

## MEMORANDUM

**DATE:** September 13, 2024

**To:** Jared Jerome, Associate Planner

**FROM:** Ron Brugger, Senior Air Quality Specialist  
 Bianca Martinez, Air Quality Specialist

**SUBJECT:** Air Quality, Energy, and Greenhouse Gas Technical Memorandum for the Sun Mesa (Billings) Mini Storage Project in Yucca Valley, San Bernardino County, California

### INTRODUCTION

LSA has prepared this Air Quality, Energy, and Greenhouse Gas Technical Memorandum to evaluate the impacts associated with construction and operation of the proposed Sun Mesa (Billings) Mini Storage Project (project) in Yucca Valley, unincorporated San Bernardino County, California. This analysis follows the guidelines identified by the Mojave Desert Air Quality Management District (MDAQMD) in its California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines.<sup>1</sup> In keeping with these guidelines, this analysis describes existing air quality, air quality and greenhouse gas (GHG) emissions generated from project-related sources, regional air pollution, and global climate change. In addition, this analysis discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

### PROJECT LOCATION AND DESCRIPTION

The 4.34-acre project site is located on Assessor’s Parcel Number 0597-111-67-0000, which is east of State Route 247 and north of Buena Vista Drive in Yucca Valley, unincorporated San Bernardino County, California. The project site is currently undeveloped. Access to the project site is provided by Buena Vista Drive, Sun Mesa Drive, and Newton Lane. Figure 1 and Figure 2 (all figures provided in Attachment A) show the project location and conceptual site plan, respectively.

The proposed project would involve the development of a 20-building, 94,500 total square foot (sf) mini storage facility. The site would be bounded by a maximum 10-foot-high security fence and would consist of 17 storage buildings of approximately 4,800 sf each, evenly distributed around the

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<sup>1</sup> Mojave Desert Air Quality Management District (MDAQMD). 2020. California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines. Website: <https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000> (accessed September 2024).

site. Along the eastern property line, two linear storage buildings (one 5,000 sf in floor area and the other 7,500 sf in floor area) would run the length of the project site. Two entrances would be located on the west side of the site and would be gated. A 400 sf manager's unit would be located at the northern entry gate. Additionally, outdoor parking stalls would be located on the north and east sides of the proposed manager's unit building. These parking areas would accommodate approximately 10 vehicles. A 9,600 sf retention basin would be located on the southwest corner of the project site. The proposed project would include associated site improvements including new internal roadways and utility improvements. Access to the proposed project site would be between the hours of 6:00 a.m. and 10:00 p.m. 7 days per week.

The Town of Yucca Valley General Plan Land Use Map designates the project site as Commercial (C).<sup>2</sup> The proposed project is consistent with this land use designation. The Town of Yucca Valley Zoning Map identifies the project site as Neighborhood Commercial (C-N), and the proposed project is consistent with this zoning designation.<sup>3</sup> Once operational, the proposed project would generate approximately 137 average daily trips. Additionally, the proposed project would be all electric and would include low water landscape.

Construction is anticipated to begin in the fall of 2024 and be completed within 24 months. Construction activities would include site preparation, grading, building construction, paving, architectural coating, and trenching. The maximum depth of excavation for construction would be approximately 7 feet below the ground surface, with all soil balanced on the project site. Connections to utilities may require additional excavation up to 15 feet below the ground surface at limited locations on site.

## SENSITIVE RECEPTORS IN THE PROJECT AREA

For this analysis, sensitive receptors are considered areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is surrounded primarily by industrial and residential uses. The areas adjacent to the project site include industrial uses to the south and west, residential uses to the southeast, and vacant land to the north and east. The nearest sensitive receptors include a single-family home located southeast of the project site at approximately 200 feet from the project site boundary.

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<sup>2</sup> Town of Yucca Valley. 2014. Yucca Valley General Plan, Figure LU-1: General Plan Land Use. Website: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.yucca-valley.org/home/showpublisheddocument/2778/637009499961530000> (accessed September 2024).

<sup>3</sup> Town of Yucca Valley. 2014. Official Zoning District Map. Website: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.yucca-valley.org/home/showpublisheddocument/6044/638526759731270000> (accessed September 2024).

## ENVIRONMENTAL SETTING

### Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The project site is in Yucca Valley in unincorporated San Bernardino County and is within the jurisdiction of MDAQMD, which regulates air quality in the Mojave Desert Air Basin (Basin).

The Basin is an assemblage of mountain ranges interspersed with long, broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. The Basin encompasses desert portions of Kern, Los Angeles, Riverside, and San Bernardino counties. The Basin is surrounded by national forests to the south and west and desert to the north and east.

Both State and federal governments have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O<sub>3</sub> and NO<sub>2</sub>, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO<sub>2</sub>, and Pb are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table A, the Basin is designated as nonattainment by the federal standards for O<sub>3</sub> and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) and nonattainment by the State standards for O<sub>3</sub>, particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>), and PM<sub>10</sub>.

**Table A: Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin**

Pollutant	State	Federal
O <sub>3</sub>	Nonattainment	Nonattainment <sup>1</sup>
PM <sub>10</sub>	Nonattainment	Nonattainment <sup>2</sup>
PM <sub>2.5</sub>	Nonattainment <sup>1</sup>	Attainment/Unclassified
CO	Attainment	Attainment/Unclassified
NO <sub>2</sub>	Attainment	Attainment/Unclassified
SO <sub>2</sub>	Attainment	Attainment/Unclassified
Lead <sup>1</sup>	Attainment	Attainment/Unclassified
All Others	Attainment/Unclassified	N/A

Source: Mojave Desert Air Quality Management District Attainment Status (n.d.). Website: <https://www.mdaqmd.ca.gov/home/showpublisheddocument/1267/636337468837000000> (accessed September 2024)

<sup>1</sup> Only the southwest corner of the desert portion of San Bernardino County is Nonattainment.

<sup>2</sup> Only the San Bernardino County portion is Nonattainment.

CO = carbon monoxide

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

N/A = not applicable

PM<sub>10</sub> = particulate matter less than 10 microns in size

NO<sub>2</sub> = nitrogen dioxide

SO<sub>2</sub> = sulfur dioxide

O<sub>3</sub> = ozone

O<sub>3</sub> levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by MDAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Basin still exceeds the State standard for 1-hour and 8-hour O<sub>3</sub> levels. The USEPA lowered the 1997 0.80 part per million (ppm) federal 8-hour O<sub>3</sub> standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The Basin is classified as nonattainment for the 1-hour and 8-hour O<sub>3</sub> standards at the State level and for the 8-hour O<sub>3</sub> standard at the federal level.

From 2021 to 2023, the Joshua Tree National Monument station (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour O<sub>3</sub> standards<sup>4</sup>:

- The federal 8-hour O<sub>3</sub> standard had 37 exceedances in 2021, 37 in 2022, and 24 in 2023.
- The State 8-hour O<sub>3</sub> standard had 42 exceedances in 2021, 39 in 2022, and 29 in 2023.
- The federal 1-hour O<sub>3</sub> standard had no exceedances in the 3-year period.
- The State 1-hour O<sub>3</sub> standard had 3 exceedances in 2021, 2 in 2022, and 1 exceedance in 2023.

Federal and State standards have also been established for PM<sub>2.5</sub> over 24-hour and yearly averaging periods. PM<sub>2.5</sub>, because of the small size of individual particles, can be especially harmful to human health. PM<sub>2.5</sub> is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On December 17, 2006, the USEPA strengthened the 24-

<sup>4</sup> California Air Resources Board (CARB). 2023. *iADAM: Air Quality Data Statistics*. Website: <https://www.arb.ca.gov/adam/index.html> (accessed September 2024).

hour PM<sub>2.5</sub> NAAQS from 65 micrograms per cubic meter (µg/m<sup>3</sup>) to 35 µg/m<sup>3</sup>, and the Basin was subsequently designated “moderate” nonattainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS on December 14, 2009. On February 7, 2024, the USEPA strengthened the NAAQS for PM<sub>2.5</sub> by revising the primary (health-based) annual standard from 12.0 µg/m<sup>3</sup> to 9.0 µg/m<sup>3</sup>; however, a new attainment designation has not been issued. The Basin is also considered a nonattainment area for the PM<sub>2.5</sub> standard at the State level. From 2021 to 2023, the San Bernardino-4<sup>th</sup> Street station (the closest station to the project site monitoring PM<sub>2.5</sub>) recorded the following exceedances of the federal 24-hour PM<sub>2.5</sub>:

- The federal 24-hour PM<sub>2.5</sub> standard had 3 exceedances in 2021, 6 exceedances in 2022, and 3 exceedances in 2023.

The Basin is classified as a PM<sub>10</sub> nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM<sub>10</sub> standard on July 26, 2013. Because the Basin was redesignated from nonattainment to attainment, a PM<sub>10</sub> maintenance plan was adopted in 2013 and is required to be updated every 10 years. From 2021 to 2023, the Redlands-Dearborn station in Redlands (the closest monitoring station to the project site monitoring PM<sub>10</sub>) recorded no exceedances of the federal PM<sub>10</sub> standard.

- The State 24-hour PM<sub>10</sub> standard had no exceedance in 2021 and 2022 and an unknown number of exceedances in 2023.

All areas of the Basin have continued to remain below the federal CO standards (35 ppm 1-hour and 9 ppm 8-hour) since 2003. The USEPA redesignated the Basin to attainment of the federal CO standards, effective June 11, 2017. The Basin is also well below the State CO standards (20 ppm 1-hour CO and 9 ppm 8-hour CO).

## Energy Background

### Electricity

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

According to the most recent data available, in 2022, California’s electricity was generated primarily by natural gas (47.5 percent), renewable sources (52.2 percent), large hydroelectric (7.2 percent), nuclear (8.7 percent), coal (<1.0 percent), and other unspecified sources. Total electric generation in California in 2022 was 287,220 gigawatt-hours (GWh), up 3.4 percent from the 2021 total generation of 277,764 GWh.<sup>5</sup>

<sup>5</sup> California Energy Commission (CEC). 2022. *2022 Total System Electric Generation*. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation> (accessed September 2024).

