucks. In addition, the project's contractors must adhere to SCAQMD Rule 403 regulations, which significantly reduce the generation of fugitive dust.

Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed project would be less than significant with mitigation incorporated.

The SCAQMD identified those land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants, composting activities, refineries, landfills, and businesses involved in fiberglass molding.²² Mitigation Measure Air-1 and Standard Condition AIR-3 would prevent any land uses that cause odors. *As a result, the impacts would be less than significant with mitigation incorporated.*

HOT-SPOT ANALYSIS

Most vehicles generate carbon monoxide (CO) as part of the tail-pipe emissions; therefore, high concentrations of CO along busy roadways and congested intersections are a concern. The areas surrounding the most congested intersections are often found to contain high levels of CO that exceed applicable standards. These areas of high CO concentration are referred to as *hot-spots*. Two variables influence the creation of a hot-spot and these variables include traffic volumes and traffic congestion. Typically, a hot-spot may occur near an intersection that is experiencing severe congestion (a LOS E or LOS F).²³ The SCAQMD stated in its CEQA Handbook that a CO hot-spot would not likely develop at an intersection operating at LOS C or better. Since the Handbook was written, there have been new CO emissions controls added to vehicles and reformulated fuels are now sold in the Basin. These new automobile emissions controls, along with the reformulated fuels, have resulted in a lowering of both ambient CO concentrations and vehicle emissions. The projected peak hour traffic would not significantly degrade any local intersection's level of service to LOS E or F. In addition, Project-generated traffic would not result in the creation of a carbon monoxide *hot-spot* (refer to Section 3.17, Transportation of this IS/MND).

The Air Toxics [Hot-Spots] Act requires that each local Air Pollution Control District or Air Quality Management District determine which facilities are required to prepare a health risk assessment (HRA). As defined under the Act, a HRA includes a comprehensive analysis of the dispersion of hazardous substances in the environment, their potential for human exposure, and a quantitative assessment of both individual

²¹ California, State of. *California Code of Regulations, Title 13, Section 2485 Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*.

²² South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. As amended 2017.

²³ "LOS" refers to "Level of Service."

and population-wide health risks associated with those levels of exposure. Senate Bill 1731, which amends the "Hot-Spots" Program, requires the Office of Environmental Health Hazard Assessment (OEHHA) to adopt risk assessment guidelines for the program using a full public review process. The modelling protocols outlined by the OEHHA do not apply to the proposed Project (refer Notice of "Adoption of Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015") given that the Project is not subject to a 1401 Permit. The proposed Project would not be subject to the requirements of a Rule 1401 Permit (New Source Review of Toxic Air Contaminants) at this time.

The Project site is located in Southern California and the majority (if not all) of the diesel trucks travelling to and from the proposed Project would be employing *clean diesel trucks* to reduce diesel particulates. The U.S. trucking fleet is transitioning to newer clean diesel technology which translates into fuel savings, lower greenhouse gas emissions and a reduction in diesel particulate emissions. This newest generation of clean diesel trucks would have NO_x emissions that are 99 percent lower than older generations of larger trucks along with 98 percent fewer diesel particulate emissions, resulting in significant clean air benefits. Beginning in 2011, all heavy-duty diesel trucks sold had to meet NO_x emissions of no more than 0.20 grams per brake horsepower hour (g/BHP-hr.). This is in addition to particulate emissions levels of no more than 0.01 g/HP-hr. established in 2007. The new more restrictive emissions requirements, together with the SCAQMD's regulations limiting truck idling times to 5 minutes would mitigate potential impacts related to truck diesel emissions. While the use of "clean diesel" trucks were not identified as a mitigation, all heavy-duty trucks sold in California since 2011 must meet NO_x emissions of no more than 0.20 grams per brake horsepower hour (g/BHP-hr.). California will also require new trucks to be zero-emissions in 2040. Furthermore, fugitive dust emissions during construction, which is responsible for PM₁₀ and PM_{2.5} emissions, would further be reduced through the implementation of SCAQMD regulations related to fugitive dust generation and other construction-related emissions.²⁴ These SCAQMD regulations are standard conditions required for every construction Project undertaken in the City as well as in the cities and counties governed by the SCAQMD. *As a result, the impacts would be less than significant.*

6. GREENHOUSE GAS SIGNIFICANCE THRESHOLDS AND METHODOLOGY

THRESHOLDS AND METHODOLOGY

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on greenhouse gas emissions if it results in any of the following:

- The proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- The proposed project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler. However, emissions from fossil fuel combustion have elevated the concentrations of GHG in the atmosphere to above natural levels. These man-made GHG will have the effect of warming atmospheric temperatures with the attendant impacts of changes in the global climate, increased sea levels, and changes to the worldwide biome. The major GHG that influence global warming are described below.

- *Water Vapor.* Water vapor is the most abundant GHG present in the atmosphere. While water

²⁴ South Coast Air Quality Management District. *Rule 403, Fugitive Dust*. As Amended June 3, 2005.

vapor is not considered a pollutant, it remains in the atmosphere and maintains a climate necessary for life. Changes in the atmospheric concentration of water vapor are directly related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water evaporates from ground storage (rivers, oceans, reservoirs, soil).

- *Carbon Dioxide (CO₂)*. The natural production and absorption of CO₂ is achieved through the terrestrial biosphere and the ocean. Manmade sources of CO₂ include the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, these activities have increased the atmospheric concentrations of CO₂.
- *Methane (CH₄)*. CH₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO₂. Methane's lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO₂, N₂O, and Chlorofluorocarbons (CFCs)). CH₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Other human-related sources of methane production include fossil-fuel combustion and biomass burning.
- *Nitrous Oxide (N₂O)*. Concentrations of N₂O also began to increase at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N₂O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant.
- *Chlorofluorocarbons (CFC)*. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). Due to the discovery that they can destroy stratospheric ozone, a global effort to halt their production was undertaken, and in 1989, the European Community agreed to ban CFCs by 2000, and subsequent treaties banned CFCs worldwide by 2010. This effort was highly successful, and the levels of the major CFCs are now remaining at the same level or declining.
- *Hydrofluorocarbons (HFC)*. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order) HFC-23 (CHF₃), HFC- 134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. HFCs are manmade and used for applications such as automobile air conditioners and refrigerants.
- *Perfluorocarbons (PFC)*. PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface can destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆). Concentrations of CF₄ in the atmosphere are over 70 parts per thousand (ppt). The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.
- *Sulfur Hexafluoride (SF₆)*. SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ has the highest global warming potential of any gas evaluated; 23,900 times that of CO₂.

Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Section 15064.4 of the CEQA Guidelines recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions. The SCAQMD has adopted a threshold of 10,000 MTCO₂e per year for industrial projects. The threshold applies to both emissions from construction and operational phases plus indirect emissions. Projects with emissions less than the threshold would not result in a significant impact.

7. GREENHOUSE GAS EMISSIONS

The proposed project involves the construction of a 27,078 square-foot warehouse building (2,146 square feet of office and 24,932 square feet of warehousing) with related parking and site improvements on a 61,508 square foot (1.41 gross acres) lot.²⁵ Industrial and warehousing uses are permitted under the PD-19 zoning designation but the project would be limited to warehouse use only. The State of California requires CEQA documents include an evaluation of greenhouse gas (“GHG”) emissions or gases that trap heat in the atmosphere. GHG are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler. The passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, established the California target to achieve reductions in GHG to 1990 GHG emission levels by the year 2020.²⁶

The SCAQMD has established a single quantified threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for new industrial development.²⁷ Carbon dioxide equivalent, or CO₂e, is a term that is used to describe different greenhouse gases in a common and collective unit. Table 9 summarizes annual greenhouse gas emissions from the construction and operation of the proposed project. As indicated in Section 3.6.A, Energy, in the IS/MND, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy during construction or operation. As indicated in Table 9, the CO₂e total for the proposed project is 182.99 MTCO₂e per year. The proposed project's construction and operational emissions would be below the quantified threshold of significance. *As a result, the impacts would be less than significant.*

²⁵ C.E.G. Construction. *Site Plan Sheet A100 California Industrial 2601 California, Monrovia, California*. May 2025.

²⁶ California, State of. OPR Technical Advisory – *CEQA and Climate Change: Addressing Climate Change through the California Environmental Quality Act (CEQA) Review*. June 19, 2008.

²⁷ SCAQMD. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*.

https://planning.lacity.org/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.39_SCAQMD%20GHG%20Meeting%2015.pdf.