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.<sup>6</sup> According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,604 GWh for the residential sector and 54,266 GWh for the non-residential sector). Total electricity consumption in San Bernardino County in 2022 was 16,629.6 GWh (16,629,614,195 kilowatt-hours [kWh]).<sup>7</sup>

### *Natural Gas*

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

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.<sup>8</sup>

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.<sup>9</sup> According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 5,026 million therms (2,230 million therms for the residential sector). Total natural gas consumption in San Bernardino County in 2022 was 562 million therms (562,123,065 therms).<sup>10</sup>

### *Fuel*

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

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<sup>6</sup> Southern California Edison (SCE). 2020. About Us. Website: <https://www.sce.com/about-us/who-we-are> (accessed September 2024).

<sup>7</sup> CEC. 2020. Electricity Consumption by County and Entity. Websites: <http://www.ecdms.energy.ca.gov/elecbycounty.aspx> and <http://www.ecdms.energy.ca.gov/elecbyutil.aspx> (accessed September 2024).

<sup>8</sup> CEC. 2021. Supply and Demand of Natural Gas in California. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california> (accessed September 2024).

<sup>9</sup> Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: <https://www.socalgas.com/about-us> (accessed September 2024).

<sup>10</sup> CEC. 2020. Gas Consumption by County and Entity. Website: <http://www.ecdms.energy.ca.gov/gasbyutil.aspx> (accessed September 2024).

The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2021.<sup>11</sup> Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This act, which originally mandated a national fuel economy standard of 35 mpg by year 2020<sup>12</sup>, applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most-used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and SUVs. According to the most recent data available, in 2022, total gasoline consumption in California was 316,425 thousand barrels or 1,597.6 trillion British Thermal Units (BTU).<sup>13</sup> Of the total gasoline consumption, 299,304 thousand barrels or 1,511.2 trillion BTU were consumed for transportation.<sup>14</sup> Based on fuel consumption data obtained from the California Air Resources Board’s California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 893.9 million gallons of gasoline and approximately 327.1 million gallons of diesel will be consumed from vehicle trips in San Bernardino County in 2024.

### Greenhouse Gas Background

GHGs are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although man-made GHGs include naturally occurring GHGs such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), some gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF<sub>3</sub>), and sulfur hexafluoride (SF<sub>6</sub>) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

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<sup>11</sup> United States Department of Transportation (USDOT). “Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles.” Website: <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles> (accessed September 2024).

<sup>12</sup> United States Department of Energy. 2007. “Energy Independence & Security Act of 2007.” Website: <https://www.afdc.energy.gov/laws/eisa> (accessed September 2024).

<sup>13</sup> United States Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: [www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_mg.html&sid=CA](http://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA) (accessed September 2024).

<sup>14</sup> Ibid.



These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO<sub>2</sub>, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO<sub>2</sub> over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO<sub>2</sub> equivalents (CO<sub>2</sub>e).

## REGULATORY SETTING

This section provides regulatory background information for air quality and GHGs.

### Air Quality

Applicable federal, State, regional, and local air quality regulations are discussed below.

#### *Federal Regulations*

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

#### *State Regulations*

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O<sub>3</sub>, SO<sub>2</sub>, and NO<sub>2</sub> by the earliest practical date. The CCAA provides districts with the authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and areawide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in districtwide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The California Air Resources Board (CARB) is the State’s “clean air agency.” CARB’s goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

#### *Regional Regulations*

**Mojave Desert Air Quality Management District.** The MDAQMD is the regional agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards in the San Bernardino County portion of the Mojave Desert Air Basin. Programs include air quality rules and regulations that



regulate stationary sources, area sources, point sources, and certain mobile source emissions. The MDAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

All areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The most recent air quality plans are the PM<sub>10</sub> Attainment Demonstration and Attainment Plan and the O<sub>3</sub> Attainment Plan.

In addition, emissions that would result from mobile, area, and stationary sources during construction and operation of the project are subject to the rules and regulations of the MDAQMD. The MDAQMD rules applicable to the project may include, but are not limited to, the following:

- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:** This rule prohibits the discharge 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.
- **Rule 403.2 – Fugitive Dust Control for the Mojave Desert Planning Area:** This rule ensures that the NAAQS for PM<sub>10</sub> will not be exceeded due to anthropogenic sources of fugitive dust within the Mojave Desert Planning Area and implements the control measures contained in the Mojave Desert Planning Area Federal PM<sub>10</sub> Attainment Plan.
- **Rule 442 – Usage of Solvents:** The purpose of this rule is to reduce volatile organic compound (VOC) emissions from VOC-containing materials or equipment that is not subject to limits of any rule found in District Regulation XI – Source Specific Standards.
- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

**Southern California Association of Governments.** The Southern California Association of Governments (SCAG) is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the Air Quality Management Plan (AQMP) and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

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

SCAG adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) on April 4, 2024<sup>15</sup>. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding, and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

### *Local Regulations*

**Yucca Valley General Plan.** The Town of Yucca Valley addresses air quality in the Open Space and Conservation Element of its Policy Plan.<sup>16</sup> The Open Space and Conservation Element includes goals and policies that work to improve and maintain air quality for the benefit of the health and vitality of the residents and the local economy. The following policies from the Open Space and Conservation Element are applicable to the proposed project:

- **Policy OSC 10-1:** Participate in the monitoring of all air pollutants of regional concern on a continuous basis.
- **Policy OSC 10-2:** Coordinate air quality planning efforts with other local, regional, and federal agencies.
- **Policy OSC 10-4:** Coordinate land use planning efforts to assure that sensitive receptors are reasonably separated from polluting point sources.

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<sup>15</sup> Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: <https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-social-2024-final-complete-040424.pdf?1712261565> (accessed September 2024).

<sup>16</sup> Town of Yucca Valley. n.d. *2022 General Plan, Open Space and Conservation Element*. Website: <https://www.yucca-valley.org/our-town/departments/community-development/planning/general-plan-update> (accessed September 2024).

- **Policy OSC 10-5:** Provide consistent and effective code enforcement for construction and grading activities to assure ground disturbances do not contribute to blowing sand and fugitive dust emissions.

## Energy

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

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

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

### *Federal Regulations*

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

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

### State Regulations

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

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

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023 Integrated Energy Policy Report*.<sup>17</sup> The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

**Renewable Portfolio Standard.** SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In

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<sup>17</sup> CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.<sup>18</sup>

**California Energy Code.** Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards in Part 6 of Title 24 of the California Code of Regulations (CCR), known as the Energy Code. The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The Energy Code is updated every 3 years, with the most recent update consisting of the 2022 Energy Code that became effective January 1, 2023. Mid-cycle supplements to the 2022 Code will become effective on July 1, 2024. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in the Energy Code.

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

**California Energy Efficiency Strategic Plan.** On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Strategic Plan was updated in 2011. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.

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<sup>18</sup> California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: [cpuc.ca.gov/rps](http://cpuc.ca.gov/rps) (accessed September 2024).

- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

### *Regional Regulations*

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

### *Local Regulations*

**Yucca Valley General Plan.** The Town of Yucca Valley's General Plan<sup>19</sup> Open Space and Conservation Element includes objectives and policies that work to reduce the consumption of nonrenewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources. The following policies related to energy are applicable to the proposed project:**Policy OCS 9-1:** Develop, promote, and implement long-term energy efficiency and demand management policies and standards for Town facilities, vehicles, and new development.

- **Policy OCS 9-3:** Encourage the use of clean and/or renewable alternative energy sources for transportation, heating, cooling, and construction.
- **Policy OCS 9-5:** Ensure that any planned construction, demolition, addition, alteration, repair, remodel, landscaping, or grading projects divert all reusable, salvageable, and recyclable debris from landfill disposal.
- **Policy OCS 9-9:** Promote building design and construction that integrates alternative energy systems, including but not limited to solar, thermal, photovoltaics, and other clean energy systems.

### **Greenhouse Gas Emissions**

This section describes regulations related to global climate change at the federal, State, and local levels.

#### *Federal Regulations*

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO<sub>2</sub> emissions under the CAA.

Although there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, NF<sub>3</sub>, PFCs, and SF<sub>6</sub>) constitute a threat to public health and welfare, and that the combined

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<sup>19</sup> Town of Yucca Valley. n.d. *2022 General Plan, Open Space and Conservation Element*. Website: <https://www.yucca-valley.org/our-town/departments/community-development/planning/general-plan-update> (accessed September 2024).

emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

### *State Regulations*

CARB is the lead agency for implementing climate change regulations in the State. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to address climate change. In addition to the Energy Code and the Green Building Code described above, Key efforts by the State are described below.

**Assembly Bill 32 (2006), California Global Warming Solutions Act.** California’s major initiative for reducing GHG emissions is AB 32, passed by the State Legislature on August 31, 2006. This effort set a target to reduce GHG emissions to 1990 levels by 2020. CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO<sub>2</sub>e. The emission target of 427 MMT requires the reduction of 169 MMT from the State’s projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. CARB approved the Scoping Plan on December 11, 2008, which contains the main strategies California will implement to achieve the reduction goals and includes CARB-recommended GHG reductions for each emissions sector of the State’s GHG inventory.

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EO) S-3-05 and B-16-2012. The First Update highlights California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State’s “longer-term” GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,<sup>20</sup> to reflect the 2030 target that was set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan<sup>21</sup> was approved in December 2022 and assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State’s long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen and utilizing biogas resulting from

<sup>20</sup> CARB. 2017. *California’s 2017 Climate Change Scoping Plan*. November.

<sup>21</sup> CARB. 2022. *2022 Scoping Plan Update*. May 10. Website: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf> (accessed September 2024).



wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California be zero-emission by 2035 and that all other fleets transition to zero-emission as fully as possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

**Senate Bill 375 (2008).** Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as MPOs. CARB may update the targets every 4 years and must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction targets, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

**Executive Order B-30-15 (2015).** Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

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

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

**Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act.** SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

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

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for private utilities and by the California Energy Commission for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State

energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

**Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197.** In summer 2016, the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emission reduction target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 ppm CO<sub>2</sub>e and reduce the likelihood of catastrophic impacts from climate change.

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

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

**Executive Order B-55-18.** EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that, not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO<sub>2</sub>e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

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

### *Regional Regulations*

**Mojave Desert Air Quality Management District.** The MDAQMD has adopted GHG emissions thresholds in its CEQA Guidelines but has not adopted a comprehensive strategy for reducing GHG emissions. The MDAQMD threshold is 100,000 MT/year CO<sub>2</sub>e and 548,000 pounds per day.

**Southern California Association of Governments.** SCAG is a regional council consisting of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. In total, the SCAG region encompasses 191 cities and more than 38,000 square miles within Southern California. SCAG is the MPO serving the region under federal law and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2008 Regional Comprehensive Plan.

On April 4, 2024, SCAG adopted *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (2024–2050 RTP/SCS)*.<sup>22</sup> In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per-capita emission levels by 2020 and 19 percent below 2005 per capita emission levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emission reduction targets. Land use strategies to achieve the region’s targets include planning for new growth around high-quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and to plan for more active lifestyles.<sup>23</sup> However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

### *Local Regulations*

**San Bernardino County Greenhouse Gas Reduction Plan.** As a response to the 2006 AB 32 law, a project partnership led by the San Bernardino Associated Governments, the predecessor agency to the San Bernardino County Transportation Authority, has compiled an inventory of GHG emissions and developed reduction measures that was adopted by the 21 Partnership Cities of San Bernardino County. The regional GHG reduction plan<sup>24</sup> was adopted in 2021 and will serve as the basis for cities in San Bernardino County to develop more detailed community level climate action plans.

The Town of Yucca Valley was a participant in the San Bernardino County Regional Greenhouse Gas Reduction Plan, which identifies the County’s vision and goals on reducing GHG emissions in the different cities, local government facilities, and communities. In response to these initiatives, an informal project partnership, led by the San Bernardino Council of Governments, compiled a GHG emissions inventory and an evaluation of reduction measures that could be adopted by the 25

<sup>22</sup> Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Website: <https://scag.ca.gov/connect-socal> (accessed September 2024).

<sup>23</sup> Ibid.

<sup>24</sup> San Bernardino Council of Governments (SBCOG). 2021. San Bernardino County Regional Greenhouse Gas Reduction Plan. Website: [https://www.gosbcta.com/wp-content/uploads/2019/09/San\\_Bernardino\\_Regional\\_GHG\\_Reduction\\_Plan\\_Main\\_Text\\_Mar\\_2021.pdf](https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf) (accessed September 2024).

partnership cities of San Bernardino County. This partnership has committed to undertake the following actions that will reduce GHG emissions associated with its regional (or countywide) activities:

- Prepare a baseline (2016) GHG emissions inventory for each of the 25 Partnership Jurisdictions in the County;
- Prepare a future year (2020, 2030, and 2045) GHG emissions forecast for each of the jurisdictions;
- Develop general GHG reduction measures and jurisdiction-specific measures appropriate for each jurisdiction; and
- Develop consistent baseline information for jurisdictions to use for their development of community climate action plans meeting jurisdiction-identified reduction goals.

**Yucca Valley General Plan.** The Town of Yucca Valley addresses climate change in the Open Space and Conservation Element of its General Plan.<sup>25</sup> The Open Space and Conservation Element includes goals and policies that work to improve and maintain air quality for the benefit of the health and vitality of residents and the local economy. The following policies from the Open Space and Conservation Element are applicable to the proposed project:

- **Policy OCS 11-1:** Continue to participate in and support the provisions of the San Bernardino Regional Greenhouse Gas Reduction Plan.
- **Policy OCS 11-2:** Encourage new development to be designed to take advantage of the desert climate through solar orientation, shading patterns, and other green building practices and technologies.
- **Policy OCS 11-3:** Maintain General Plan Land Use, Housing, and Transportation goals and policies to be aligned with, support, and enhance SCAG's Regional Transportation Plan and Sustainable Communities Strategy to achieve reductions in GHG emissions.

## METHODOLOGY

### Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil

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<sup>25</sup> Town of Yucca Valley. n.d. *2022 General Plan, Open Space and Conservation Element*. Website: <https://www.yucca-valley.org/our-town/departments/community-development/planning/general-plan-update> (accessed September 2024).

disturbance and fuel combustion from mobile heavy-duty, diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

LSA used the California Emissions Estimator Model version 2022.1 (CalEEMod) computer program to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. This analysis assumes that construction would begin in the fall of 2024 and be completed in 24 months, which was included in CalEEMod. The proposed project would require excavation to provide connections to utilities. Therefore, this analysis included a trenching phase and associated equipment for trenching operations, such as trenchers and tractors/loaders/backhoes, which was included in CalEEMod. The proposed project would not require any soil import or export, which were also included in CalEEMod. This analysis also assumes that the proposed project would comply with MDAQMD Rule 403 measures. All other construction details are not yet known; therefore, default assumptions (e.g., construction equipment, construction worker and truck trips, and fleet activities) from CalEEMod were used.

### Operational Emissions

This air quality analysis includes estimating emissions associated with long-term operation of the project. Indirect emissions of criteria pollutants with regional impacts would be emitted by project-generated vehicle trips. In addition, localized air quality impacts (i.e., higher CO concentrations or “hot-spots”) near intersections or roadway segments in the project vicinity would also potentially occur due to project-generated vehicle trips.

Consistent with MDAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As previously discussed in the Project Location and Description section, the proposed project would construct a 94,500 sf mini storage facility and associated improvements. Therefore, the proposed project analysis was conducted using the land use codes *Unrefrigerated Warehouse No-Rail*. Trip generation rates used in CalEEMod for the project were based on the project’s trip generation analysis, which identifies that the project would generate approximately 137 new average daily trips.<sup>26</sup> In addition, consistent with the project design plans, this CalEEMod analysis incorporates selections to reflect no natural gas usage during construction and operation of the proposed project. As such, the default natural gas data were converted to kWh and added to the default electricity estimates to account for all energy use for the proposed project, which was included in CalEEMod. When project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions.

### Energy Use

The analysis focuses on the sources of energy that are relevant to the proposed project: electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amounts of electricity, construction fuel, and fuel use from operations are quantified and compared to that consumed in San Bernardino County. The

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<sup>26</sup> LSA Associates, Inc. 2024. *Sun Mesa Mini Storage Project Trip Generation and Vehicle Miles Traveled Memorandum, Table A*. July 18.

electricity uses of the proposed project are analyzed on an annual basis. Electricity uses were estimated for the project using default energy intensities by land use type in CalEEMod.

### Greenhouse Gas Emissions

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related vehicular trips. Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that, for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

## THRESHOLDS OF SIGNIFICANCE

The thresholds of significance used in this analysis are described in this section.

### Air Quality

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under applicable NAAQS or CAAQS;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

Certain air districts (e.g., MDAQMD) have created guidelines and requirements to conduct air quality analysis. The MDAQMD's current guidelines, the *CEQA* and Federal Air Conformity Guidelines<sup>27</sup>, were followed in this assessment of air quality impacts for the proposed project.

### Regional Emissions Thresholds

MDAQMD has established daily emission thresholds for construction and operation of proposed projects. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the MDAQMD's *CEQA and Federal Conformity Guidelines*. The criteria include emissions thresholds, compliance with State and national air quality standards, and consistency with the current air quality plans. The emission thresholds were established based on

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<sup>27</sup> Mojave Desert Air Quality Management District (MDAQMD). 2020. California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines. Website: <https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000> (accessed September 2024).

the attainment status of the air basins within the MDAQMD with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project’s contribution to health risks. Table B lists the CEQA significance thresholds for construction and operational emissions established for the MDAQMD.

**Table B: Regional Thresholds for Construction and Operational Emissions**

Emissions Source	Pollutant Emissions Threshold					
	VOCs	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Tons Per Year						
Construction	25	25	100	25	15	12
Operations	25	25	100	25	15	12
Pounds Per Day						
Construction	137	137	548	82	65	137
Operations	137	137	548	82	65	137

Source: MDAQMD Air Quality Significance Thresholds (MDAQMD 2020).

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

MDAQMD = Mojave Desert Air Quality Management District

SO<sub>x</sub> = sulfur oxides

VOCs = volatile organic compounds

Projects in the MDAQMD with construction- or operations-related emissions that exceed any of their respective emission thresholds would be considered significant under MDAQMD guidelines. These thresholds, which the MDAQMD developed and which apply throughout the MDAQMD, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

*Local Microscale Concentration Standards*

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

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

**Energy**

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

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or



- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency

### Greenhouse Gas Thresholds

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

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

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

The Town of Yucca Valley adopted San Bernardino County's *Greenhouse Gas Emissions Reduction Plan Update*<sup>28</sup> in 2021 and GHG Development Review Process (DRP)<sup>29</sup> in 2015. The DRP procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the DRP and comply with State requirements. For projects exceeding the review standard of 3,000 MT CO<sub>2</sub>e per year, the use of screening tables or a project-specific technical analysis to quantify and mitigate project emissions is required. If the GHG emissions from the project are less than 3,000 MT CO<sub>2</sub>e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant.

For the purpose of this analysis, the proposed project will be compared to the San Bernardino County Review Threshold of 3,000 MT CO<sub>2</sub>e/yr. The project is also evaluated for compliance with the 2022 Scoping Plan, and the 2024–2050 RTP/SCS.