TABLE 9 – GREENHOUSE GAS EMISSIONS INVENTORY

Source	GHG Emissions (metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Long-Term – Mobile Emissions	75.7	--	0.09	76.8
Long-Term – Area Emissions	0.55	--	--	0.55
Long-Term – Energy Emissions	73	0.01	--	73.2
Long-Term – Waste Emission	12.2	0.20	--	18.7
Long-Term – Water Emissions	2.27	0.23	--	7.93
Long-Term – Total Emissions	163.8	0.44	0.09	177.2
Total Construction Emissions	170.7	0.01	0.01	173.7
Construction Emissions Amortized Over 30 Years				5.79
Operational Emissions w/ Amortized Construction				182.99
Significance Threshold for Warehouse/Industrial				10,000

Source: Attachment A, CalEEMod V.2022.1.1.39

The City of Monrovia’s Energy Action Plan²⁸ was made to establish energy conservation and GHG reduction goals with a strong goal of achieving a 25% reduction in greenhouse gas emissions by 2030 within the Plan’s Section 4. In this section, policies such as rebate programs, Federal Tax incentives, and bond measures are introduced to achieve this goal. Another strategy is to use long term Power Purchase Agreements (PPA) which are legal agreements/contracts between organizations to buy power from a company for 10-20 years. Often the PPA can be paid off sooner since the energy savings can be used to reduce the time of the contract. Along with this legal contract, there are economic and accounting analytical tools called “life cycle analysis”, which can provide details as to the Return on Investment (ROI) and measure the time along with “externalities” (e.g., other costs) to pay for the renewable energy systems. A more recent strategy has come from the Clinton Climate Initiative (CCI) in Washington DC, whereby private companies that contract for energy services are identified and screened in order to bid and contract for renewable energy and demand management services to non-profit or government organizations. This approach also includes low interest financing and bank support to communities. Some pilot projects will soon be identified and tested in Southern California. The City of Monrovia’s Environmental Justice Element²⁹ also includes the following policy and programs with respect to climate change:

- *Policy 4.2:* Improve air quality conditions and minimize air quality impacts on sensitive population groups, by reducing point source emissions (ozone, small particulate matter, diesel particulates), particularly in the environmental justice community.
- *Program 4.2.1:* Collaborate with industrial businesses to improve outdoor air quality through enhanced operations and other pollution reduction measures where possible.
- *Program 4.2.2:* Encourage smoke-free workplaces, multi-family housing, parks, and other outdoor gathering places to reduce exposure to second-hand smoke and coordinate with local advocacy groups to identify more potential smoke-free areas.
- *Program 4.2.3:* Continue to support the efforts of the South Coast Air Quality Management District (SCAQMD) to identify, monitor, and reduce air pollutants.
- *Program 4.2.4:* Require new sensitive land uses to include feasible measures such as setbacks,

²⁸ City of Monrovia. *Energy Action Plan*.

<https://www.cityofmonrovia.org/home/showpublisheddocument/774/636210502321300000> June 2008.

²⁹ City of Monrovia. *Environmental Justice Element*.

<https://www.monroviaca.gov/home/showpublisheddocument/30689/6381077561229300000>

landscaping, ventilation systems, and other effective measures to minimize potential impacts from air pollution.

- *Program 4.2.5:* Maintain designated truck routes to avoid residential areas and other sensitive areas, especially in the environmental justice community.
- *Program 4.2.6:* Preserve and enhance natural landscapes and tree canopies in and around the environmental justice community to minimize air pollution impacts and heat exposure. Promote the use of drought tolerant and native species in landscaped areas.
- *Program 4.2.7:* Support programs promoting the installation of electric vehicle charging stations within public parking lots and continue to explore removing barriers for private entity installations.
- *Policy 4.3:* Protect sensitive land uses (e.g., schools, housing, health facilities, childcare facilities, senior centers, parks, etc.) from increased pollution exposure, particularly in the environmental justice community.
- *Program 4.3.1:* Limit the siting and construction of new large-scale hazardous waste producers and facilities on or near sensitive land uses in and around the environmental justice community.
- *Program 4.3.2:* Continue to ensure compatibility between sensitive land uses and heavy industrial uses and other potentially harmful facilities.

The proposed project's implementation would not adversely impact the above environmental justice policies and programs. As indicated in Table 9, the CO₂e total for the proposed operations of the project is 182.99 MTCO₂e per year. Of this total figure, 76.8 MTCO₂e per year would come from mobile emissions. Three truck loading docks would be provided. As indicated previously, the construction and operation of the proposed project would result in the generation of a limited number of emissions that would be below the SCAQMD's thresholds (refer to Table 6 and 7). As indicated in Section 3.6, Energy of the Initial Study, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy during construction or operation. *As a result, no impacts would occur.*

8. MITIGATION MEASURES

The following mitigation measure included in the air quality section would prohibit uses that would potentially cause odors:

- *Mitigation Measure AIR-1.* All proposed uses of the site shall be reviewed by the City of Monrovia's Development Review Committee. No land uses that cause odors are allowed.

The following standard conditions are also included in the air quality section:

- *Standard Condition AIR-1:* Prior to issuance of any Grading Permit, the City of Monrovia Public Works Department shall confirm that the project stipulates that, in compliance with SCAQMD Rule 402 and Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. SCAQMD Rule 403 requires that fugitive dust be controlled with 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. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rules 403 and 402 are as follows:

- The Project Construction Contractor shall develop and implement dust control methods that shall achieve this control level in a SCAQMD Rule 403 dust control plan, designate personnel to monitor the dust control program, and order increased watering, as necessary, to ensure a 55 percent control level. Those duties shall include holiday and weekend periods when work may not be in progress. Additional control measures to reduce fugitive dust shall include, but are not limited to, the following:
 - Apply water twice daily, or nontoxic soil stabilizers according to manufacturer's specifications, to all unpaved parking or staging areas or unpaved road surfaces or as needed to areas where soil is disturbed.
 - Use low-sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
 - During earthmoving or excavation operations, fugitive dust emissions shall be controlled by regular watering to prevent excessive amounts of dust, ceasing earthmoving and excavation activities during periods of high winds (i.e., winds greater than 20 miles per hour (mph) averaged over 1 hour), and minimizing the area disturbed by earthmoving or excavation operations at all times.
 - After earthmoving or excavation operations, fugitive dust emissions shall be controlled by revegetating and watering portions of the construction area to remain inactive longer than a period of 3 months and watering all active portions of the construction site.
 - At all times, fugitive dust emissions shall be controlled by limiting the on-site vehicle speed to 15 mph and paving road improvements as soon as feasible.
 - At all times during the construction phase, ozone precursor emissions from mobile equipment shall be controlled by maintaining equipment engines in good condition and in proper tune according to manufacturers' specifications.
 - Outdoor storage piles of construction materials shall be kept covered, watered, or otherwise chemically stabilized with a chemical wetting agent to minimize fugitive dust emissions and wind erosion.
- *Standard Condition AIR-2:* Prior to issuance of any Grading Permit, the City of Monrovia Public Works Department shall confirm that the project complies with Mitigation Measure AIR-B of the *2021-2029 Housing Element Update, Safety Element Update, New Environmental Justice Element, and Zoning Text Amendment State Clearinghouse # 2022080729 Final Initial Study and Mitigated Negative Declaration* to reduce diesel engine emissions of ozone precursors ROG and NO_x, particulate matter less than 10 microns in size (PM₁₀), particulate matter less than 2.5 microns in size (PM_{2.5}), and diesel particulate matter (DPM). The following measures shall be incorporated into all project specifications to reduce diesel engine emissions of O₃ precursors including ROG and NO_x, PM₁₀, PM_{2.5}, and diesel PM:
 - *Idling Restrictions.* Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:
 - When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;

- When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
 - To bring the equipment to the manufacturer's recommended operating temperature;
 - When the ambient temperature is below 40 degrees F or above 85 degrees F; or
 - When equipment is being repaired.
- *Standard Condition AIR-3:* Throughout operation of the project, the Director of the City of Monrovia Community Development *Department*, or designee, shall ensure that the project complies with applicable provisions of Section 8.10.030 of the City's Municipal Code, which requires that every person in control of the day-to-day operations at any commercial premise provide for the collection and proper disposal of solid waste at least once per week.