## IMPACT ANALYSIS

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

<sup>28</sup> San Bernardino Council of Governments (SBCOG). 2021. San Bernardino County Regional Greenhouse Gas Reduction Plan. Website: [https://www.gosbcta.com/wp-content/uploads/2019/09/San\\_Bernardino\\_Regional\\_GHG\\_Reduction\\_Plan\\_Main\\_Text\\_Mar\\_2021.pdf](https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf) (accessed September 2024).

<sup>29</sup> Atkins. 2015. *Greenhouse Gas Development Review Process, County of San Bernardino*. March. Website: <https://www.sbcounty.gov/Uploads/lus/GreenhouseGas/FinalGHGUpdate.pdf> (accessed September 2024)

## Air Quality Impacts

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from project-related vehicular trips and energy consumption.

### *Consistency with Applicable Air Quality Plans*

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans. The Town of Yucca Valley General Plan Land Use and Zoning Maps designate the project site as Commercial (C)<sup>30</sup> and Neighborhood Commercial (C-N). The proposed project site is consistent with this land use and zoning designation. Therefore, the proposed project would not require a land use or zoning designation change.

As identified above, all areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The most recent air quality plans are the PM<sub>10</sub> Attainment Demonstration and Attainment Plan and the O<sub>3</sub> Attainment Plan. The attainment plans are based on regional growth projections developed by SCAG. Under CEQA, a project has the potential to be regionally significant if it would house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 sf of floor area. The proposed project would include a 94,500 sf mini storage facility; therefore, the proposed project would not be considered regionally significant.

Additionally, as discussed below, the regional emissions generated by construction and operation phases of the proposed project would be less than the MDAQMD emissions thresholds, and MDAQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the air basin. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the applicable air quality plans.

### *Criteria Pollutant Analysis*

The Basin is designated as nonattainment for O<sub>3</sub> and PM<sub>10</sub> for federal standards and nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> for State standards. The MDAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing

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<sup>30</sup> Town of Yucca Valley. 2014. Yucca Valley General Plan, Figure LU-1: General Plan Land Use. Website: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.yucca-valley.org/home/showpublisheddocument/2778/637009499961530000> (accessed September 2024).

cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

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

**Construction Emissions.** During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO<sub>x</sub>), VOCs, directly emitted PM<sub>2.5</sub> or PM<sub>10</sub>, and toxic air contaminants such as diesel exhaust particulate matter.

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

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. MDAQMD has established Rule 403.2: Fugitive Dust Control, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related PM<sub>10</sub> emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, VOCs, and some soot particulate (PM<sub>2.5</sub> and PM<sub>10</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table C (CalEEMod output sheets are provided in Attachment B).

The results shown in Table C indicate the proposed project would not exceed the significance criteria for daily VOCs, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> emissions. Therefore, construction of the

proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS.

**Table C: Short-Term Regional Construction Emissions**

Construction Year	Maximum Regional Pollutant Emissions					
	VOCs	NO <sub>x</sub>	CO	SO <sub>x</sub>	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
<b>Pounds Per Day</b>						
Site Preparation	3.7	36.1	34.0	<0.1	6.9	4.2
Grading	2.0	18.3	19.7	<0.1	2.9	1.7
Trenching	0.4	2.6	3.8	<0.1	0.2	0.1
Building Construction	1.3	11.1	16.6	<0.1	1.1	0.6
Paving	0.8	6.6	10.5	<0.1	0.5	0.3
Architectural Coating	9.7	0.9	2.4	<0.1	0.2	0.1
<b>Maximum (lbs/day)</b>	<b>11.0</b>	<b>36.1</b>	<b>34.0</b>	<b>&lt;0.1</b>	<b>6.9</b>	<b>4.2</b>
MDAQMD Thresholds	137.0	137.0	548.0	137.0	82.0	65.0
<b>Exceeds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Tons Per Year</b>						
2024	0.1	0.5	0.5	<0.1	0.1	<0.1
2025	0.1	0.9	1.3	<0.1	0.1	<0.1
2026	0.3	0.7	1.1	<0.1	0.1	<0.1
<b>Maximum (tons/year)</b>	<b>0.3</b>	<b>0.9</b>	<b>1.3</b>	<b>&lt;0.1</b>	<b>0.1</b>	<b>&lt;0.1</b>
MDAQMD Thresholds	25	25	100	25	15	12
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Compiled by LSA (September 2024).

Note: Maximum emissions of VOCs occurred during the overlapping building construction and architectural coating phases

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

MDAQMD = Mojave Desert Air Quality Management District

SO<sub>x</sub> = sulfur oxides

VOCs = volatile organic compounds

**Operational Air Quality Impacts.** Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources. Area-source emissions include architectural coatings, consumer products, and landscaping. Energy-source emissions result from activities in buildings that use natural gas. Mobile-source emissions are from vehicle trips associated with operation of the project.

Mobile source emissions include VOC and NO<sub>x</sub> emissions that contribute to the formation of O<sub>3</sub>. Additionally, PM<sub>10</sub> emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy-source emissions result from activities in buildings that use natural gas. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. However, the proposed project would not use natural gas. Therefore, energy-source emissions would be minimal.

Area-source emissions consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table D provides the estimated existing emission estimates and the proposed project's estimated operational emissions.

The results shown in Table D indicate the proposed project would not exceed the significance criteria for daily VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS.

**Table D: Project Operational Emissions**

Emission Type	Pollutant Emissions					
	VOCs	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Pounds Per Day</b>						
Mobile Sources	0.8	0.9	7.9	<0.1	1.5	0.4
Area Sources	2.8	<0.1	4.1	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Project Emissions</b>	<b>3.6</b>	<b>0.9</b>	<b>12.0</b>	<b>&lt;0.1</b>	<b>1.5</b>	<b>0.4</b>
MDAQMD Thresholds	137.0	137.0	548.0	137.0	82.0	65.0
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Tons Per Year</b>						
Mobile Sources	0.1	0.2	1.2	<0.1	0.3	0.1
Area Sources	0.5	<0.1	0.4	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Project Emissions</b>	<b>0.6</b>	<b>0.2</b>	<b>1.6</b>	<b>&lt;0.1</b>	<b>0.3</b>	<b>0.1</b>
MDAQMD Thresholds	25	25	100	25	15	12
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Compiled by LSA (September 2024).

Note: Some values may not appear to add correctly due to rounding.

CO = carbon monoxide

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

MDAQMD = Mojave Desert Air Quality Management District

SO<sub>x</sub> = sulfur oxides

VOCs = volatile organic compounds

**Long-Term Microscale (CO Hot-Spot) Analysis.** Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited. Under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, thereby affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the San Bernardino 4<sup>th</sup> Street station (the closest station to the project site monitoring CO) showed a highest recorded 1-hour concentration of 2.0 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the State standard is 9 ppm) from 2021 to 2023. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed project is expected to generate 137 average daily trips, with 9 trips occurring in the a.m. peak hour and 15 trips occurring in the p.m. peak hour.<sup>31</sup> Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

#### *Health Risk on Nearby Sensitive Receptors*

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. As described above, the project site is surrounded primarily by industrial uses, vacant land, and residential uses. The nearest sensitive receptors include a single-family home located southeast of the project site at approximately 200 feet from the project site boundary.

As detailed in Table C and Table D, the emission levels indicate that the project would not exceed MDAQMD thresholds during project construction or operation. Due to the small size of the proposed project in relation to the overall Basin, the level of emissions is not sufficiently high enough to use a regional modeling program to correlate health effects on a Basin-wide level. On a regional scale, the quantity of emissions from the project is incrementally minor. Therefore, the proposed project would not expose sensitive receptors to substantial levels of pollutant concentrations.

#### *Odors*

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease after individual construction is completed. The proposed project would not include any activities or operations that would generate objectionable odors, and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people.

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<sup>31</sup> LSA Associates, Inc. 2024. *Sun Mesa Mini Storage Project Trip Generation and Vehicle Miles Traveled Memorandum, Table A*. July 18.

## Energy Use

This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

### Construction

The anticipated construction schedule assumes that the proposed project would be built in approximately 24 months. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, architectural coating, and trenching activities.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State’s available energy sources.

### Operation

Energy use associated with the proposed project would consist of natural gas, electricity, and vehicle fuel use associated with project operations.

Table E shows the estimated potential increased electricity, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data and using the USEPA’s fuel economy estimates for 2020 and the California diesel fuel economy estimates for 2021.

**Table E: Estimated Annual Energy Use of Proposed Project**

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	962,994	0	27,218	19,120

Source: Compiled by LSA (September 2024).  
 kBTU = thousand British thermal units  
 kWh = kilowatt hours

As shown in Table E, the estimated increase in electricity demand associated with the operation of the proposed project would be 962,994 kWh per year. Total electricity consumption in San



Bernardino County in 2022 was 16,629,614,195 kWh;<sup>32</sup> therefore, operation of the proposed project would negligibly increase the annual electricity consumption in San Bernardino County by approximately less than 0.1 percent.

In addition, the project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. As shown above in Table E, the proposed project would result in the consumption of 27,218 gallons of gasoline and 19,120 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 328.0 million gallons of gasoline and approximately 856.3 million gallons of diesel will be consumed from vehicle trips in San Bernardino County in 2026. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in San Bernardino County by approximately less than 0.1 percent for gasoline fuel usage and approximately less than 0.1 percent for diesel fuel usage. The proposed project would result in fuel usage that is a small fraction of current annual fuel use in San Bernardino County, and fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Furthermore, the proposed project would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for commercial uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. As such, the proposed project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

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

The CEC recently adopted the *2023 Integrated Energy Policy Report*.<sup>33</sup> The *2023 Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The *2023 Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

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<sup>32</sup> CEC. 2022. Electricity Consumption by County. Website: [www.ecdms.energy.ca.gov/elecbycounty.aspx](http://www.ecdms.energy.ca.gov/elecbycounty.aspx) (accessed September 2024).

<sup>33</sup> CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the region's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's *2023 Integrated Energy Policy Report*. Therefore, the proposed project would not lead to new or substantially more severe energy impacts.

### Greenhouse Gas Emission Impacts

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

#### *Generation of Greenhouse Gas Emissions*

The following section details the proposed project's construction- and operational-related GHG emissions and contribution to global climate change.

**Construction Greenhouse Gas Emissions.** Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, MDAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. As described above, for the purpose of this analysis, the proposed project will be compared to the San Bernardino County Review threshold of 3,000 MT/year CO<sub>2</sub>e. Construction GHG emissions are amortized over the life of the project (considered to be 30 years), added to the operational emissions, and compared to the applicable GHG significance threshold.

Using CalEEMod, it is estimated that the project would generate approximately 495.3 MT CO<sub>2</sub>e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 16.5 MT CO<sub>2</sub>e.

**Operational Greenhouse Gas Emissions.** Long-term operation of the proposed project would generate GHG emissions from area, mobile, waste, and water sources, as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips associated with trips to the proposed project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site and other sources. Waste-source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated

waste. In addition, water-source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

GHG emissions were estimated using CalEEMod. Table F shows the estimated operational GHG emissions for the proposed project. Motor vehicle emissions are the largest source of GHG emissions for the project, at approximately 47 percent of the project total. Energy sources are the next largest category, at approximately 38 percent. Water and waste sources are about 10 and 5 percent of the total emissions, respectively. Area sources make up less than 1 percent of the total emissions.

**Table F: Greenhouse Gas Emissions**

Emission Type	Operational Emissions (MT/yr)				Percentage of Total
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
Mobile Source	283.9	<0.1	<0.1	288.6	47
Area Source	1.4	<0.1	<0.1	1.4	<1
Energy Source	232.4	<0.1	<0.1	233.3	38
Water Source	37.4	0.7	<0.1	60.3	10
Waste Source	7.9	0.8	0.0	27.7	5
<b>Total Operational Emissions</b>				<b>611.3</b>	
Amortized Construction Emissions				16.5	—
<b>Total Annual Emissions</b>				<b>627.8</b>	—
<b>San Bernardino County Review Threshold</b>				<b>3,000</b>	
<b>Exceedance?</b>				<b>No</b>	

Source: Compiled by LSA (September 2024).

Note: Figures may not appear to add correctly due to rounding.

CH<sub>4</sub> = methane

MT/yr = metric tons per year

CO<sub>2</sub> = carbon dioxide

N<sub>2</sub>O = nitrous oxide

CO<sub>2</sub>e = carbon dioxide equivalent

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT CO<sub>2</sub>e/yr. Based on the analysis results, the proposed project would result in approximately 627.8 MT CO<sub>2</sub>e/yr, which would not exceed the San Bernardino County Review Threshold of 3,000 MT CO<sub>2</sub>e/yr. Therefore, project-level and cumulative GHG emissions would be less than significant. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

*Consistency with Greenhouse Gas Reduction Plans*

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan and SCAG’s 2024–2050 RTP/SCS.

**2022 Scoping Plan.** EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reduction target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set

by EO B-30-15 and codified by SB 32.<sup>34</sup> SB 32 builds on AB 32 and keeps California on the path toward achieving the State’s 2050 objective of reducing emissions to 80 percent below 1990 levels. AB 197, the companion bill to SB 32, provides additional direction to CARB that is related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 that is intended to provide easier public access to air emission data collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan<sup>35</sup> assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State’s long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

- **Energy-efficient measures** are intended to maximize energy-efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California’s new and existing inventory of buildings. As mentioned above, the proposed project would not be powered by natural gas, and no natural gas demand is anticipated during construction or operation of the proposed project. The elimination of natural gas in new development would help projects implement their “fair share” of achieving long-term 2045 carbon neutrality consistent with State goals. As such, if a project does not use natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change.<sup>36</sup> The proposed project does not include natural gas. In addition, the proposed project would comply with the latest Title 24 standards regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.
- **Water conservation and efficiency measures** are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would be required to comply with the latest Title 24 standards, which include a variety of different measures, including reduction of wastewater and water use. The proposed project would also include low water landscape in their design. In addition, the proposed project would be required

<sup>34</sup> CARB. 2017. *California’s 2017 Climate Change Scoping Plan*. November

<sup>35</sup> CARB. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December. Website: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf> (accessed September 2024).

<sup>36</sup> Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*. April. Website: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/final-ceqa-thresholds-report-for-climate-impacts-02092022-alt-pdf.pdf?rev=a3f6b70f316b4637864fb0b2cff78ebd&sc\\_lang=vi-vn](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/final-ceqa-thresholds-report-for-climate-impacts-02092022-alt-pdf.pdf?rev=a3f6b70f316b4637864fb0b2cff78ebd&sc_lang=vi-vn) (accessed September 2024).

to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

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

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emission reduction goals identified in the 2022 Scoping Plan.

**SCAG’s Regional Transportation Plan/Sustainable Communities Strategy.** SCAG’s 2024–2050 RTP/SCS identifies land use strategies that focus on new housing and job growth in areas served by high-quality transit, and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2024–2050 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe for all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities. The 2024–2050 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as providing a forecast development pattern that is generally consistent with regional-level General Plan data. The forecast development pattern, when integrated with the financially constrained transportation investments identified in the 2024–2050 RTP/SCS, would reach the regional target of reducing GHG emissions from automobiles and light-duty trucks by 8 percent by 2020 and 19 percent by 2035 (compared to 2005 levels per capita emission levels). The 2024–2050 RTP/SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the 2024–2050 RTP/SCS, but it provides incentives for consistency for governments and developers.

Implementing SCAG’s RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets. As demonstrated in the Consistency with Applicable Air Quality Plans section, above, the proposed project does not meet the criteria identified in *State CEQA Guidelines* Section 15205.b.2 (Projects of Statewide, Regional, or Areawide Significance) for projects of statewide, regional, or area-wide significance. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning, and would be consistent with the Town’s General Plan and Zoning Ordinance. As such, the proposed project would not interfere with SCAG’s ability to achieve the region’s GHG reduction target of 19 percent below 2005 per capita emissions levels by 2035. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and, as such, it would not conflict

with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

The proposed project would construct a 94,500 sf mini storage facility and associated improvements that are consistent with existing local and regional planning assumptions for the project site. Therefore, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS.

## CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed MDAQMD thresholds of significance. Compliance with MDAQMD Rule 403: Fugitive Dust would further reduce construction dust impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also not result in objectionable odors affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to be minimal and would not be cumulatively considerable. In addition, the proposed project would generally be consistent with both the 2022 Scoping Plan and the SCAG RTP/SCS.

Attachments: A: Figure 1: Project Location  
                  Figure 2: Project Site Plan  
                  B: CalEEMod Output Files

## **ATTACHMENT A**

### **FIGURES**

Figure 1: Project Location

Figure 2: Project Site Plan



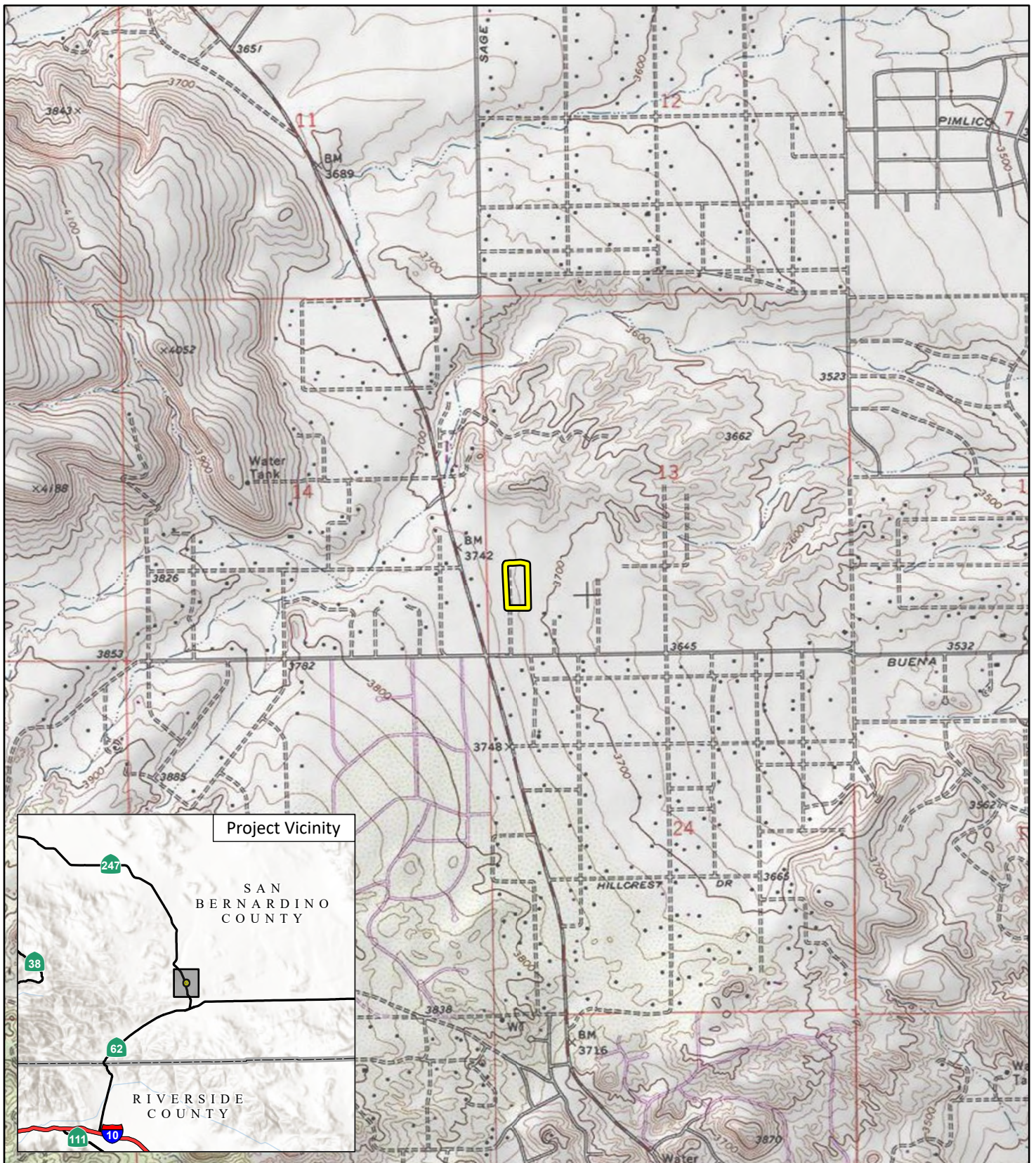



FIGURE 1

LSA

 Project Area



0 1000 2000  
FEET

SOURCE: USGS 7.5' Quad - Yucca Valley North (1989), CA

J:\20231230\GIS\Pro\Sun Mesa Mini Storage Project\Sun Mesa Mini Storage Project.aprx (11/16/2023)