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MONR 003 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MONR 003
Construction Start Date	1/1/2027
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.2000
Location	34.11780391748093, -118.00028775595065
County	Los Angeles-South Coast
City	Monrovia
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4921
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.39

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	24.9000	1000sqft	0.57000	24,900.0	11,576.0	—	—	—

General Office Building	2.15000	1000sqft	0.05000	2,150.00	0.00000	—	—	—
Parking Lot	23.9000	1000sqft	0.79000	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.43006	8.42901	3.72567	11.2136	0.01897	0.03231	0.18362	0.21593	0.03231	0.04463	0.07694	—	1,980.74	1,980.74	0.08085	0.03778	0.81511	1,994.84
Mit.	4.38449	4.38343	3.72567	11.2136	0.01897	0.03231	0.18362	0.21593	0.03231	0.04463	0.07694	—	1,980.74	1,980.74	0.08085	0.03778	0.81511	1,994.84
% Reduced	48%	48%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55236	0.32390	6.06921	16.6062	0.04977	0.09786	8.30374	8.40160	0.09786	3.75343	3.85129	—	6,486.65	6,486.65	0.29501	0.66154	0.22651	6,691.39
Mit.	0.55236	0.32390	6.06921	16.6062	0.04977	0.09786	3.05966	3.15753	0.09786	1.21868	1.31654	—	6,486.65	6,486.65	0.29501	0.66154	0.22651	6,691.39
% Reduced	—	—	—	—	—	—	63%	62%	—	68%	66%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.83318	0.81439	1.45955	4.52566	0.00891	0.01628	0.72923	0.74551	0.01628	0.32030	0.33658	—	1,031.19	1,031.19	0.04276	0.05560	0.36272	1,049.20
Mit.	0.48958	0.47079	1.45955	4.52566	0.00891	0.01628	0.29385	0.31013	0.01628	0.11015	0.12643	—	1,031.19	1,031.19	0.04276	0.05560	0.36272	1,049.20
% Reduced	41%	42%	—	—	—	—	60%	58%	—	66%	62%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15205	0.14863	0.26637	0.82593	0.00163	0.00297	0.13308	0.13606	0.00297	0.05845	0.06143	—	170.726	170.726	0.00708	0.00921	0.06005	173.706
Mit.	0.08935	0.08592	0.26637	0.82593	0.00163	0.00297	0.05363	0.05660	0.00297	0.02010	0.02307	—	170.726	170.726	0.00708	0.00921	0.06005	173.706
% Reduced	41%	42%	—	—	—	—	60%	58%	—	66%	62%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	8.43006	8.42901	3.72567	11.2136	0.01897	0.03231	0.18362	0.21593	0.03231	0.04463	0.07694	—	1,980.74	1,980.74	0.08085	0.03778	0.81511	1,994.84
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.55236	0.32390	6.06921	16.6062	0.04977	0.09786	8.30374	8.40160	0.09786	3.75343	3.85129	—	6,486.65	6,486.65	0.29501	0.66154	0.22651	6,691.39
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.83318	0.81439	1.45955	4.52566	0.00891	0.01628	0.72923	0.74551	0.01628	0.32030	0.33658	—	1,031.19	1,031.19	0.04276	0.05560	0.36272	1,049.20
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	0.15205	0.14863	0.26637	0.82593	0.00163	0.00297	0.13308	0.13606	0.00297	0.05845	0.06143	—	170.726	170.726	0.00708	0.00921	0.06005	173.706
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2.2.2. Onsite Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	8.42109	8.42109	3.54128	10.4747	0.01797	0.03131	0.00000	0.03131	0.03131	0.00000	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	0.00000	1,702.90
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.23093	0.23093	3.54128	14.2408	0.02264	0.04619	7.08658	7.13277	0.04619	3.42534	3.47153	—	2,451.94	2,451.94	0.09946	0.01989	0.00000	2,460.36
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.79358	0.79358	1.06953	4.14167	0.00681	0.01251	0.58834	0.60085	0.01251	0.28399	0.29650	—	673.649	673.649	0.02733	0.00547	0.00000	675.961
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.14483	0.14483	0.19519	0.75586	0.00124	0.00228	0.10737	0.10966	0.00228	0.05183	0.05411	—	111.530	111.530	0.00452	0.00090	0.00000	111.913

2.2.3. Offsite Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05374	0.04371	0.18438	0.73892	0.00100	0.00100	0.18362	0.18462	0.00100	0.04463	0.04563	—	283.671	283.671	0.01201	0.02401	0.81511	291.942
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.32143	0.09297	4.86838	2.36541	0.02713	0.05168	1.21715	1.26883	0.05168	0.32809	0.37976	—	4,034.70	4,034.70	0.19555	0.64165	0.22651	4,231.03
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	0.03960	0.02081	0.39002	0.38399	0.00210	0.00378	0.14088	0.14466	0.00378	0.03631	0.04009	—	357.545	357.545	0.01544	0.05013	0.36272	373.234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00723	0.00380	0.07118	0.07008	0.00038	0.00069	0.02571	0.02640	0.00069	0.00663	0.00732	—	59.1957	59.1957	0.00256	0.00830	0.06005	61.7932

2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.38449	4.38343	3.72567	11.2136	0.01897	0.03231	0.18362	0.21593	0.03231	0.04463	0.07694	—	1,980.74	1,980.74	0.08085	0.03778	0.81511	1,994.84
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.55236	0.32390	6.06921	16.6062	0.04977	0.09786	3.05966	3.15753	0.09786	1.21868	1.31654	—	6,486.65	6,486.65	0.29501	0.66154	0.22651	6,691.39
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.48958	0.47079	1.45955	4.52566	0.00891	0.01628	0.29385	0.31013	0.01628	0.11015	0.12643	—	1,031.19	1,031.19	0.04276	0.05560	0.36272	1,049.20
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08935	0.08592	0.26637	0.82593	0.00163	0.00297	0.05363	0.05660	0.00297	0.02010	0.02307	—	170.726	170.726	0.00708	0.00921	0.06005	173.706

2.2.5. Onsite Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.37552	4.37552	3.54128	10.4747	0.01797	0.03131	0.00000	0.03131	0.03131	0.00000	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	0.00000	1,702.90
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	0.23093	0.23093	3.54128	14.2408	0.02264	0.04619	1.84251	1.88870	0.04619	0.89059	0.93677	—	2,451.94	2,451.94	0.09946	0.01989	0.00000	2,460.36
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.44998	0.44998	1.06953	4.14167	0.00681	0.01251	0.15297	0.16548	0.01251	0.07384	0.08634	—	673.649	673.649	0.02733	0.00547	0.00000	675.961
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08212	0.08212	0.19519	0.75586	0.00124	0.00228	0.02792	0.03020	0.00228	0.01348	0.01576	—	111.530	111.530	0.00452	0.00090	0.00000	111.913

2.2.6. Offsite Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05374	0.04371	0.18438	0.73892	0.00100	0.00100	0.18362	0.18462	0.00100	0.04463	0.04563	—	283.671	283.671	0.01201	0.02401	0.81511	291.942
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.32143	0.09297	4.86838	2.36541	0.02713	0.05168	1.21715	1.26883	0.05168	0.32809	0.37976	—	4,034.70	4,034.70	0.19555	0.64165	0.22651	4,231.03
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.03960	0.02081	0.39002	0.38399	0.00210	0.00378	0.14088	0.14466	0.00378	0.03631	0.04009	—	357.545	357.545	0.01544	0.05013	0.36272	373.234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00723	0.00380	0.07118	0.07008	0.00038	0.00069	0.02571	0.02640	0.00069	0.00663	0.00732	—	59.1957	59.1957	0.00256	0.00830	0.06005	61.7932

2.3. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.10483	1.05756	0.31355	3.24796	0.00594	0.01595	0.48035	0.49630	0.01524	0.12201	0.13725	25.4582	1,020.07	1,045.53	2.63289	0.05053	1.42978	1,127.84

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.89336	0.86207	0.31870	1.89912	0.00566	0.01386	0.48035	0.49421	0.01366	0.12201	0.13567	25.4582	993.905	1,019.36	2.63345	0.05142	0.04217	1,100.57
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01759	0.97712	0.31329	2.61088	0.00538	0.01506	0.43716	0.45222	0.01452	0.11106	0.12559	25.4582	963.642	989.100	2.63166	0.04994	0.57163	1,070.35
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18571	0.17832	0.05718	0.47649	0.00098	0.00275	0.07978	0.08253	0.00265	0.02027	0.02292	4.21489	159.542	163.757	0.43570	0.00827	0.09464	177.208

2.4. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.22673	0.20350	0.16009	1.95091	0.00501	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	512.132	512.132	0.02199	0.01901	1.42456	519.770
Area	0.86231	0.84616	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423
Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	1.10483	1.05756	0.31355	3.24796	0.00594	0.01595	0.48035	0.49630	0.01524	0.12201	0.13725	25.4582	1,020.07	1,045.53	2.63289	0.05053	1.42978	1,127.84
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.22465	0.20126	0.17514	1.77853	0.00480	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	490.803	490.803	0.02275	0.01994	0.03694	497.351
Area	0.65292	0.65292	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423

Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	0.89336	0.86207	0.31870	1.89912	0.00566	0.01386	0.48035	0.49421	0.01366	0.12201	0.13567	25.4582	993.905	1,019.36	2.63345	0.05142	0.04217	1,100.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20546	0.18394	0.16295	1.68450	0.00447	0.00272	0.43716	0.43988	0.00253	0.11106	0.11359	—	457.227	457.227	0.02083	0.01843	0.56640	463.805
Area	0.79634	0.78528	0.00678	0.80579	0.00005	0.00143	—	0.00143	0.00108	—	0.00108	—	3.31356	3.31356	0.00014	0.00003	—	3.32551
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423
Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	1.01759	0.97712	0.31329	2.61088	0.00538	0.01506	0.43716	0.45222	0.01452	0.11106	0.12559	25.4582	963.642	989.100	2.63166	0.04994	0.57163	1,070.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03750	0.03357	0.02974	0.30742	0.00082	0.00050	0.07978	0.08028	0.00046	0.02027	0.02073	—	75.6991	75.6991	0.00345	0.00305	0.09377	76.7882
Area	0.14533	0.14331	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058
Energy	0.00288	0.00144	0.02620	0.02201	0.00016	0.00199	—	0.00199	0.00199	—	0.00199	—	73.0002	73.0002	0.00528	0.00039	—	73.2481
Water	—	—	—	—	—	—	—	—	—	—	—	1.94802	10.2941	12.2421	0.20039	0.00482	—	18.6891
Waste	—	—	—	—	—	—	—	—	—	—	—	2.26687	0.00000	2.26687	0.22657	0.00000	—	7.93100
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087
Total	0.18571	0.17832	0.05718	0.47649	0.00098	0.00275	0.07978	0.08253	0.00265	0.02027	0.02292	4.21489	159.542	163.757	0.43570	0.00827	0.09464	177.208

2.5. Operations Emissions by Sector, Mitigated

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

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

Mobile	0.22673	0.20350	0.16009	1.95091	0.00501	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	512.132	512.132	0.02199	0.01901	1.42456	519.770
Area	0.86231	0.84616	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423
Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	1.10483	1.05756	0.31355	3.24796	0.00594	0.01595	0.48035	0.49630	0.01524	0.12201	0.13725	25.4582	1,020.07	1,045.53	2.63289	0.05053	1.42978	1,127.84
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.22465	0.20126	0.17514	1.77853	0.00480	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	490.803	490.803	0.02275	0.01994	0.03694	497.351
Area	0.65292	0.65292	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423
Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	0.89336	0.86207	0.31870	1.89912	0.00566	0.01386	0.48035	0.49421	0.01366	0.12201	0.13567	25.4582	993.905	1,019.36	2.63345	0.05142	0.04217	1,100.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20546	0.18394	0.16295	1.68450	0.00447	0.00272	0.43716	0.43988	0.00253	0.11106	0.11359	—	457.227	457.227	0.02083	0.01843	0.56640	463.805
Area	0.79634	0.78528	0.00678	0.80579	0.00005	0.00143	—	0.00143	0.00108	—	0.00108	—	3.31356	3.31356	0.00014	0.00003	—	3.32551
Energy	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	440.925	440.925	0.03189	0.00235	—	442.423
Water	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	1.01759	0.97712	0.31329	2.61088	0.00538	0.01506	0.43716	0.45222	0.01452	0.11106	0.12559	25.4582	963.642	989.100	2.63166	0.04994	0.57163	1,070.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03750	0.03357	0.02974	0.30742	0.00082	0.00050	0.07978	0.08028	0.00046	0.02027	0.02073	—	75.6991	75.6991	0.00345	0.00305	0.09377	76.7882
Area	0.14533	0.14331	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058

Energy	0.00288	0.00144	0.02620	0.02201	0.00016	0.00199	—	0.00199	0.00199	—	0.00199	—	73.0002	73.0002	0.00528	0.00039	—	73.2481
Water	—	—	—	—	—	—	—	—	—	—	—	1.94802	10.2941	12.2421	0.20039	0.00482	—	18.6891
Waste	—	—	—	—	—	—	—	—	—	—	—	2.26687	0.00000	2.26687	0.22657	0.00000	—	7.93100
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087
Total	0.18571	0.17832	0.05718	0.47649	0.00098	0.00275	0.07978	0.08253	0.00265	0.02027	0.02292	4.21489	159.542	163.757	0.43570	0.00827	0.09464	177.208

3. Construction Emissions Details

3.1. Site Preparation (2027)

3.1.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19419	0.19419	1.00980	11.8782	0.01904	0.03884	—	0.03884	0.03884	—	0.03884	—	2,061.85	2,061.85	0.08364	0.01673	—	2,068.93
Dust From Material Movement	—	—	—	—	—	—	6.26354	6.26354	—	3.00380	3.00380	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm ent	0.00319	0.00319	0.01660	0.19526	0.00031	0.00064	—	0.00064	0.00064	—	0.00064	—	33.8934	33.8934	0.00137	0.00027	—	34.0097
Dust From Material Movement	—	—	—	—	—	—	0.10296	0.10296	—	0.04938	0.04938	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.00058	0.00058	0.00303	0.03563	0.00006	0.00012	—	0.00012	0.00012	—	0.00012	—	5.61144	5.61144	0.00023	0.00005	—	5.63070
Dust From Material Movement	—	—	—	—	—	—	0.01879	0.01879	—	0.00901	0.00901	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02985	0.02612	0.03233	0.38170	0.00000	0.00000	0.09803	0.09803	0.00000	0.02298	0.02298	—	94.4927	94.4927	0.00132	0.00355	0.00805	95.5932
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00049	0.00043	0.00053	0.00659	0.00000	0.00000	0.00159	0.00159	0.00000	0.00037	0.00037	—	1.57622	1.57622	0.00002	0.00006	0.00220	1.59638
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00009	0.00008	0.00010	0.00120	0.00000	0.00000	0.00029	0.00029	0.00000	0.00007	0.00007	—	0.26096	0.26096	< 0.000005	0.00001	0.00036	0.26430
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.3. Onsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19419	0.19419	1.00980	11.8782	0.01904	0.03884	—	0.03884	0.03884	—	0.03884	—	2,061.85	2,061.85	0.08364	0.01673	—	2,068.93
Dust From Material Movement	—	—	—	—	—	—	1.62852	1.62852	—	0.78099	0.78099	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.00319	0.00319	0.01660	0.19526	0.00031	0.00064	—	0.00064	0.00064	—	0.00064	—	33.8934	33.8934	0.00137	0.00027	—	34.0097
Dust From Material Movement	—	—	—	—	—	—	0.02677	0.02677	—	0.01284	0.01284	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00058	0.00058	0.00303	0.03563	0.00006	0.00012	—	0.00012	0.00012	—	0.00012	—	5.61144	5.61144	0.00023	0.00005	—	5.63070
Dust From Material Movement	—	—	—	—	—	—	0.00489	0.00489	—	0.00234	0.00234	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.4. Offsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02985	0.02612	0.03233	0.38170	0.00000	0.00000	0.09803	0.09803	0.00000	0.02298	0.02298	—	94.4927	94.4927	0.00132	0.00355	0.00805	95.5932
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00049	0.00043	0.00053	0.00659	0.00000	0.00000	0.00159	0.00159	0.00000	0.00037	0.00037	—	1.57622	1.57622	0.00002	0.00006	0.00220	1.59638
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00009	0.00008	0.00010	0.00120	0.00000	0.00000	0.00029	0.00029	0.00000	0.00007	0.00007	—	0.26096	0.26096	< 0.000005	0.00001	0.00036	0.26430
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Grading (2027)