Sun Mesa (Billings) Mini Storage Project  
Project Location



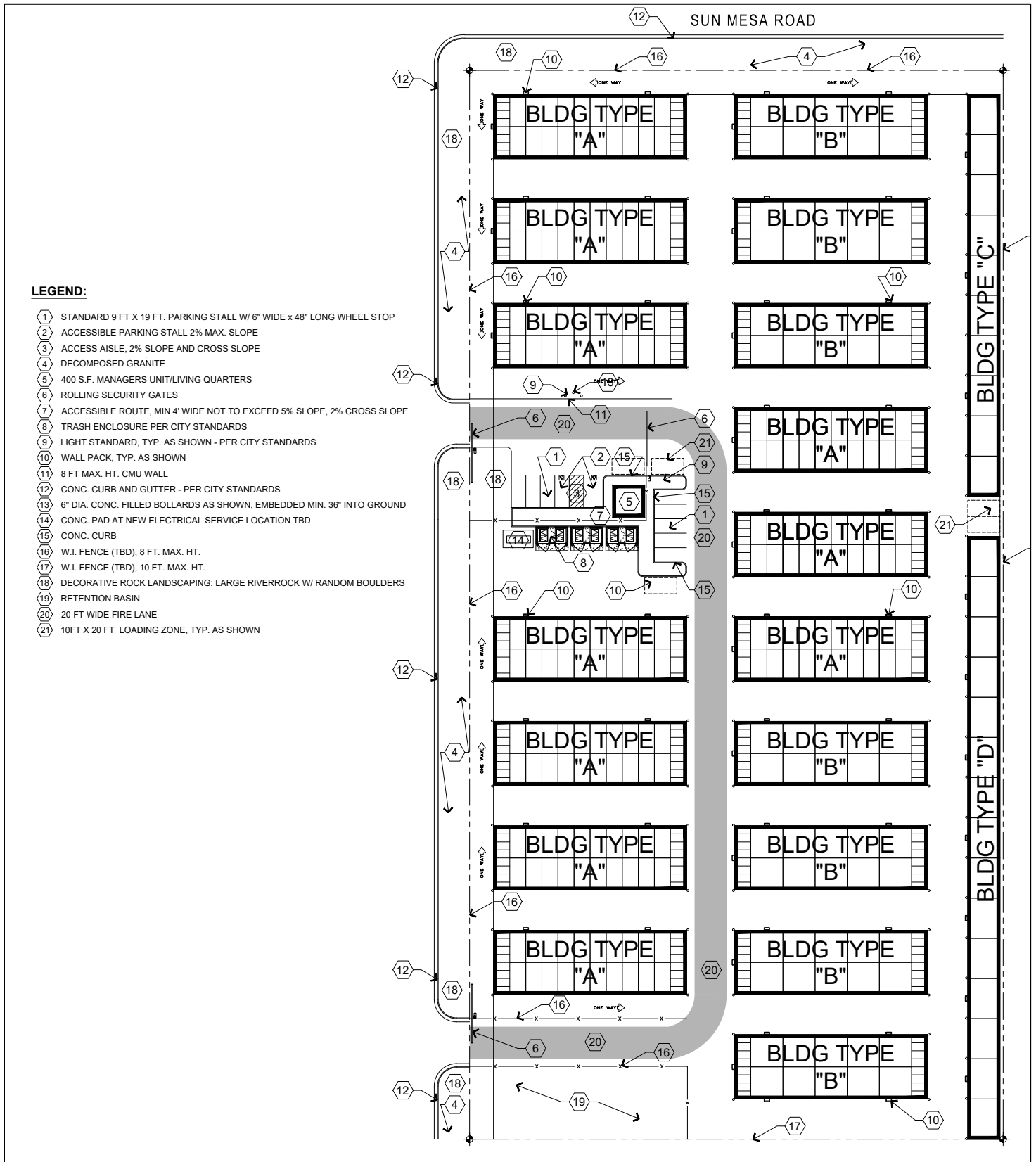


FIGURE 2

LSA



NOT TO SCALE

Sun Mesa (Billings) Mini Storage Project  
Project Site Plan

SOURCE: DRP Enterprises

I:\2023\20231230\G\Site\_Plan.ai (8/7/2024)

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## ATTACHMENT B

### CALEEMOD OUTPUT FILES

# Sun Mesa Mini Storage (20231230) Custom Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
  - 2.3. Construction Emissions by Year, Mitigated
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
  - 2.6. Operations Emissions by Sector, Mitigated
3. Construction Emissions Details
  - 3.1. Site Preparation (2024) - Unmitigated
  - 3.2. Site Preparation (2024) - Mitigated
  - 3.3. Grading (2024) - Unmitigated

3.4. Grading (2024) - Mitigated

3.5. Phase 1 Building Construction (2025) - Unmitigated

3.6. Phase 1 Building Construction (2025) - Mitigated

3.7. Phase 2 Building Construction (2026) - Unmitigated

3.8. Phase 2 Building Construction (2026) - Mitigated

3.9. Paving (2025) - Unmitigated

3.10. Paving (2025) - Mitigated

3.11. Paving (2026) - Unmitigated

3.12. Paving (2026) - Mitigated

3.13. Phase 2 Architectural Coating (2026) - Unmitigated

3.14. Phase 2 Architectural Coating (2026) - Mitigated

3.15. Phase 1&2 Trenching (2024) - Unmitigated

3.16. Phase 1&2 Trenching (2024) - Mitigated

3.17. Phase 1&2 Trenching (2025) - Unmitigated

3.18. Phase 1&2 Trenching (2025) - Mitigated

#### 4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

#### 4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

#### 4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

#### 4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

### 5. Activity Data

#### 5.1. Construction Schedule



5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

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

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Sun Mesa Mini Storage (20231230)
Construction Start Date	10/15/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	14.4
Location	34.16702495562455, -116.42088238904205
County	San Bernardino-Mojave Desert
City	Yucca Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5144
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

## 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	94.5	1000sqft	4.34	94,500	7,620	0.00	—	—

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

Sector	#	Measure Title
Water	W-5	Design Water-Efficient Landscapes

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	11.4	18.6	0.03	0.44	0.86	1.27	0.40	0.21	0.58	—	3,809	3,809	0.14	0.11	3.91	3,850
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	36.1	34.0	0.05	1.60	5.34	6.94	1.47	2.68	4.15	—	5,526	5,526	0.23	0.11	0.10	5,548
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	4.94	7.23	0.01	0.20	0.30	0.44	0.19	0.14	0.25	—	1,350	1,350	0.05	0.03	0.49	1,361
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	0.90	1.32	< 0.005	0.04	0.06	0.08	0.03	0.03	0.05	—	223	223	0.01	0.01	0.08	225
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

## 2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.36	11.1	16.6	0.03	0.44	0.65	1.09	0.40	0.16	0.56	—	3,470	3,470	0.12	0.11	3.47	3,508
2026	11.0	11.4	18.6	0.03	0.41	0.86	1.27	0.38	0.21	0.58	—	3,809	3,809	0.14	0.11	3.91	3,850
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.73	36.1	34.0	0.05	1.60	5.34	6.94	1.47	2.68	4.15	—	5,526	5,526	0.23	0.05	0.03	5,548
2025	0.81	6.63	9.96	0.01	0.29	0.26	0.55	0.26	0.06	0.32	—	1,609	1,609	0.07	0.02	0.03	1,617
2026	11.0	11.5	17.2	0.03	0.41	0.86	1.27	0.38	0.21	0.58	—	3,718	3,718	0.11	0.11	0.10	3,755
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.28	2.63	2.81	< 0.005	0.12	0.30	0.42	0.11	0.14	0.25	—	448	448	0.02	< 0.005	0.05	449
2025	0.60	4.94	7.23	0.01	0.20	0.23	0.44	0.19	0.06	0.24	—	1,350	1,350	0.05	0.03	0.49	1,361
2026	1.67	3.86	5.85	0.01	0.14	0.23	0.38	0.13	0.06	0.19	—	1,171	1,171	0.04	0.03	0.45	1,181
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.05	0.48	0.51	< 0.005	0.02	0.06	0.08	0.02	0.03	0.05	—	74.1	74.1	< 0.005	< 0.005	0.01	74.4
2025	0.11	0.90	1.32	< 0.005	0.04	0.04	0.08	0.03	0.01	0.04	—	223	223	0.01	0.01	0.08	225
2026	0.31	0.70	1.07	< 0.005	0.03	0.04	0.07	0.02	0.01	0.03	—	194	194	0.01	0.01	0.07	196