3.2.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23093	0.23093	1.20083	14.2408	0.02264	0.04619	—	0.04619	0.04619	—	0.04619	—	2,451.94	2,451.94	0.09946	0.01989	—	2,460.36
Dust From Material Movement	—	—	—	—	—	—	7.08658	7.08658	—	3.42534	3.42534	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.01582	0.01582	0.08225	0.97540	0.00155	0.00316	—	0.00316	0.00316	—	0.00316	—	167.941	167.941	0.00681	0.00136	—	168.518
Dust From Material Movement	—	—	—	—	—	—	0.48538	0.48538	—	0.23461	0.23461	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00289	0.00289	0.01501	0.17801	0.00028	0.00058	—	0.00058	0.00058	—	0.00058	—	27.8046	27.8046	0.00113	0.00023	—	27.9000
Dust From Material Movement	—	—	—	—	—	—	0.08858	0.08858	—	0.04282	0.04282	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03979	0.03483	0.04310	0.50894	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	125.990	125.990	0.00176	0.00474	0.01073	127.458
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.28164	0.05814	4.82528	1.85647	0.02713	0.05168	1.08644	1.13812	0.05168	0.29745	0.34913	—	3,908.71	3,908.71	0.19379	0.63691	0.21578	4,103.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00273	0.00239	0.00295	0.03663	0.00000	0.00000	0.00885	0.00885	0.00000	0.00207	0.00207	—	8.75678	8.75678	0.00012	0.00032	0.01222	8.86877
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.01956	0.00416	0.33422	0.12636	0.00186	0.00354	0.07375	0.07729	0.00354	0.02021	0.02375	—	267.651	267.651	0.01327	0.04354	0.24599	281.203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00050	0.00044	0.00054	0.00669	0.00000	0.00000	0.00161	0.00161	0.00000	0.00038	0.00038	—	1.44979	1.44979	0.00002	0.00005	0.00202	1.46833
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00357	0.00076	0.06099	0.02306	0.00034	0.00065	0.01346	0.01411	0.00065	0.00369	0.00433	—	44.3127	44.3127	0.00220	0.00721	0.04073	46.5563

3.2.3. Onsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23093	0.23093	1.20083	14.2408	0.02264	0.04619	—	0.04619	0.04619	—	0.04619	—	2,451.94	2,451.94	0.09946	0.01989	—	2,460.36
Dust From Material Movement	—	—	—	—	—	—	1.84251	1.84251	—	0.89059	0.89059	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01582	0.01582	0.08225	0.97540	0.00155	0.00316	—	0.00316	0.00316	—	0.00316	—	167.941	167.941	0.00681	0.00136	—	168.518

Dust From Material Movement	—	—	—	—	—	—	0.12620	0.12620	—	0.06100	0.06100	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00289	0.00289	0.01501	0.17801	0.00028	0.00058	—	0.00058	0.00058	—	0.00058	—	27.8046	27.8046	0.00113	0.00023	—	27.9000
Dust From Material Movement	—	—	—	—	—	—	0.02303	0.02303	—	0.01113	0.01113	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.4. Offsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03979	0.03483	0.04310	0.50894	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	125.990	125.990	0.00176	0.00474	0.01073	127.458
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.28164	0.05814	4.82528	1.85647	0.02713	0.05168	1.08644	1.13812	0.05168	0.29745	0.34913	—	3,908.71	3,908.71	0.19379	0.63691	0.21578	4,103.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00273	0.00239	0.00295	0.03663	0.00000	0.00000	0.00885	0.00885	0.00000	0.00207	0.00207	—	8.75678	8.75678	0.00012	0.00032	0.01222	8.86877
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.01956	0.00416	0.33422	0.12636	0.00186	0.00354	0.07375	0.07729	0.00354	0.02021	0.02375	—	267.651	267.651	0.01327	0.04354	0.24599	281.203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00050	0.00044	0.00054	0.00669	0.00000	0.00000	0.00161	0.00161	0.00000	0.00038	0.00038	—	1.44979	1.44979	0.00002	0.00005	0.00202	1.46833
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00357	0.00076	0.06099	0.02306	0.00034	0.00065	0.01346	0.01411	0.00065	0.00369	0.00433	—	44.3127	44.3127	0.00220	0.00721	0.04073	46.5563

3.3. Building Construction (2027)

3.3.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20037	0.20037	3.54128	10.4747	0.01797	0.03131	—	0.03131	0.03131	—	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	—	1,702.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20037	0.20037	3.54128	10.4747	0.01797	0.03131	—	0.03131	0.03131	—	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	—	1,702.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04776	0.04776	0.84409	2.49671	0.00428	0.00746	—	0.00746	0.00746	—	0.00746	—	404.508	404.508	0.01641	0.00328	—	405.896
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00872	0.00872	0.15405	0.45565	0.00078	0.00136	—	0.00136	0.00136	—	0.00136	—	66.9708	66.9708	0.00272	0.00054	—	67.2007
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04485	0.03956	0.03846	0.66948	0.00000	0.00000	0.14569	0.14569	0.00000	0.03415	0.03415	—	148.123	148.123	0.00627	0.00528	0.46155	150.315
Vendor	0.00889	0.00414	0.14593	0.06944	0.00100	0.00100	0.03793	0.03893	0.00100	0.01048	0.01148	—	135.548	135.548	0.00575	0.01873	0.35356	141.626
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04435	0.03882	0.04804	0.56726	0.00000	0.00000	0.14569	0.14569	0.00000	0.03415	0.03415	—	140.429	140.429	0.00197	0.00528	0.01196	142.064
Vendor	0.00870	0.00395	0.15177	0.07110	0.00100	0.00100	0.03793	0.03893	0.00100	0.01048	0.01148	—	135.623	135.623	0.00575	0.01873	0.00918	141.357
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01057	0.00925	0.01145	0.14209	0.00000	0.00000	0.03432	0.03432	0.00000	0.00804	0.00804	—	33.9659	33.9659	0.00047	0.00126	0.04741	34.4003
Vendor	0.00212	0.00096	0.03640	0.01676	0.00024	0.00024	0.00895	0.00919	0.00024	0.00248	0.00271	—	32.3162	32.3162	0.00137	0.00446	0.03636	33.7170

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00193	0.00169	0.00209	0.02593	0.00000	0.00000	0.00626	0.00626	0.00000	0.00147	0.00147	—	5.62344	5.62344	0.00008	0.00021	0.00785	5.69536
Vendor	0.00039	0.00018	0.00664	0.00306	0.00004	0.00004	0.00163	0.00168	0.00004	0.00045	0.00050	—	5.35032	5.35032	0.00023	0.00074	0.00602	5.58224
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.3. Onsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20037	0.20037	3.54128	10.4747	0.01797	0.03131	—	0.03131	0.03131	—	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	—	1,702.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20037	0.20037	3.54128	10.4747	0.01797	0.03131	—	0.03131	0.03131	—	0.03131	—	1,697.07	1,697.07	0.06884	0.01377	—	1,702.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04776	0.04776	0.84409	2.49671	0.00428	0.00746	—	0.00746	0.00746	—	0.00746	—	404.508	404.508	0.01641	0.00328	—	405.896

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00872	0.00872	0.15405	0.45565	0.00078	0.00136	—	0.00136	0.00136	—	0.00136	—	66.9708	66.9708	0.00272	0.00054	—	67.2007
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.4. Offsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04485	0.03956	0.03846	0.66948	0.00000	0.00000	0.14569	0.14569	0.00000	0.03415	0.03415	—	148.123	148.123	0.00627	0.00528	0.46155	150.315
Vendor	0.00889	0.00414	0.14593	0.06944	0.00100	0.00100	0.03793	0.03893	0.00100	0.01048	0.01148	—	135.548	135.548	0.00575	0.01873	0.35356	141.626
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04435	0.03882	0.04804	0.56726	0.00000	0.00000	0.14569	0.14569	0.00000	0.03415	0.03415	—	140.429	140.429	0.00197	0.00528	0.01196	142.064
Vendor	0.00870	0.00395	0.15177	0.07110	0.00100	0.00100	0.03793	0.03893	0.00100	0.01048	0.01148	—	135.623	135.623	0.00575	0.01873	0.00918	141.357
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01057	0.00925	0.01145	0.14209	0.00000	0.00000	0.03432	0.03432	0.00000	0.00804	0.00804	—	33.9659	33.9659	0.00047	0.00126	0.04741	34.4003
Vendor	0.00212	0.00096	0.03640	0.01676	0.00024	0.00024	0.00895	0.00919	0.00024	0.00248	0.00271	—	32.3162	32.3162	0.00137	0.00446	0.03636	33.7170
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00193	0.00169	0.00209	0.02593	0.00000	0.00000	0.00626	0.00626	0.00000	0.00147	0.00147	—	5.62344	5.62344	0.00008	0.00021	0.00785	5.69536

Vendor	0.00039	0.00018	0.00664	0.00306	0.00004	0.00004	0.00163	0.00168	0.00004	0.00045	0.00050	—	5.35032	5.35032	0.00023	0.00074	0.00602	5.58224
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Paving (2027)

3.4.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06976	0.06976	0.84449	4.62143	0.00608	0.01226	—	0.01226	0.01226	—	0.01226	—	658.973	658.973	0.02673	0.00535	—	661.235
Paving	0.06677	0.06677	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00592	0.00592	0.07172	0.39250	0.00052	0.00104	—	0.00104	0.00104	—	0.00104	—	55.9676	55.9676	0.00227	0.00045	—	56.1597
Paving	0.00567	0.00567	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm ent	0.00108	0.00108	0.01309	0.07163	0.00009	0.00019	—	0.00019	0.00019	—	0.00019	—	9.26608	9.26608	0.00038	0.00008	—	9.29788
Paving	0.00103	0.00103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04023	0.03549	0.03450	0.60065	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	132.893	132.893	0.00562	0.00474	0.41410	134.860
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00338	0.00296	0.00366	0.04542	0.00000	0.00000	0.01097	0.01097	0.00000	0.00257	0.00257	—	10.8584	10.8584	0.00015	0.00040	0.01516	10.9973
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00062	0.00054	0.00067	0.00829	0.00000	0.00000	0.00200	0.00200	0.00000	0.00047	0.00047	—	1.79773	1.79773	0.00002	0.00007	0.00251	1.82073
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.3. Onsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06976	0.06976	0.84449	4.62143	0.00608	0.01226	—	0.01226	0.01226	—	0.01226	—	658.973	658.973	0.02673	0.00535	—	661.235
Paving	0.06677	0.06677	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00592	0.00592	0.07172	0.39250	0.00052	0.00104	—	0.00104	0.00104	—	0.00104	—	55.9676	55.9676	0.00227	0.00045	—	56.1597
Paving	0.00567	0.00567	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00108	0.00108	0.01309	0.07163	0.00009	0.00019	—	0.00019	0.00019	—	0.00019	—	9.26608	9.26608	0.00038	0.00008	—	9.29788
Paving	0.00103	0.00103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.4. Offsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04023	0.03549	0.03450	0.60065	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	132.893	132.893	0.00562	0.00474	0.41410	134.860
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00338	0.00296	0.00366	0.04542	0.00000	0.00000	0.01097	0.01097	0.00000	0.00257	0.00257	—	10.8584	10.8584	0.00015	0.00040	0.01516	10.9973
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00062	0.00054	0.00067	0.00829	0.00000	0.00000	0.00200	0.00200	0.00000	0.00047	0.00047	—	1.79773	1.79773	0.00002	0.00007	0.00251	1.82073
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Architectural Coating (2027)

3.5.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02114	0.02114	0.64604	0.96319	0.00173	0.00235	—	0.00235	0.00235	—	0.00235	—	133.513	133.513	0.00542	0.00108	—	133.971

Architect Coatings	8.39995	8.39995	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00180	0.00180	0.05487	0.08181	0.00015	0.00020	—	0.00020	0.00020	—	0.00020	—	11.3394	11.3394	0.00046	0.00009	—	11.3784
Architectural Coatings	0.71342	0.71342	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00033	0.00033	0.01001	0.01493	0.00003	0.00004	—	0.00004	0.00004	—	0.00004	—	1.87737	1.87737	0.00008	0.00002	—	1.88382
Architectural Coatings	0.13020	0.13020	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00897	0.00791	0.00769	0.13390	0.00000	0.00000	0.02914	0.02914	0.00000	0.00683	0.00683	—	29.6246	29.6246	0.00125	0.00106	0.09231	30.0631
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00075	0.00066	0.00082	0.01013	0.00000	0.00000	0.00245	0.00245	0.00000	0.00057	0.00057	—	2.42056	2.42056	0.00003	0.00009	0.00338	2.45151
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00014	0.00012	0.00015	0.00185	0.00000	0.00000	0.00045	0.00045	0.00000	0.00010	0.00010	—	0.40075	0.40075	0.00001	0.00001	0.00056	0.40588
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.3. Onsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02114	0.02114	0.64604	0.96319	0.00173	0.00235	—	0.00235	0.00235	—	0.00235	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	4.35438	4.35438	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00180	0.00180	0.05487	0.08181	0.00015	0.00020	—	0.00020	0.00020	—	0.00020	—	11.3394	11.3394	0.00046	0.00009	—	11.3784
Architectural Coatings	0.36982	0.36982	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00033	0.00033	0.01001	0.01493	0.00003	0.00004	—	0.00004	0.00004	—	0.00004	—	1.87737	1.87737	0.00008	0.00002	—	1.88382
Architectural Coatings	0.06749	0.06749	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.4. Offsite - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00897	0.00791	0.00769	0.13390	0.00000	0.00000	0.02914	0.02914	0.00000	0.00683	0.00683	—	29.6246	29.6246	0.00125	0.00106	0.09231	30.0631

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00075	0.00066	0.00082	0.01013	0.00000	0.00000	0.00245	0.00245	0.00000	0.00057	0.00057	—	2.42056	2.42056	0.00003	0.00009	0.00338	2.45151
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00014	0.00012	0.00015	0.00185	0.00000	0.00000	0.00045	0.00045	0.00000	0.00010	0.00010	—	0.40075	0.40075	0.00001	0.00001	0.00056	0.40588
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.15285	0.13719	0.10793	1.31522	0.00338	0.00199	0.32383	0.32582	0.00185	0.08226	0.08411	—	345.257	345.257	0.01483	0.01281	0.96037	350.406

General Office Building	0.07388	0.06631	0.05216	0.63569	0.00163	0.00096	0.15652	0.15748	0.00089	0.03976	0.04065	—	166.875	166.875	0.00717	0.00619	0.46418	169.364
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.22673	0.20350	0.16009	1.95091	0.00501	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	512.132	512.132	0.02199	0.01901	1.42456	519.770
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.15145	0.13568	0.11807	1.19901	0.00323	0.00199	0.32383	0.32582	0.00185	0.08226	0.08411	—	330.878	330.878	0.01534	0.01344	0.02490	335.292
General Office Building	0.07320	0.06558	0.05707	0.57952	0.00156	0.00096	0.15652	0.15748	0.00090	0.03976	0.04065	—	159.925	159.925	0.00741	0.00650	0.01204	162.059
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.22465	0.20126	0.17514	1.77853	0.00480	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	490.803	490.803	0.02275	0.01994	0.03694	497.351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.02745	0.02458	0.02177	0.22507	0.00060	0.00036	0.05841	0.05877	0.00034	0.01484	0.01518	—	55.4219	55.4219	0.00252	0.00223	0.06866	56.2193
General Office Building	0.01004	0.00899	0.00797	0.08235	0.00022	0.00013	0.02137	0.02150	0.00012	0.00543	0.00555	—	20.2772	20.2772	0.00092	0.00082	0.02512	20.5689
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.03750	0.03357	0.02974	0.30742	0.00082	0.00050	0.07978	0.08028	0.00046	0.02027	0.02073	—	75.6991	75.6991	0.00345	0.00305	0.09377	76.7882

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.15285	0.13719	0.10793	1.31522	0.00338	0.00199	0.32383	0.32582	0.00185	0.08226	0.08411	—	345.257	345.257	0.01483	0.01281	0.96037	350.406
General Office Building	0.07388	0.06631	0.05216	0.63569	0.00163	0.00096	0.15652	0.15748	0.00089	0.03976	0.04065	—	166.875	166.875	0.00717	0.00619	0.46418	169.364
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.22673	0.20350	0.16009	1.95091	0.00501	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	512.132	512.132	0.02199	0.01901	1.42456	519.770
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.15145	0.13568	0.11807	1.19901	0.00323	0.00199	0.32383	0.32582	0.00185	0.08226	0.08411	—	330.878	330.878	0.01534	0.01344	0.02490	335.292
General Office Building	0.07320	0.06558	0.05707	0.57952	0.00156	0.00096	0.15652	0.15748	0.00090	0.03976	0.04065	—	159.925	159.925	0.00741	0.00650	0.01204	162.059
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.22465	0.20126	0.17514	1.77853	0.00480	0.00295	0.48035	0.48330	0.00275	0.12201	0.12476	—	490.803	490.803	0.02275	0.01994	0.03694	497.351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.02745	0.02458	0.02177	0.22507	0.00060	0.00036	0.05841	0.05877	0.00034	0.01484	0.01518	—	55.4219	55.4219	0.00252	0.00223	0.06866	56.2193

General Office Building	0.01004	0.00899	0.00797	0.08235	0.00022	0.00013	0.02137	0.02150	0.00012	0.00543	0.00555	—	20.2772	20.2772	0.00092	0.00082	0.02512	20.5689
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.03750	0.03357	0.02974	0.30742	0.00082	0.00050	0.07978	0.08028	0.00046	0.02027	0.02073	—	75.6991	75.6991	0.00345	0.00305	0.09377	76.7882