## 2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.36	11.1	16.6	0.03	0.44	0.65	1.09	0.40	0.16	0.56	—	3,470	3,470	0.12	0.11	3.47	3,508
2026	11.0	11.4	18.6	0.03	0.41	0.86	1.27	0.38	0.21	0.58	—	3,809	3,809	0.14	0.11	3.91	3,850
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.73	36.1	34.0	0.05	1.60	5.34	6.94	1.47	2.68	4.15	—	5,526	5,526	0.23	0.05	0.03	5,548
2025	0.81	6.63	9.96	0.01	0.29	0.26	0.55	0.26	0.06	0.32	—	1,609	1,609	0.07	0.02	0.03	1,617
2026	11.0	11.5	17.2	0.03	0.41	0.86	1.27	0.38	0.21	0.58	—	3,718	3,718	0.11	0.11	0.10	3,755
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.28	2.63	2.81	< 0.005	0.12	0.30	0.42	0.11	0.14	0.25	—	448	448	0.02	< 0.005	0.05	449
2025	0.60	4.94	7.23	0.01	0.20	0.23	0.44	0.19	0.06	0.24	—	1,350	1,350	0.05	0.03	0.49	1,361
2026	1.67	3.86	5.85	0.01	0.14	0.23	0.38	0.13	0.06	0.19	—	1,171	1,171	0.04	0.03	0.45	1,181
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.05	0.48	0.51	< 0.005	0.02	0.06	0.08	0.02	0.03	0.05	—	74.1	74.1	< 0.005	< 0.005	0.01	74.4
2025	0.11	0.90	1.32	< 0.005	0.04	0.04	0.08	0.03	0.01	0.04	—	223	223	0.01	0.01	0.08	225
2026	0.31	0.70	1.07	< 0.005	0.03	0.04	0.07	0.02	0.01	0.03	—	194	194	0.01	0.01	0.07	196

## 2.4. Operations Emissions Compared Against Thresholds

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

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



Unmit.	3.59	0.89	12.0	0.02	0.02	1.50	1.52	0.02	0.38	0.40	89.7	3,446	3,535	9.24	0.19	6.89	3,830
Mit.	3.59	0.89	12.0	0.02	0.02	1.50	1.52	0.02	0.38	0.40	89.7	3,445	3,535	9.24	0.19	6.89	3,829
% Reduced	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.83	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	89.7	3,266	3,356	9.24	0.19	0.18	3,644
Mit.	2.83	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	89.7	3,265	3,355	9.24	0.19	0.18	3,643
% Reduced	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.17	0.96	8.56	0.02	0.02	1.49	1.51	0.02	0.38	0.39	89.7	3,311	3,401	9.24	0.19	2.97	3,693
Mit.	3.17	0.96	8.56	0.02	0.02	1.49	1.51	0.02	0.38	0.39	89.7	3,311	3,400	9.24	0.19	2.97	3,692
% Reduced	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.18	1.56	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	14.9	548	563	1.53	0.03	0.49	611
Mit.	0.58	0.18	1.56	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	14.9	548	563	1.53	0.03	0.49	611
% Reduced	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—

## 2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Area	2.82	0.03	4.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409
Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	3.59	0.89	12.0	0.02	0.02	1.50	1.52	0.02	0.38	0.40	89.7	3,446	3,535	9.24	0.19	6.89	3,830
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Area	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409
Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	2.83	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	89.7	3,266	3,356	9.24	0.19	0.18	3,644
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.95	6.53	0.02	0.01	1.49	1.50	0.01	0.38	0.39	—	1,715	1,715	0.06	0.08	2.97	1,743
Area	2.47	0.02	2.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.33	8.33	< 0.005	< 0.005	—	8.36
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409

Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	3.17	0.96	8.56	0.02	0.02	1.49	1.51	0.02	0.38	0.39	89.7	3,311	3,401	9.24	0.19	2.97	3,693
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289
Area	0.45	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	232	232	0.01	< 0.005	—	233
Water	—	—	—	—	—	—	—	—	—	—	6.93	30.5	37.5	0.71	0.02	—	60.4
Waste	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7
Total	0.58	0.18	1.56	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	14.9	548	563	1.53	0.03	0.49	611

## 2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Area	2.82	0.03	4.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409
Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	3.59	0.89	12.0	0.02	0.02	1.50	1.52	0.02	0.38	0.40	89.7	3,445	3,535	9.24	0.19	6.89	3,829
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Area	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409

Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	2.83	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	89.7	3,265	3,355	9.24	0.19	0.18	3,643
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.95	6.53	0.02	0.01	1.49	1.50	0.01	0.38	0.39	—	1,715	1,715	0.06	0.08	2.97	1,743
Area	2.47	0.02	2.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.33	8.33	< 0.005	< 0.005	—	8.36
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,404	1,404	0.09	0.01	—	1,409
Water	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Waste	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	3.17	0.96	8.56	0.02	0.02	1.49	1.51	0.02	0.38	0.39	89.7	3,311	3,400	9.24	0.19	2.97	3,692
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289
Area	0.45	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	232	232	0.01	< 0.005	—	233
Water	—	—	—	—	—	—	—	—	—	—	6.93	30.4	37.4	0.71	0.02	—	60.3
Waste	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7
Total	0.58	0.18	1.56	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	14.9	548	563	1.53	0.03	0.49	611

### 3. Construction Emissions Details

#### 3.1. Site Preparation (2024) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.49	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.11	1.06	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.03	234
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.25	3.25	< 0.005	< 0.005	0.01	3.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.2. Site Preparation (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.49	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.06	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.03	234
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.25	3.25	< 0.005	< 0.005	0.01	3.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00



Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Grading (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.05	2.11	< 0.005	0.09	—	0.09	0.09	—	0.09	—	332	332	0.01	< 0.005	—	333
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.37	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	55.0	55.0	< 0.005	< 0.005	—	55.2
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.79	3.79	< 0.005	< 0.005	0.01	3.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.4. Grading (2024) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.05	2.11	< 0.005	0.09	—	0.09	0.09	—	0.09	—	332	332	0.01	< 0.005	—	333
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	55.0	55.0	< 0.005	< 0.005	—	55.2
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.79	3.79	< 0.005	< 0.005	0.01	3.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.5. Phase 1 Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.25	2.29	2.86	0.01	0.09	—	0.09	0.09	—	0.09	—	526	526	0.02	< 0.005	—	527
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.42	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	3.30	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	579	579	0.02	0.02	2.12	588
Vendor	0.02	0.50	0.22	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	493	493	< 0.005	0.07	1.35	514
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.54	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	116	116	0.01	< 0.005	0.20	117
Vendor	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.13	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.02	18.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.6. Phase 1 Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.29	2.86	0.01	0.09	—	0.09	0.09	—	0.09	—	526	526	0.02	< 0.005	—	527
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.42	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	3.30	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	579	579	0.02	0.02	2.12	588
Vendor	0.02	0.50	0.22	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	493	493	< 0.005	0.07	1.35	514
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.54	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	116	116	0.01	< 0.005	0.20	117
Vendor	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.13	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.02	18.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.7. Phase 2 Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.46	3.23	0.01	0.09	—	0.09	0.09	—	0.09	—	598	598	0.02	< 0.005	—	600



Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.45	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	3.06	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	567	567	0.02	0.02	1.92	576
Vendor	0.02	0.48	0.20	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	484	484	< 0.005	0.07	1.22	505
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.19	2.04	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	502	502	0.01	0.02	0.05	509
Vendor	0.02	0.51	0.21	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	484	484	< 0.005	0.07	0.03	504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.21	131
Vendor	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	121	121	< 0.005	0.02	0.13	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.4	21.4	< 0.005	< 0.005	0.03	21.6
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.0	20.0	< 0.005	< 0.005	0.02	20.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Phase 2 Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.46	3.23	0.01	0.09	—	0.09	0.09	—	0.09	—	598	598	0.02	< 0.005	—	600
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.45	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	3.06	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	567	567	0.02	0.02	1.92	576
Vendor	0.02	0.48	0.20	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	484	484	< 0.005	0.07	1.22	505

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.19	2.04	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	502	502	0.01	0.02	0.05	509
Vendor	0.02	0.51	0.21	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	484	484	< 0.005	0.07	0.03	504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.21	131
Vendor	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	121	121	< 0.005	0.02	0.13	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.4	21.4	< 0.005	< 0.005	0.03	21.6
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.0	20.0	< 0.005	< 0.005	0.02	20.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.99	2.70	< 0.005	0.09	—	0.09	0.08	—	0.08	—	412	412	0.02	< 0.005	—	414
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.49	< 0.005	0.02	—	0.02	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.5
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	1.66	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	292	292	0.01	0.01	1.07	296
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.11	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.2	81.2	< 0.005	< 0.005	0.14	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.02	13.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.10. Paving (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.99	2.70	< 0.005	0.09	—	0.09	0.08	—	0.08	—	412	412	0.02	< 0.005	—	414
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.49	< 0.005	0.02	—	0.02	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.5
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	1.66	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	292	292	0.01	0.01	1.07	296
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.11	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.2	81.2	< 0.005	< 0.005	0.14	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.02	13.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.11. Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.09	1.54	< 0.005	0.05	—	0.05	0.04	—	0.04	—	235	235	0.01	< 0.005	—	236
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.1
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.03	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.03	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.4	45.4	< 0.005	< 0.005	0.07	46.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.12. Paving (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355



Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.09	1.54	< 0.005	0.05	—	0.05	0.04	—	0.04	—	235	235	0.01	< 0.005	—	236
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.1
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.03	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.03	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.4	45.4	< 0.005	< 0.005	0.07	46.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.13. Phase 2 Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	9.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	9.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Architectural Coatings	1.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.79	2.79	< 0.005	< 0.005	—	2.80
Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.23	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	227	227	0.01	0.01	0.77	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.82	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	201	201	< 0.005	0.01	0.02	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.1	26.1	< 0.005	< 0.005	0.04	26.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.32	4.32	< 0.005	< 0.005	0.01	4.37