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169.857	169.857	0.01054	0.00128	—	170.501
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	55.8416	55.8416	0.00346	0.00042	—	56.0533
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.9363	43.9363	0.00273	0.00033	—	44.1029
Total	—	—	—	—	—	—	—	—	—	—	—	—	269.635	269.635	0.01673	0.00203	—	270.657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169.857	169.857	0.01054	0.00128	—	170.501

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	55.8416	55.8416	0.00346	0.00042	—	56.0533
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.9363	43.9363	0.00273	0.00033	—	44.1029
Total	—	—	—	—	—	—	—	—	—	—	—	—	269.635	269.635	0.01673	0.00203	—	270.657
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	28.1218	28.1218	0.00174	0.00021	—	28.2284
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	9.24522	9.24522	0.00057	0.00007	—	9.28027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.27416	7.27416	0.00045	0.00005	—	7.30174
Total	—	—	—	—	—	—	—	—	—	—	—	—	44.6412	44.6412	0.00277	0.00034	—	44.8104

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169.857	169.857	0.01054	0.00128	—	170.501
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	55.8416	55.8416	0.00346	0.00042	—	56.0533
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.9363	43.9363	0.00273	0.00033	—	44.1029

Total	—	—	—	—	—	—	—	—	—	—	—	—	269.635	269.635	0.01673	0.00203	—	270.657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	169.857	169.857	0.01054	0.00128	—	170.501
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	55.8416	55.8416	0.00346	0.00042	—	56.0533
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.9363	43.9363	0.00273	0.00033	—	44.1029
Total	—	—	—	—	—	—	—	—	—	—	—	—	269.635	269.635	0.01673	0.00203	—	270.657
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	28.1218	28.1218	0.00174	0.00021	—	28.2284
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	9.24522	9.24522	0.00057	0.00007	—	9.28027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.27416	7.27416	0.00045	0.00005	—	7.30174
Total	—	—	—	—	—	—	—	—	—	—	—	—	44.6412	44.6412	0.00277	0.00034	—	44.8104

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Unrefrig Warehouse-No Rail	0.01418	0.00709	0.12892	0.10829	0.00077	0.00980	—	0.00980	0.00980	—	0.00980	—	153.825	153.825	0.01361	0.00029	—	154.252
General Office Building	0.00161	0.00081	0.01464	0.01230	0.00009	0.00111	—	0.00111	0.00111	—	0.00111	—	17.4648	17.4648	0.00155	0.00003	—	17.5133
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	171.290	171.290	0.01516	0.00032	—	171.765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.01418	0.00709	0.12892	0.10829	0.00077	0.00980	—	0.00980	0.00980	—	0.00980	—	153.825	153.825	0.01361	0.00029	—	154.252
General Office Building	0.00161	0.00081	0.01464	0.01230	0.00009	0.00111	—	0.00111	0.00111	—	0.00111	—	17.4648	17.4648	0.00155	0.00003	—	17.5133
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	171.290	171.290	0.01516	0.00032	—	171.765
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.00259	0.00129	0.02353	0.01976	0.00014	0.00179	—	0.00179	0.00179	—	0.00179	—	25.4675	25.4675	0.00225	0.00005	—	25.5382
General Office Building	0.00029	0.00015	0.00267	0.00224	0.00002	0.00020	—	0.00020	0.00020	—	0.00020	—	2.89150	2.89150	0.00026	0.00001	—	2.89952
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00288	0.00144	0.02620	0.02201	0.00016	0.00199	—	0.00199	0.00199	—	0.00199	—	28.3590	28.3590	0.00251	0.00005	—	28.4377

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01418	0.00709	0.12892	0.10829	0.00077	0.00980	—	0.00980	0.00980	—	0.00980	—	153.825	153.825	0.01361	0.00029	—	154.252
General Office Building	0.00161	0.00081	0.01464	0.01230	0.00009	0.00111	—	0.00111	0.00111	—	0.00111	—	17.4648	17.4648	0.00155	0.00003	—	17.5133
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	171.290	171.290	0.01516	0.00032	—	171.765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01418	0.00709	0.12892	0.10829	0.00077	0.00980	—	0.00980	0.00980	—	0.00980	—	153.825	153.825	0.01361	0.00029	—	154.252
General Office Building	0.00161	0.00081	0.01464	0.01230	0.00009	0.00111	—	0.00111	0.00111	—	0.00111	—	17.4648	17.4648	0.00155	0.00003	—	17.5133
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01579	0.00790	0.14356	0.12059	0.00086	0.01091	—	0.01091	0.01091	—	0.01091	—	171.290	171.290	0.01516	0.00032	—	171.765
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No	0.00259	0.00129	0.02353	0.01976	0.00014	0.00179	—	0.00179	0.00179	—	0.00179	—	25.4675	25.4675	0.00225	0.00005	—	25.5382
General Office Building	0.00029	0.00015	0.00267	0.00224	0.00002	0.00020	—	0.00020	0.00020	—	0.00020	—	2.89150	2.89150	0.00026	0.00001	—	2.89952
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00288	0.00144	0.02620	0.02201	0.00016	0.00199	—	0.00199	0.00199	—	0.00199	—	28.3590	28.3590	0.00251	0.00005	—	28.4377

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.58158	0.58158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07134	0.07134	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.20939	0.19325	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Total	0.86231	0.84616	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.58158	0.58158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.07134	0.07134	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.65292	0.65292	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	0.10614	0.10614	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.01302	0.01302	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	0.02617	0.02416	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058
Total	0.14533	0.14331	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	0.58158	0.58158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect ural Coating s	0.07134	0.07134	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	0.20939	0.19325	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Total	0.86231	0.84616	0.00990	1.17646	0.00007	0.00209	—	0.00209	0.00158	—	0.00158	—	4.83780	4.83780	0.00020	0.00004	—	4.85524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	0.58158	0.58158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.07134	0.07134	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.65292	0.65292	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	0.10614	0.10614	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.01302	0.01302	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	0.02617	0.02416	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058
Total	0.14533	0.14331	0.00124	0.14706	0.00001	0.00026	—	0.00026	0.00020	—	0.00020	—	0.54860	0.54860	0.00002	< 0.000005	—	0.55058

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.0339	58.3855	69.4194	1.13502	0.02732	—	105.937
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.73225	3.79131	4.52356	0.07532	0.00181	—	6.94664
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.0339	58.3855	69.4194	1.13502	0.02732	—	105.937
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.73225	3.79131	4.52356	0.07532	0.00181	—	6.94664
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.82679	9.66638	11.4932	0.18792	0.00452	—	17.5390
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.12123	0.62770	0.74893	0.01247	0.00030	—	1.15010
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.94802	10.2941	12.2421	0.20039	0.00482	—	18.6891

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.0339	58.3855	69.4194	1.13502	0.02732	—	105.937
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.73225	3.79131	4.52356	0.07532	0.00181	—	6.94664
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.0339	58.3855	69.4194	1.13502	0.02732	—	105.937

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.73225	3.79131	4.52356	0.07532	0.00181	—	6.94664
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	11.7662	62.1768	73.9430	1.21034	0.02913	—	112.883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.82679	9.66638	11.4932	0.18792	0.00452	—	17.5390
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.12123	0.62770	0.74893	0.01247	0.00030	—	1.15010
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.94802	10.2941	12.2421	0.20039	0.00482	—	18.6891

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6144	0.00000	12.6144	1.26076	0.00000	—	44.1335

General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.07761	0.00000	1.07761	0.10770	0.00000	—	3.77018
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6144	0.00000	12.6144	1.26076	0.00000	—	44.1335
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.07761	0.00000	1.07761	0.10770	0.00000	—	3.77018
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.08846	0.00000	2.08846	0.20873	0.00000	—	7.30681
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.17841	0.00000	0.17841	0.01783	0.00000	—	0.62420
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.26687	0.00000	2.26687	0.22657	0.00000	—	7.93100

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6144	0.00000	12.6144	1.26076	0.00000	—	44.1335
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.07761	0.00000	1.07761	0.10770	0.00000	—	3.77018
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.6144	0.00000	12.6144	1.26076	0.00000	—	44.1335
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.07761	0.00000	1.07761	0.10770	0.00000	—	3.77018
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.6920	0.00000	13.6920	1.36847	0.00000	—	47.9037
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.08846	0.00000	2.08846	0.20873	0.00000	—	7.30681

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.17841	0.00000	0.17841	0.01783	0.00000	—	0.62420
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.26687	0.00000	2.26687	0.22657	0.00000	—	7.93100

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00523	0.00523
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00087	0.00087

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2027	1/8/2027	5.00000	6.00000	—
Grading	Grading	1/11/2027	2/12/2027	5.00000	25.0000	—
Building Construction	Building Construction	2/15/2027	6/15/2027	5.00000	87.0000	—
Paving	Paving	6/16/2027	7/28/2027	5.00000	31.0000	—
Architectural Coating	Architectural Coating	7/29/2027	9/9/2027	5.00000	31.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	7.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.000000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	8.00000	367.000	0.40000

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	2.00000	7.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Tier 4 Final	1.000000	6.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Tier 4 Final	1.000000	6.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.000000	6.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Tier 4 Final	3.00000	8.00000	46.0000	0.45000
Paving	Cement and Mortar Mixers	Diesel	Tier 4 Final	1.000000	6.00000	10.00000	0.56000
Paving	Pavers	Diesel	Tier 4 Final	1.000000	6.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Tier 4 Final	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Tier 4 Final	1.000000	7.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.000000	6.00000	37.0000	0.48000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	7.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.000000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00000	7.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Tier 4 Final	1.000000	6.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Tier 4 Final	1.000000	6.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.000000	6.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Tier 4 Final	3.00000	8.00000	46.0000	0.45000

Paving	Cement and Mortar Mixers	Diesel	Tier 4 Final	1.000000	6.00000	10.00000	0.56000
Paving	Pavers	Diesel	Tier 4 Final	1.000000	6.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Tier 4 Final	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Tier 4 Final	1.000000	7.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	10.00000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	58.6000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	11.1460	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	4.43349	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	10.00000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	2.22920	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT

Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	10.00000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	58.6000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	11.1460	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	4.43349	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	10.00000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	2.22920	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	40,575.0	13,525.0	2,064.74

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	5.62500	0.00000	0.00000
Grading	2,905.00	0.00000	15.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.79000

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Unrefrigerated Warehouse-No Rail	0.00000	0%
Paving	General Office Building	0.00000	0%
Paving	Parking Lot	0.79000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2027	0.00000	531.983	0.03300	0.00400
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5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	43.3260	43.3260	43.3260	15,814.0	456.622	456.622	456.622	166,667
General Office Building	20.9410	4.75150	1.50500	5,785.85	220.702	50.0771	15.8615	60,978.3
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	43.3260	43.3260	43.3260	15,814.0	456.622	456.622	456.622	166,667
General Office Building	20.9410	4.75150	1.50500	5,785.85	220.702	50.0771	15.8615	60,978.3
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0

Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
General Office Building	Wood Fireplaces	0	0
General Office Building	Gas Fireplaces	0	0
General Office Building	Propane Fireplaces	0	0
General Office Building	Electric Fireplaces	0	0
General Office Building	No Fireplaces	0	0
General Office Building	Conventional Wood Stoves	0	0
General Office Building	Catalytic Wood Stoves	0	0
General Office Building	Non-Catalytic Wood Stoves	0	0
General Office Building	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	40,575.0	13,525.0	2,064.74

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	116,541	531.983	0.0330	0.0040	479,976
General Office Building	38,313.6	531.983	0.0330	0.0040	54,494.9
Parking Lot	30,145.3	531.983	0.0330	0.0040	0.00000

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	116,541	531.983	0.0330	0.0040	479,976
General Office Building	38,313.6	531.983	0.0330	0.0040	54,494.9
Parking Lot	30,145.3	531.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	5,758,125	162,349
General Office Building	382,128	0.00000
Parking Lot	0.00000	0.00000

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	5,758,125	162,349
General Office Building	382,128	0.00000
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	23.4060	0.00000
General Office Building	1.99950	0.00000
Parking Lot	0.00000	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	23.4060	0.00000
General Office Building	1.99950	0.00000
Parking Lot	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.8600	annual days of extreme heat
Extreme Precipitation	6.35000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00000	annual hectares burned

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

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

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

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	84.5800

AQ-PM	74.1879
AQ-DPM	44.4431
Drinking Water	76.1833
Lead Risk Housing	93.7366
Pesticides	53.8276
Toxic Releases	81.1328
Traffic	19.3875
Effect Indicators	—
CleanUp Sites	68.9436
Groundwater	48.6967
Haz Waste Facilities/Generators	63.0708
Impaired Water Bodies	23.8765
Solid Waste	66.8958
Sensitive Population	—
Asthma	44.0179
Cardio-vascular	23.1929
Low Birth Weights	44.7652
Socioeconomic Factor Indicators	—
Education	78.6257
Housing	53.1179
Linguistic	69.2245
Poverty	53.4799
Unemployment	67.4779

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	47.59399461
Employed	48.29975619
Median HI	45.68202233
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	36.58411395
Transportation	—
Auto Access	44.50147568
Active commuting	39.56114462
Social	—
2-parent households	44.34749134
Voting	54.2409855
Neighborhood	—
Alcohol availability	78.30103939
Park access	39.49698447
Retail density	22.80251508
Supermarket access	22.96933145
Tree canopy	74.25895034
Housing	—
Homeownership	75.69613756
Housing habitability	45.91299885
Low-inc homeowner severe housing cost burden	48.10727576
Low-inc renter severe housing cost burden	18.72192994
Uncrowded housing	28.82073656
Health Outcomes	—
Insured adults	9.367380983
Arthritis	0.0

Asthma ER Admissions	71.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	24.9
Cognitively Disabled	43.0
Physically Disabled	49.3
Heart Attack ER Admissions	80.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	63.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	48.8
Elderly	60.7
English Speaking	25.8
Foreign-born	77.8

Outdoor Workers	29.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	46.2
Traffic Density	33.3
Traffic Access	23.0
Other Indices	—
Hardship	67.0
Other Decision Support	—
2016 Voting	31.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0000
Healthy Places Index Score for Project Location (b)	39.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Lot Size
Construction: Construction Phases	Timeline
Construction: Off-Road Equipment	Equipment
Construction: Dust From Material Movement	Grading figures

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.57163	0.57000
Landscape Area	sq. ft	—	11,576.0
Lot Area	acre	0.04936	0.05000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.54867	0.79000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Site Preparation	Site Preparation	Start Date	1/30/2027	1/1/2027
Site Preparation	Site Preparation	End Date	2/1/2027	1/8/2027
Site Preparation	Site Preparation	Work Days per Phase	2.00000	6.00000
Grading	Grading	Start Date	2/2/2027	1/11/2027
Grading	Grading	End Date	2/7/2027	2/12/2027
Grading	Grading	Work Days per Phase	4.00000	25.0000
Building Construction	Building Construction	Start Date	2/8/2027	2/15/2027

Building Construction	Building Construction	End Date	11/15/2027	6/15/2027
Building Construction	Building Construction	Work Days per Phase	200.000	87.0000
Paving	Paving	Start Date	11/16/2027	6/16/2027
Paving	Paving	End Date	11/30/2027	7/28/2027
Paving	Paving	Work Days per Phase	10.00000	31.0000
Architectural Coating	Architectural Coating	Start Date	12/1/2027	7/29/2027
Architectural Coating	Architectural Coating	End Date	12/15/2027	9/9/2027
Architectural Coating	Architectural Coating	Work Days per Phase	10.00000	31.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Site Preparation	Graders	Engine Tier	Average	Tier 4 Final
Site Preparation	Rubber Tired Dozers	Engine Tier	Average	Tier 4 Final
Site Preparation	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 4 Final
Grading	Graders	Engine Tier	Average	Tier 4 Final
Grading	Rubber Tired Dozers	Engine Tier	Average	Tier 4 Final
Grading	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 4 Final
Building Construction	Cranes	Engine Tier	Average	Tier 4 Final
Building Construction	Forklifts	Engine Tier	Average	Tier 4 Final
Building Construction	Generator Sets	Engine Tier	Average	Tier 4 Final
Building Construction	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 4 Final
Building Construction	Welders	Engine Tier	Average	Tier 4 Final
Paving	Cement and Mortar Mixers	Engine Tier	Average	Tier 4 Final
Paving	Pavers	Engine Tier	Average	Tier 4 Final
Paving	Paving Equipment	Engine Tier	Average	Tier 4 Final
Paving	Rollers	Engine Tier	Average	Tier 4 Final
Architectural Coating	Air Compressors	Engine Tier	Average	Tier 4 Final

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Grading	Material Imported	Cubic Yards	—	2,905.00
Grading	Material Exported	Cubic Yards	—	0.00000
Grading	Total Acres Graded	acres	25.0000	15.0000