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.14. Phase 2 Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	9.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	9.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Architectural Coatings	1.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.79	2.79	< 0.005	< 0.005	—	2.80
Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.23	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	227	227	0.01	0.01	0.77	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.82	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	201	201	< 0.005	0.01	0.02	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.1	26.1	< 0.005	< 0.005	0.04	26.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.32	4.32	< 0.005	< 0.005	0.01	4.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 3.15. Phase 1&amp;2 Trenching (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.55	3.40	< 0.005	0.12	—	0.12	0.11	—	0.11	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.9	65.9	< 0.005	< 0.005	0.01	66.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.16. Phase 1&2 Trenching (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.55	3.40	< 0.005	0.12	—	0.12	0.11	—	0.11	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.9	65.9	< 0.005	< 0.005	0.01	66.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.17. Phase 1&2 Trenching (2025) - Unmitigated

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

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



Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.39	3.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.39	3.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.45	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	94.5	94.5	< 0.005	< 0.005	—	94.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.9	72.9	< 0.005	< 0.005	0.27	74.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.03	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.6	64.6	< 0.005	< 0.005	0.01	65.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.18. Phase 1&2 Trenching (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.39	3.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.39	3.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.45	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	94.5	94.5	< 0.005	< 0.005	—	94.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.9	72.9	< 0.005	< 0.005	0.27	74.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.6	64.6	< 0.005	< 0.005	0.01	65.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Total	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Total	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289
Total	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289

## 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	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	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Total	0.78	0.85	7.92	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,841	1,841	0.06	0.08	6.89	1,872
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Total	0.68	0.92	6.01	0.02	0.01	1.50	1.52	0.01	0.38	0.39	—	1,678	1,678	0.06	0.08	0.18	1,703
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289
Total	0.13	0.17	1.19	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	284	284	0.01	0.01	0.49	289

## 4.2. Energy

## 4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Total	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Total	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	232	232	0.01	< 0.005	—	233
Total	—	—	—	—	—	—	—	—	—	—	—	232	232	0.01	< 0.005	—	233

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

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Total	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Total	—	—	—	—	—	—	—	—	—	—	—	1,404	1,404	0.09	0.01	—	1,409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	232	232	0.01	< 0.005	—	233
Total	—	—	—	—	—	—	—	—	—	—	—	232	232	0.01	< 0.005	—	233

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>—</b>	<b>0.00</b>	<b>0.00</b>	<b>—</b>	<b>0.00</b>	<b>—</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>—</b>	<b>0.00</b>

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.67	0.03	4.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.9	16.9	< 0.005	< 0.005	—	17.0
<b>Total</b>	<b>2.82</b>	<b>0.03</b>	<b>4.11</b>	<b>&lt; 0.005</b>	<b>0.01</b>	<b>—</b>	<b>0.01</b>	<b>0.01</b>	<b>—</b>	<b>0.01</b>	<b>—</b>	<b>16.9</b>	<b>16.9</b>	<b>&lt; 0.005</b>	<b>&lt; 0.005</b>	<b>—</b>	<b>17.0</b>
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>2.14</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.06	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38
Total	0.45	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38

#### 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	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 Products	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.67	0.03	4.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Total	2.82	0.03	4.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38
Total	0.45	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.38	1.38	< 0.005	< 0.005	—	1.38

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Total	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Total	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	365
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	6.93	30.5	37.5	0.71	0.02	—	60.4
Total	—	—	—	—	—	—	—	—	—	—	6.93	30.5	37.5	0.71	0.02	—	60.4

#### 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	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	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Total	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Total	—	—	—	—	—	—	—	—	—	—	41.9	184	226	4.31	0.10	—	364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	6.93	30.4	37.4	0.71	0.02	—	60.3
Total	—	—	—	—	—	—	—	—	—	—	6.93	30.4	37.4	0.71	0.02	—	60.3

### 4.5. Waste Emissions by Land Use

#### 4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7

Total	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7
-------	---	---	---	---	---	---	---	---	---	---	------	------	------	------	------	---	------

#### 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	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	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Total	—	—	—	—	—	—	—	—	—	—	47.9	0.00	47.9	4.78	0.00	—	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7
Total	—	—	—	—	—	—	—	—	—	—	7.93	0.00	7.93	0.79	0.00	—	27.7

#### 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

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

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

### 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	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. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

### 4.8.2. Mitigated

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

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

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

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

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

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

#### 4.9.2. Mitigated

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

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

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

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	10/14/2024	10/19/2024	5.00	5.00	—
Grading	Grading	10/21/2024	12/16/2024	5.00	41.0	—
Phase 1 Building Construction	Building Construction	4/8/2025	7/28/2025	5.00	80.0	—
Phase 2 Building Construction	Building Construction	6/1/2026	10/5/2026	5.00	91.0	—
Paving	Paving	7/29/2025	3/30/2026	5.00	175	—
Phase 2 Architectural Coating	Architectural Coating	8/3/2026	10/5/2026	5.00	46.0	—
Phase 1&2 Trenching	Trenching	12/17/2024	4/7/2025	5.00	80.0	—

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Phase 1 Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Phase 1 Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Phase 1 Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Phase 1 Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Phase 1 Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Phase 2 Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Phase 2 Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Phase 2 Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Phase 2 Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Phase 2 Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45



Paving	Tractors/Loaders/Back	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Phase 2 Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Phase 1&2 Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Phase 1&2 Trenching	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Phase 1 Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Phase 1 Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Phase 1 Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Phase 1 Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Phase 1 Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37

Phase 2 Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Phase 2 Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Phase 2 Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Phase 2 Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Phase 2 Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Phase 2 Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Phase 1&2 Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Phase 1&2 Trenching	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Phase 1 Building Construction	—	—	—	—
Phase 1 Building Construction	Worker	39.7	18.5	LDA,LDT1,LDT2
Phase 1 Building Construction	Vendor	15.5	10.2	HHDT,MHDT
Phase 1 Building Construction	Hauling	0.00	20.0	HHDT
Phase 1 Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Phase 2 Architectural Coating	—	—	—	—
Phase 2 Architectural Coating	Worker	15.9	18.5	LDA,LDT1,LDT2
Phase 2 Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Phase 2 Architectural Coating	Hauling	0.00	20.0	HHDT
Phase 2 Architectural Coating	Onsite truck	—	—	HHDT
Phase 2 Building Construction	—	—	—	—
Phase 2 Building Construction	Worker	39.7	18.5	LDA,LDT1,LDT2
Phase 2 Building Construction	Vendor	15.5	10.2	HHDT,MHDT
Phase 2 Building Construction	Hauling	0.00	20.0	HHDT
Phase 2 Building Construction	Onsite truck	—	—	HHDT
Phase 1&2 Trenching	—	—	—	—
Phase 1&2 Trenching	Worker	5.00	18.5	LDA,LDT1,LDT2
Phase 1&2 Trenching	Vendor	—	10.2	HHDT,MHDT

Phase 1&2 Trenching	Hauling	0.00	20.0	HHDT
Phase 1&2 Trenching	Onsite truck	—	—	HHDT

## 5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Phase 1 Building Construction	—	—	—	—
Phase 1 Building Construction	Worker	39.7	18.5	LDA,LDT1,LDT2
Phase 1 Building Construction	Vendor	15.5	10.2	HHDT,MHDT
Phase 1 Building Construction	Hauling	0.00	20.0	HHDT
Phase 1 Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Phase 2 Architectural Coating	—	—	—	—
Phase 2 Architectural Coating	Worker	15.9	18.5	LDA,LDT1,LDT2
Phase 2 Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Phase 2 Architectural Coating	Hauling	0.00	20.0	HHDT
Phase 2 Architectural Coating	Onsite truck	—	—	HHDT
Phase 2 Building Construction	—	—	—	—
Phase 2 Building Construction	Worker	39.7	18.5	LDA,LDT1,LDT2
Phase 2 Building Construction	Vendor	15.5	10.2	HHDT,MHDT
Phase 2 Building Construction	Hauling	0.00	20.0	HHDT
Phase 2 Building Construction	Onsite truck	—	—	HHDT
Phase 1&2 Trenching	—	—	—	—
Phase 1&2 Trenching	Worker	5.00	18.5	LDA,LDT1,LDT2
Phase 1&2 Trenching	Vendor	—	10.2	HHDT,MHDT
Phase 1&2 Trenching	Hauling	0.00	20.0	HHDT
Phase 1&2 Trenching	Onsite truck	—	—	HHDT

### 5.4. Vehicles

#### 5.4.1. Construction Vehicle Control Strategies

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

### 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Phase 2 Architectural Coating	0.00	0.00	141,750	47,250	—

### 5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	7.50	0.00	—
Grading	0.00	0.00	15.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.23

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.23	33%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
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Unrefrigerated Warehouse-No Rail	137	137	137	49,980	2,127	2,127	2,127	776,263
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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	137	137	137	49,980	2,127	2,127	2,127	776,263

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	141,750	47,250	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	180
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### 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	962,994	532	0.0330	0.0040	0.00

#### 5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	962,994	532	0.0330	0.0040	0.00

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	21,853,125	168,696

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	21,853,125	78,373

### 5.13. Operational Waste Generation



5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	88.8	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	88.8	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

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

Equipment Type	Fuel Type
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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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## 8. User Changes to Default Data

Screen	Justification
Land Use	Site is 4.34 acres, buildings take 94,500sf, parking 1,710sf, other pavement takes 75,620sf (assuming pavement is 40% of total based on site plan), retention pond 9,600sf. Leaves 7,620 for landscaping.
Construction: Construction Phases	Construction plans start in Fall 2024. Assume that architectural coatings applied during latter part of building construction phase.
Construction: Paving	Planning 7,250 sf of AC and 2,675 sf of PCC
Construction: Dust From Material Movement	Site will be balanced.
Construction: Off-Road Equipment	Added equipment for trenching operations.
Operations: Vehicle Data	The proposed project would generate 137 ADT. Trip rate = 137 ADT/ 94.5 tsf = 1.449
Operations: Energy Use	The proposed project would not include natural gas. Electricity consumption was adjusted.